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# SIR TIM SMIT

Eden Project co-founder gains EU funding for geothermal energy project VOL 24 4 2019

# DISNEYLAND PARIS

Daniel Delcourt and David Wilson talk €2bn expansion plan

# **YVES PÉPIN**

Industry legend on creating large-scale spectaculars

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# Planning for disaster

Climate change is increasing the occurrence of natural catastrophes and putting pressure on the insurance industry, meaning it's never been more vital for all attractions to have effective disaster plans in place

e work in a very life-affirming industry, committed to creating peak experiences for people that form some of their most valued and precious memories.

With such a positive mindset running through the sector, it's understandably tempting to always hope for the best and to focus on innovation, outreach, development, and growth, rather than spending time imagining the many disasters that could befall even the best prepared.

So when things go wrong and a backward step is forced on us in the form of some kind of incident, it can be jarring from the point of view of organisation culture and leave attractions operators very exposed if emergency planning hasn't been top of the to-do list.

In this issue, we talk to attractions that have had to face huge challenges and setbacks as a result of fires, floods, earthquakes, and accidents (see page 74). We hear firsthand how they dealt with the challenges they faced and what they learned from these experiences.

It takes a generous spirit to share stories of failure and catastrophe, so we're grateful to our contributors for sharing their stories and their hard-won advice.

It's easy to think big national institutions must have things like disaster planning all sewn up, yet this is clearly not always the case, as was illustrated in September 2018, when the Museu Nacional in Rio de Janeiro suffered a catastrophic fire that destroyed most of its two million artifacts. Firefighters didn't have enough water because two hydrants were dry and 200 years of history went up in flames.

The two biggest challenges in relation to preparedness are having an effective and regularly-updated disaster management plan which can be rapidly implemented and getting decent, affordable insurance which will be a help rather than a hindrance when it comes to making a claim.



Miami Zoo's hurricane plan ensures a safe refuge for everyone

 It's challenging to get decent, affordable insurance which will be a help rather than a hindrance

With climate change increasing the frequency of disasters, the insurance industry is being squeezed and that squeeze is being passed on to customers, making claiming ever more complex and challenging: it took Christchurch museum seven years to settle after the earthquake, for example,

Attractions that are prepared cope the best, so if your disaster planning needs work, now really is the time to act.

Liz Terry, editor lizterry@leisuremedia.com @elizterry

Tel: +44 (0)1462 431385 attractionsmanagement.com



@attractionsmag theteam@leisuremedia.com



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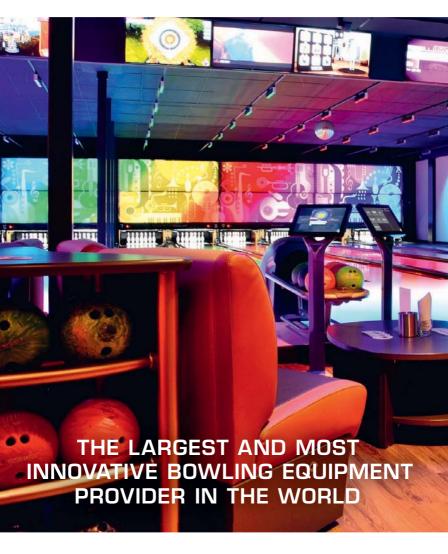


On the cover: Amanda Thompson

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#### the team



Liz Terry +44 (0)1462 431385



Managing editor

Tom Anstev +44 (0)1462 471916



Publisher

Julie Badrick +44 (0)1462 471919

SUBSCRIPTIONS +44 (0)1462 471930

#### NEWSDESK

Tom Walker +44 (0)1462 431385

Stu Robarts +44 (0)1462 471902

Megan Whitby +44 (0)1462 471906

#### ADVERTISING TEAM

Julie Badrick +44 (0)1462 471919

Ian Williame

+44 (0)1462 471909

#### PRODUCTS EDITOR

Lauren Heath-Jones +44 (0)1462 471927

#### CIRCULATION

Michael Emmerson +44 (0)1462 471932

FINANCE +44 (0)1462 471930



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# Attractions People

6 Our pieces allow the corals to flourish and provide a place for creatures to live?

Jason deCaires Taylor underwater sculptor and environmentalist

t wasn't really a careers option after leaving school," says Jason deCaires Taylor, who created his first installation 12 years ago. "I studied art and I also worked as a scuba diving instructor so I naturally fell into it."

The British-born Taylor has one of the most unusual jobs in the world, creating underwater art installations for more than a million scuba divers and snorkelers a year. He's most famously known for a collection of more than 500 life-size sculptures at the Cancún Marine Park in Mexico.

His latest project takes him to Australia's Great Barrier Reef for the first time, where he's creating the Museum of Underwater Art (MOUA) — a first of fits kind installation for Australia, which is being created to increase awareness of threatened ecosystems and to rehabilitate parts of the Great Barrier Reef.

"it's been on the cards for a few years, with planning and organisation," he says. "I've spent a lot of 2019 producing the works that are there at the moment. We're installing them in November with the first to open in December.

"Its aim first and foremost is to showcase how wonderful the Great Barrier Reef is. There's a misconception that it's all gloom and doom and dying but that's not the case. A lot of it is fantastic and thriving. But it really needs us to help conserve it."

Artworks will be installed at several locations along the Queensland coast, including John Brewer Reef, Magnetic Island, Palm Island and Townsville, MOUA is



a not-for-profit collaboration between both the national and local government, as well as James Cook University, the Australian Institute of Marine Science and the Great Barrier Reef Marine Park Authority.

The first installation, called Ocean Siren, will be a solar-powered sculpture of a young indigenous girl. Standing above water at low tide and submerged at high tide, the sculpture in Townsville will change colour using live water temperature data. This, says Taylor, is designed to raise awareness for critical

warming of the oceans, which is directly linked to coral bleaching.

"The Australian Institute of Marine Science has set up temperature loggers around the reef," he explains.

"The data will be fed into the sculpture so that changes in temperature will be seen in real-time."

The Coral Greenhouse will open shortly after Ocean Siren at Hohn Brewer Reef. The 12m-high (39.3ft) underwater botanical structure has been designed as an art space, underwater







Jason deCaires' latest work will see a giant underwater greenhouse installed to create a new marine ecosystem and monitoring station



educational centre, science laboratory and a sheltered space for marine life. When installed, it will be planted with more than 2,000 coral fragments, which will help to create a marine ecosystem.

For the Magnetic Island site, which will be completed by the end of 2020, Taylor will tell the story of reef science. The installation on Palm Island is being created in consultation with the indigenous community and is set to open in August 2020. The aim is to boost tourism to give an economic boost to the local area.

"We're very much trying to create a strong link between art and science," says Taylor. "The installations are also going to be monitoring stations with coral nurseries and scientific equipment. The idea is that we engage the community in becoming the guardians of the reef."

#### **Eco-friendly**

With an underwater installation, there are a range of factors to consider, including durability, eco-friendliness and habitat.

"It's a much more complicated process than working with sculptures on land," says Taylor. "First of all, the materials have to be durable and not a pollutant in any way. They also have to be able to cope with extreme stress from cyclones, wave action and strong currents. The forces and dynamics are very different underwater, so they have to be able to withstand the high impact of a marine environment. These installations will take hundreds of years until they're fully developed, so the materials have to be able to withstand the withstand that type of resistance."

The sculptures are all made from a pH-neutral marine cement with a textured

surface designed to help the settlement of corals and other marine life.

"Our pieces allow the corals to flourish and provide a place for creatures to live," says Taylor. "They'll definitely go through many different evolutions underwater. With the 'greenhouse', the idea is to use the structure to aggregate the land and make it a place of refuge for sea life.

#### **New frontiers**

With 12 years of experience and countless projects open to the public worldwide, de Caires Taylor thinks his work is far from done, with plans to take his underwater projects to new and exciting locations across the world.

"Art is a really good way to explore new seascapes and highlight how incredibly beautiful these underwater sites are," he says. "I've done quite a few different projects now, working in the Atlantic Ocean, the Caribbean Sea and the Pacific Ocean. I'm interested in doing something in the Arctic – I'm concerned about the loss of ice coverage — and I'm always interested in working in new environments.

"People think of beautiful underwater areas as tropical reefs and coral areas. I did a project in Norway in a fjord in the centre of Oslo last year. From the surface, its greywater that looks cold and unappealing. When you get under there, you realise there's a wealth of life and that some of the creatures that grow and flourish there are equally beautiful as some of the things you'd find on a coral reef. I'm keen on working in these kinds of new areas."



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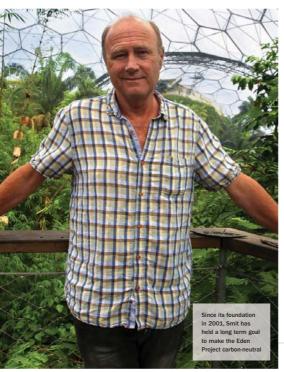
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Entertain the Possibilities

6 For the first time, a jigsaw of completely deliverable renewable energy is available for the world to enable us to go completely carbonneutral on energy generation?

Sir Tim Smit co-founder, Eden Project



ir Tim Smit is well known for his commitment to green living. Co-founder of the world-famous Eden Project in Cornwall, UK, the Dutch-born British businessman founded the £80m (US\$103.5m) attraction, which promotes blodiversity and sustainability with its indoor rainforest, housed inside two glant biomes.

After gaining EU funding, he's taking that commitment one step further, with plans to not only transform the Eden Project by building a geothermal energy plant, but also for the attraction to act as a sustainability blueprint for the entire planet.

"We've been waiting 10 years to be able to say it's full steam ahead for the Eden Project's energy scheme," says Smit. "We've always known that beneath our feet – at the centre of the earth – it's hot."

#### **Green ambitions**

Described by Smit as the biggest leap forward for Eden since it opened in 2001, the project will eventually provide clean and renewable energy to power the entire Eden Project site, as well as local businesses and the wider community.

The plan will see a narrow 25cm well

drilled 4.5km (2.8m) down through the Earth's surface to investigate temperature and permeability. Once functioning, cold water will be pumped underground, where it will pick up heat from the rocks before being pumped back to the surface at a temperature of around 180°C, running through a turbine to generate electricity, creating a completely sustainable energy source for the attraction.

"Every schoolchild knows that the middle of the world is a molten lump," says Smit. "The heat is only just below us.



Opened in 2001, the Eden Project hosts a 'global garden' of plants in giant biomes

What we're going to do is start drilling in Q2 2020 and we hope that within 18 months, Eden will be completely carbon neutral and we'll be powering everything around us from renewable sources."

Eden has teamed with EGS Energy for the potentially world-changing plan, after securing £16.8m (US\$21.8m) in funding from a mix of private and public sources, including £9.9m (US\$12.8m) from the European Regional Development Fund (ERDF), £1.4m (US\$1.8m) from Cornwall Council and £5.5m (US\$7.1m) from institutional investors.

"This is a gamechanger of the biggest kind," says Smit. "All over the world, you see protests over the fact that we are not mediating our carbon use.

"Some argue that wind and solar energy aren't enough because the wind doesn't blow all the time and the sun doesn't shine at night, but deep geothermal power gives you heat 24/7 and can level out the period when the sun isn't shining and the wind isn't blowing. For the first time, a jigsaw of completely deliverable renewable energy is available for the world to enable us to go completely carbon-neutral."



#### Powering Cornwall

Once drilled, the first well will supply a district heating system for Eden's biomes, offices and greenhouses. It will pave the way for the second phase - another 4.5km well and an electricity plant. Completing the second phase will mean that Eden will be generating sufficient renewable energy to become carbon positive by 2023 as well as aiming to be able to provide heat and power for the local area - 7,000 homes. Smit says the plans represent the chance to "spark an energy revolution".

"We have the green light and the funding to start drilling and we're determined to make this technology work," says Smit. "We want to work with others all over the world - sharing knowledge and encouraging the change as fast as is humanly possible."

To deliver the plan, a new company, Eden Geothermal Limited (EGL) has been formed. This company is made up of the Eden Project, geothermal development group EGS Energy, and geothermal developer and drilling advisor BESTEC UK.

"Once up and running, our plant will provide more than enough renewable electricity and heat for the whole site, as well as for the local area," says Smit. "We'll be drilling for good energy rather than bad.

"It's so exciting for us that the mining tradition of Cornwall is being put to use to create a renewable future."



6 It's a huge thrill for some of my favourite characters to be getting their own attractions?

#### David Walliams comedian and children's author

est known for his comedy partnership with Matt Lucas on *Little Britain* and as a judge on the ITV show *Britain*'s Got *Talent*, David Walliams has also become a successful children's author, selling more than 33 million copies of his works worldwide.

Adapted into Christmas specials, TV series, musicals and more, Walliam's works are now set to enter the world of attractions, with a new addition coming to the Alton Towers theme park in Staffordshire, UK.

"I've been working with Alton Towers on a brand new ride inspired by my children's books," the author says.

Set to open in Q2 2020, Walliams has been working with Harper/Collins Children's Books and Merlin Magic Making on the project for the last two years. The development will centre around Alton



David Walliams has sold more than 33 million copies of his children's books

Towers' existing Cloud Cuckoo Land area, complementing the existing CBeebies Land, which opened in 2014.

Known as The World of Walliams, the addition will feature a "ground-breaking, unique headline attraction", as a number of attractions and characters, which will be brought to life across the theme park and

within the wider resort's hotels. The new ride is already under construction, with work starting earlier this year.

Walliams wrote his first children's book in 2008 and has since gone on to publish 12 kids' novels, as well as a number of collections of short stories and picture books. In 2018, he was named the UK's best selling author for the second year.

Among Walliams' most popular titles are The Boy in the Dress, Gangsta Granny, Mr Stink and The World's Worst Children. All of these titles and more could be part of the attraction, though Alton Towers is remaining tight-lipped about what will actually feature.

"It's a huge thrill for some of my favourite characters to be getting their own attractions at Alton Towers," says Walliams. "I can't wait to experience them for myself, and from all the work that has gone in, I think people are going to love it. All will be revealed next year."



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USA

# **US\$125m donation secures science institution**

Billionaire hedge fund manager Kenneth C Griffin is to have the Museum of Science and Industry (MSI) in Chicago named after him, following a donation of US\$125m from his charitable fund.

The gift is the largest in the museum's history and will help it to secure its long term future, as well as allowing it to create The Pixel Studio - a digital gallery and performance space that MSI says will be the only experience of its kind in North America.

Griffin is the founder and CEO of Citadel, which reportedly has more than US\$32bn in assets under management. Said to be personally worth US\$9 9hn, he has donated around US\$700m to various organisations and causes.

"The Museum of Science and Industry celebrates our greatest scientific and commercial achievements and ignites the imagination of all who visit," said Griffin, "As one of the most important institutions of science in the world, the museum's impact extends far beyond its halls. I'm honoured to support MSI's mission to inspire the next generation of scientific exploration and innovation."

MSI's capital campaign, which is designed to support experiences that foster curiosity and creativity, fund education programmes, reimagine its galleries and modernise its building, has been propelled beyond US\$300m by the gift from Griffin.

READ MORE ONLINE



■ The museum is being renamed the after Kenneth C. Griffin



The museum celebrates our greatest scientific achievements and ignites the imagination of all who visit

Kenneth C. Griffin

UK

# Science museum restoration begins with work on Power Hall



This gallery will show

how Manchester provided the power that changed the city and the world

Sally MacDonald

Work has commenced on the restoration of the Grade II-listed Power Hall at the Science and Industry Museum in Manchester - part of a larger, multi-million-pound project to create a more sustainable museum and a "beacon for contemporary science".

In July, the museum was given funding from the UK Government and its parent, the Science Museum Group to repair the roof of the Power Hall and transform the displays inside.

Built in 1855 as the shipping shed for Liverpool Road Station, which was the world's first purpose-built passenger railway station, the Power Hall houses Europe's largest collection of working steam engines.



■The Power Hall restoration is due to be complete by Q2 2021

"This gallery will show how Manchester provided the power that changed the city and the world," said Sally MacDonald, director of the Science and Industry Museum. "In revealing more about the human skill and ingenuity of the past, we can't wait to inspire the engineers and innovators of the future."

READ MORE ONLINE

USA

# IAAPA opens new global HQ in Orlando

One of the attractions industry's global associations, IAAPA, has officially opened its new headquarters building in Orlando, providing the organisation with a custom-built facility it says is designed to support its members.

The 22,000sq ft (6,700sq m) building, set within seven acres, includes meeting rooms, special event space and workstations. It's been designed to "reflect the diversity of the attractions industry", says president and CEO, Hal McEvov, with an exterior wave pattern and artistic elements such as a colourful mural and varying ceiling heights inside.

Further amenities include a patio, outdoor kitchen

and seating overlooking the natural landscape near the headwaters of the Florida Everglades.

The new headquarters is also home to IAAPA's North America regional office. Around 50 of IAAPA's 73 employees are based in Orlando.

"We look forward to engaging and collaborating with members when they're in town and continuing to serve the global attractions industry," said McEvoy.

"This building is the result of three years hard work and teamwork with our members and many community partners and organisations, who came together to create this amazing space."

READ MORE ONLINE



■(L to R) Mayor Jerry Demings, David Rosenberg and Hal McEvoy



This building is the result of three years hard work and teamwork with our members

Hal McEvov

#### CZECH REPUBLIC

## Observation deck to top shipwreck tower in Prague



The boat is connected to the building. One cannot stand without the other David Cerný

Sculptor David Cerný and architect Tomáš Císar from the studio Black n' Arch have designed a 135m (450ft)tall tower for Prague that is shaped like an upended shipwreck and has an observation deck at the top.

Top Tower is a conventional high-rise with a base section that partially acts as a pedestal for the accompanying sculpture. which takes the form of a sunken ship's skeleton covered in seaweed.

The sculpture is not just a visual element, though, but a structural one too: "The boat is structurally connected to the building," say Císar. "One cannot stand, nor even exist, without the other. Thus the boat is not a mere addition,



■ Top Tower has an observatory on the upper level

but rather a fundamental element both intellectually and technically."

Project developer Trigema expects construction of Top Tower and its observation deck to begin in 2021, with the work taking less than three years to complete.

#### CHINA

# Universal reveals themed lands for Beijing park

Universal Studios' has revealed its under-construction Beijing theme park and resort will feature seven themed lands.

Due to open in 2021, the site will be the largest Universal theme park in the world. The announced lands are: Kung Fu Panda Land of Awesomeness; Transformers: Metrobase; Minion Land; The Wizarding World of Harry Potter; Jurassic World Isla Nublar; Hollywood Boulevard: and WaterWorld.

The world's first Universalthemed resort hotel – the Universal Studios Grand Hotel – will offer a contemporary version of the Hollywood Golden Age, surrounding guests with the world of the movies, while a second hotel – the NUO Resort Hotel – will immerse guests in Chinese cultural heritage and modern elegance, providing a "tranquil island" amidst the fast pace of the resort.

A final element of the first phase of the development will be Universal CityWalk Beijing – a retail, dining and entertainment complex, with award-winning restaurants, clubs and a movie theatre.

"We'll immerse our guests in incredible experiences that bring their favourite stories and characters to life in entirely new ways," said Tom Mehrmann, president and general manager of Universal Beiling Resort.

"Our theme park will showcase the best Universal rides, as well as all-new, unique experiences specially created to reflect China's rich cultural heritage."

READ MORE ONLINE



■Universal Beijing Resort will be IP-heavy, with seven branded lands



We'll showcase the best rides and experiences created to reflect China's rich cultural heritage

Tom Mehrmann

#### USA

# Michael Spanos named president and CEO of Six Flags



66

It's a privilege to be able to lead such a superb organisation

Michael Spanos

PepsiCo executive, Michael Spanos, has been appointed as president and CEO of Six Flags Entertainment Corporation, replacing Jim Reid-Anderson in both roles with effect from 18 November 2019.

The 55-year-old has been serving as CEO of PepsiCo, Asia, Middle East and North Africa – a sector with U\$\$6bn in revenues, spanning 43 countries, with 20,000 direct and 115,000 indirect employees, and contributing U\$\$1.2bn in operating profit.

Under Spanos' leadership, the company will set a new strategic direction that accelerates top line and operating profit growth over multiple years, starting first in the Greater China region, and then across the entire portfolio of territories.



■Six Flags is in the midst of international expansion

Spanos won't succeed Reid-Anderson as chair, with Richard Roedel set to take up that position.

"Jim has built an amazing legacy, and I look forward to the next horizon of growth," said Spanos. "It's a privilege to be able to lead such a superb organisation."

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# **SUPER AIR RACE**

The Super Air Race is an exciting new upgrade of the popular Zamperla thrill ride. 24 riders in six, four seater airplanes are hoisted upside down to a height of 14.7m (48ft.). Super Air Race has a high impact aesthetic thanks to the unique movement, world-class light package, and themed capabilities. This ride is sure to draw a crowd wherever it goes!

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#### WORLDWIDE

# Blackstone takes 65 per cent stake in waterpark operator Great Wolf

Great Wolf Resorts, which runs 18 familyoriented waterpark and entertainment resorts in the US and Canada, is targeting accelerated growth under a new joint ownership venture that sees hospitality and leisure investor Blackstone Real Estate Partners take a 65 per cent controlling interest in the company.

Blackstone will share ownership with Centerbridge Partners, which is the existing owner of Great Wolf, creating a new US\$2.9bn joint venture.

"We're pleased to welcome Blackstone as a new member of the Great Wolf pack," said Great Wolf CEO, Murray Hennessy. "Great Wolf stands to benefit greatly



■ Great Wolf is planning to expand

in hospitality, and values Centerbridge's continued involvement as we look to further expand the Great Wolf brand with the development of new resorts and enhancements to our renowned immersive family experiences."

from Blackstone's expertise

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We're pleased to welcome Blackstone to the Great Wolf pack

Murray Hennessy

#### THE BAHAMAS

## Major waterpark for the Bahamas, as Baha Mar announces US\$300m expansion

Bahamian mega-resort Baha





A new phase of expansion of the site will see the Baha Mar Bay waterpark built on the 14-acre site Mar is to be expanded with a new waterpark as part of a US\$300m project announced by the country's government.

Located near Nassau on the island of New Providence in the Bahamas, the resort currently includes three hotels, a casino, spa and a Jack Nicklaus-designed golf course. It's owned by Hong Kong-based Chow

A new phase of expansion of the site will see the Baha Mar Bay waterpark built on

Tai Fook Enterprises.

the 14-acre site formerly occupied by the nowdemolished Wyndham resort and Crystal Palace casino. It's scheduled to be completed in the next 1-2 years.

Alongside the waterpark, the new phase of development will include beach enhancements and new food and beverage facilities at Long Cay, Baha Mar's private 15-acre island, and upgrades to the existing Meliá Hotel and Baha Mar's pier.

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#### (INDUSTRY OPINION)

#### Delivering The Guest Experience

Aleatha Ezra, WWA

This October, hundreds of waterpark professionals came together for the World Waterpark



Waterpark
Association Show at Walt
Disney World Resort in
Orlando, Florida, US.

This once-a-year show provides a powerful opportunity for many of the water leisure industry's best and brightest to come together to soak up new ideas, browse hundreds of innovative products and return home with new industry connections.

One of the show's highlighted speakers was Jessica Bound, a customer experience consultant with The DiJulius Group, who told attendees: "you're in the customer perception business. Their perception is your reality. Your entire team needs to understand the day in the life of a customer in order to serve with true empathy and compassion."

Bound spoke about how to

make a waterpark brand stand out in meaningful ways by turning a mundane transaction into a unique memorable moment for the guest. "Many people say customer service is common sense, and for the most part they're right. Yet delightful, memorable customer service is so uncommon. You must put standards in place to hold everyone accountable for every experience, every time," said Bound.





Every year millions of people across the globe are delighted and thrilled by the coasters and attractions that bear the exceptional Vekoma brand.

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#### ITALY

## Palace of Versailles tour welcomes VR visitors

Google has created a virtual reality tour of the Palace of Versailles, allowing people to explore the architecture, artworks and history of the former home of French royalty wherever they are in the world.

Versailles: The Palace is Yours takes visitors on a tour of rooms including the Royal Grand Apartments, the Chapel and the Opera, It was created using a technique called photogrammetry, via which 3D models of spaces and objects are created from 2D photographs.

In what was the largest photogrammetry capture ever at the Palace of Versailles. 130,000 pictures were taken of 24 rooms and 36,000sa m (388,000sa ft) of internal surfaces using cameras and drones. This has been used to digitally reconstruct 7,000sq m (75,000sq ft) of indoor rooms and 500,000sq m (5,400,000sq ft) of gardens and outdoor space.

In addition to being able to move around the palace using VR devices, users can look at more than 100 paintings, sculptures and artefacts in detail. Google has also created curated, 360-degree 3D tours with audio narration to guide users through six of the Palace's most impressive rooms, including the Royal Opera House and Coronation Chamber, and has also utilised its Art Camera ultra-resolution scanning technology to digitise several of the famous artworks hanging on the walls.

READ MORE ONLINE



■The VR exhibit takes visitors on a tour of 24 rooms



In what was the largest photogrammetry capture ever at the Palace of Versailles, 130,000 pictures were taken of 24 rooms

#### JAPAN

## Scorekeeping wristbands planned for Nintendo World



It takes it to the whole next level. It's going to redefine what a park experience is like. It really is special.

Tom Williams

Interactive wristbands that interface back to a user's Nintendo game console look to be part of plans for Super Nintendo World, which is due to open at Universal Studios Japan theme park in Q2 2020.

Speaking at Comcast's 2019 Media, Communications & Entertainment Conference on 11 September, Universal Parks & Resorts chair and CEO Tom Williams said that the first phase of the three-level new world in Osaka will have two rides - a Super Mario Kart ride and "Yoshi's Adventures" - reportedly a short omnimover-type ride.

Williams said the rides had been tested and would "redefine what a park experience is like".



■Nintendo World will open ahead of the Tokyo Olympics

Although the plan is for every Universal Park except Beijing to eventually have the experience, there remains no timeline announced for any except that in Japan, where ground was broken on the development in 2017.

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# Do you manage a media-based attraction within your theme park or museum?

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#### POLAND

# **Architects chosen for Polish Army Museum project**

Architecture firm NM Architekci has won an international competition to design a permanent exhibition space for the new Polish Army Museum in Warsaw

Costing an estimated PI N250m (US\$62.7m) and due to open in November 2020, the new museum will be housed inside the Warsaw Citadel - a 19th century fortress in the city which served as a prison into the late 1930s.

NM Architekci's concept divides the exhibition space into three 'sightseeing paths'. either short, medium or long.

Visitors will be able to take in the exhibition at their own pace, with each path offering a different perspective of the exhibitions.

"The exhibits have been treated with the greatest respect, almost as though they were works of art," said a statement from the selection jury.

"The concept views the 'authentic' exhibits as the most important element of the exhibition, and these will be presented in consciously designed, illuminated rooms that will serve to emphasise their unique and individual character."

A striking feature of the plan, which will represent PLN45m (US\$11.3m) of the overall project budget, will see dioramas act as 'historical freeze frames', that help to provide a visual break from potential information overload, while also stimulating the imagination.

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"Keystone' dioramas will crown each segment of the display



The exhibits have been treated with the greatest respect, almost as though they were works of art

#### UK

## New museum to evoke spirit of seaside entertainment heritage



We aspired to do something completely unique

Gillian Campbell

A £13m (US\$16.8m) project to create a museum that celebrates Blackpool's role in the development of British popular culture is moving forward, following the awarding of a £4m (US\$5.2m) grant from the National Lottery Heritage Fund.

The Blackpool Museum Project is due to open in 2021 and is expected to attract 300,000 visitors per year. The immersive experience will feature the first permanent displays in a UK museum on circus, magic, variety and ballroom dance.

Memorabilia, film, music and live performance will give visitors the chance to see what made Blackpool more than just a seaside resort. Specialist interpreters and comedy writers are



■Blackpool Museum is due to open in 2021

being engaged to ensure the museum "reflects the lively spirit of Blackpool".

"We didn't want to just create a display of Blackpool's history, we aspired to do something unique." said Gillian Campbell, deputy leader of Blackpool Council.

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INDIA

# Billions earmarked for India heritage project

A programme of authentic reconstruction of 11 historic sites in India and the setting up of 100 experiential museums are among ambitious plans under development by India's culture ministry.

The Indian government will invest some RS270bn (US\$3,8bn) in a five-year programme running from 2020 to 2025, about a quarter of which will go to the Archaeological Survey of India (ASI) - a seven-fold budget increase for the agency that is tasked with conserving the nation's historical sites.

Historic sites such as the monuments of Hampi and the Bronze Age Indus Valley Civilisation are among those chosen for reconstruction.

New amenities will be provided at 600 sites, while 50 interpretation centres will be established and 50 monuments will be illuminated. There will also be a national centre for performing arts, an Indian Institute of Culture to provide training in archaeology. museology, conservation and allied fields, and a national festival to celebrate the folk art of the state of Jammu and Kashmir.

The 100 experiential museums suggested in the report will be "on the lines of the Acropolis Museum in Greece", and include a national experiential archaeological museum in Prime Minister Modi's hometown of Vadnagar in Guiarat. READ MORE ONLINE



■The World Heritage Site of Hampi is dotted with ruined temples



New amenities will be provided at 600 sites, while 50 interpretation centres will be established, and 50 monuments illuminated

UK

# £20m Silverstone Experience finally opens doors to public



The team have built an exceptional attraction that will inspire visitors with its incredible stories

Sally Reynolds

The Silverstone Experience, a £20m (US\$25.7m) attraction that hopes to inspire a new generation of motor racing engineers, has opened at the famous Northamptonshire racing circuit in the UK.

Set inside a refurbished RAF hangar (Silverstone was originally a World War II airfield), the new museum will be home to the archives of the British Racing Drivers' Club (BRDC), including items from the 1940s, as well as more recent Formula One memorabilia.

"Creating a home to tell the historic story of Silverstone was first discussed by the BRDC as long ago as 1971, so I'm immensely proud to see this seven-yearlong project come to fruition," said Sally

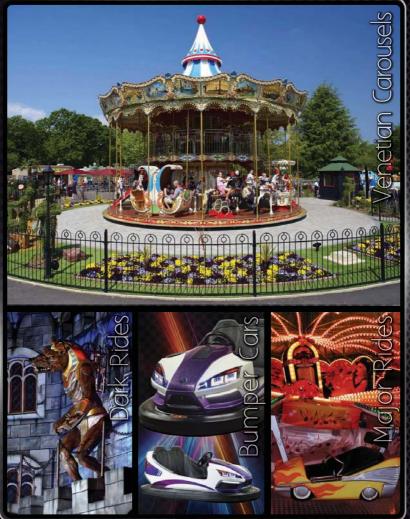


Exhibits range from the early days of motor racing

Reynolds, CEO of Silverstone Heritage, the charity behind the initiative. "The talented and committed team of staff and suppliers behind the project have built an exceptional attraction that will inspire visitors with its incredible stories."

The attraction will be open year-round and has a café and gift shop, It's opening had been delayed from July, after the project's original contractor entered administration.

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USA

### Mississippi Aquarium sets April 2020 opening date

The Mississippi Aquarium has announced an opening date of 30 April 2020.

Currently under construction in Gulfport, Mississippi, the US\$93m attraction will house alligators, river otters, fish, dolphins, stingrays and birds.

A celebration of Mississippi's marsh and gulf environments, the aquarium is expected to attract 500,000 visitors a year

Included in the attractions will be a 30ft-long (9.1m) underwater tunnel that will surround visitors with sea life, and exterior habitats that are 1.600ft (488m) long, Some 80,000sq ft (24,380sg m) of exhibits will be connected by landscaped



■The US\$93m attraction is a celebration of Mississippi

walkways representing all seven regions of Mississippi.

The tanks will hold more than a million gallons of both salt and fresh water. all of which will be filtered 16 times every day.

The aquarium will house alligators, river otters, fish, dolphins, stingrays and birds

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UK

### Chester Zoo given approval for major expansion of Grasslands area



Grasslands will be a phenomenal experience and will cement Chester Zoo as one of the world's very best attractions

Jamie Christon

Chester Zoo has had plans approved to build an African savannah habitat adjacent to a wide range of accommodation.

A proposal from the zoo has been accepted by Chester Council's planning committee, with zoo management saving the plans will "connect visitors with nature like never before".

The extension is part of the zoo's 217-acre expansion masterplan. which also includes its £40m (US\$49.2mm) Islands development currently being partially rebuilt following a fire.

"Grasslands will be a phenomenal experience and will cement Chester Zoo's standing as one of the world's very best attractions," said Jamie Christon, the zoo's chief operating officer.

"Featuring state of the art conservation breeding facilities for a range of threatened African species, Grasslands will also see the zoo push the boundaries of world-class animal care". READ MORE ONLINE

#### (INDUSTRY OPINION)

#### Making an urgent call to halt species decline

Gavrielle Kirk-Cohen WA7A



Union for Conservation

of Nature (IUCN) has issued an urgent call to massively scale up species conservation action in response to the escalating biodiversity crisis.

The Abu Dhabi Call was issued at the IUCN Species Survival Commission (SSC) Leaders' Meeting which was held in Abu Dhabi, United Arab Emirates, from 6 - 9 October 2019, More than 300 SSC leaders gathered for the meeting and signed the call, which urges governments, international agencies and the private sector to halt species decline and prevent humandriven extinctions by 2030, and to improve the conservation status of threatened species with a view to bringing about widespread recovery by 2050.

The World Association of Zoos and Aquariums has ioined as a signatory to the declaration and fully endorses and supports the Abu Dhabi Call.

As the World Association of Zoos and Aquariums, we commit to respond to the Abu Dhabi Call to scale up our commitment to species conservation. We will continue to strive for a sustainable future for people in a world in which species are highly valued for their intrinsic worth as well as the benefits they provide. We commit to providing knowledge, resources, and public education, engagement, and inspiration and to implementing action for species conservation.



# YVES PÉPIN

From international sport to major theme parks and global celebrations, Yves Pépin's spectaculars have been seen by billions of people around the world. Tom Anstey speaks to this industry innovator to find out more

e started with this idea that the attraction is not just a question of making fun things for people to enjoy," says Yves Pépin.
"It's about creating a place that represents the life of its people."

A cornerstone of the attractions industry for more than 45 years, Pepin is a creator of multimedia shows and large-scale events such as the Eiffel Tower Millennium Show – a spectacle seen by an estimated one million people in person and four billion viewers on television worldwide. He's also responsible for the opening ceremony of the 1998 FIFA World Cup and worked on the 2008 Olympic Games in Beiling, China.

Starting in 1974, his journey started alongside Yves Devraine and Thierry Arnaud, when the trio founded design and production company ECA2. While working there, he would take the traditional concept of theatre and apply it on an incredibly grand scale.

"Our ambition at the start was to create a company designing spaces," he says. "In every project, we try to make our shows and attractions represent real life and not be something totally alien.

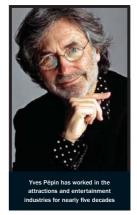
"In public spaces and for big events, that was our main direction of work, which was really to involve the attractions and shows. One of our first ever shows was in La Défense, Paris. It was in 1989 and we were celebrating the Bicentennial of the French Revolution. We needed to tell that story while trying to find out what would be the animation of this place and how it could come to life. We wanted to make a show that gave the people a different relationship with the district, to make a link with the people and the places we are working."

#### Ringing in the new year

The Eiffel Tower show was produced with Christophe Berthonneau. As the world started to celebrate the new millennium, each major city, in turn, would try and pull out the most lawish celebration of the last 1,000 years. Pépin's creation topped everything and is still talked about nearly two decades on.

To mark the occasion, ECA2 and Groupe F designed a grand pyrotechnic display. Starting at three minutes to midnight, the show included a combination of lights and 20,0000 fireworks.

"At the time we were working with models to test what we were doing," said Pepin. "What we decided to do was very new in the field of fireworks and it had to be absolutely secure in every way



- from a technical, safety, installation and operation perspective."

The show, celebrated around the world, changed industry perspectives about what you can do with an existing structure to put on a special display. For Pépin, safety and security were kev.

"The main challenge is that with such a grand project you cannot fail," he says. "Spectacular means astounding and amazing your guests, making them feel things they've never felt before. At the same time, you must assess all risk, which is often in conflict with the spectacular. We want creativity, originality and something new in terms of concept and technology."





More than a decade on the opening ceremony is still regarded as

one of the greatest in

Olympics history

More than 4.5 billion people around the world watched the opening ceremony at the 2008 Beijing Olympic Games

#### The Olympics

In Beijing, Pépin worked alongside renowned Chinese film director Zhang Yimou; Ric Birch, producer of the ceremonies at the 2000 Olympic Games in Sydney; and iconic director Steven Spielberg. Together, they would create the opening ceremony for the Olympic games.

The ceremony comprised two parts titled "Brilliant Civilization" and "Glorious Era". Seen by 91,000 people in person and billions more worldwide, the first part of the celebration highlighted the Chinese civilisation and the second part exhibited "modern China and its dream of harmony between the people of the world".

Featuring 15,000 performers, the ceremony lasted over four hours and cost a reported US\$100m to produce. The event was described as spectacular and spellbinding, with much of the international press declaring it "the greatest ever opening ceremony in the history of Olympics".

"It was a four-year total process, says Pépin. "The Chinese authorities asked different teams from across the world come up with individual projects. Following this process, they told four teams that they had been selected to do the Olympics but as a collective. This means you have to forget what you thought about and come together with a new project. We put our own concept aside and started together with these four teams tocreate the final project."

#### La Cinescénie

In the worlld of attractions, Pépin helped to creat one of France's most celebrated and iconic attractions – the Cinescénie at Puy du Fou, which has been running continuously since 1978.



### FEATURING 15,000 PERFORMERS, THE CEREMONY LASTED OVER FOUR HOURS AND COST A REPORTED US\$100M TO PRODUCE.

Telling the story of the Vendée region of France between the fourteenth century and World War II, the show involves 2,400 actors on an outdoor 'stage' spread ower 230,000sq m (2.47 million sor fit) with 28,000 costumes. Lasting for 1 hour and 40 minutes, the Cinescénie includes a number of constantly evolving performances.

In recent years, the show has reached a new level, with innovations such as lighting effects, 3D projection and new sets.

Puy du Fou welcomes two million visitors a year, making it the second-most popular park in France behind Disneyland. More than 11 million people have taken in the show.

"Puy du Fou started with the Cinéscénie," says Pépin. "Every year it gets an upgrade and refresh with new elements and new scenes. "it's like constructing a building. Each year another stone is being added or replacing another one and the structure is becoming larger, better and more beautiful. It's the same construction in the same place with the same scene but by adding more stones to this house, it eventually has become a palace.

"For visitors, they can come every few years and experience something new. This is the only example of this kind of a show which is building on itself in this manner. It's a constantly evolving project."

#### Waterscreens

The waterscreen is probably Pépin's most significant contribution to themed entertainment. The technique combines water jets and projection technology to





## PUY DU FOU WELCOMES MORE THAN TWO MILLION VISITORS EACH YEAR, MAKING IT THE SECOND-MOST POPULAR THEME PARK IN FRANCE BEHIND DISNEYLAND PARIS.



create a moving image, which appears seemingly out of nowhere. The first such use of the waterscreen was installed at La Défense for the show in 1989.

The fountain show projected images celebrating the Bicentennial of the French Revolution. It was such a success, that the technology has subsequently been adopted by Disney, Universal and SeaWorld, among many,

"We created it as an experiment and it took off from there," he says. "If it's well used, it's like the image appears somewhere where there was nothing before. It was revolutionary in the

sense that during shows you could have characters appear in a place like a lake or an open area. To have that appearing and moving and speaking is astounding."

#### Scaling up

When creating a show on the scale of Pépin's spectaculars, there are multiple factors to consider. A primary idea is that the story being told must go beyond language, with an international audience needing to be able to take in the narrative that has been created.

"No matter what culture or walk of life you're from, we all have something in

common," he says. "We try to conceive stories and characters which share common values with all of these people and this is where we must place our story and our expression.

"We must find something which people can recognise themselves and with their culture. It must speak to them and speak to their neighbours. It's quite challenging because we need to be understood by everyone and at the same time we need to make them feel that we're telling them something specific.

"The story we're telling in our shows need to be as deep as possible so that we



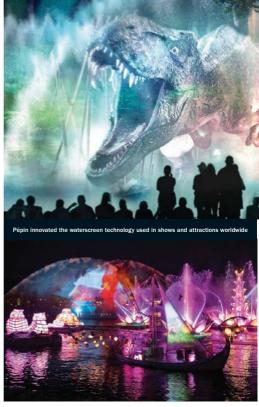
can connect emotionally with our audience. I believe a lot in the power of the emotion. It's what links the people and what must be understood by everyone."

#### Always innovating

After decades upon decades of success, Pépin continues to create and work in projects all over the world. He no longer heads ECA2, the production company he founded in 1974 and left in 2008, but continues to create spectacle and wonder as an independent consultant.

"Working for myself, I can really choose and do the things that I want to," he says. "I'm working on projects in India and I'm also doing theme park consultancy work. I've got some larger, long term projects, which are very interesting too but those are currently under wraps."

No matter the size of the project, Pépin believes that audience engagement is the



key to long-term success: "If there's no engagement or sincerity for what you are doing, it will feel like something is missing. Engagement means a connection with the audience. If you can recognise that then you're onto a real winner. Experience without sincerity is really a pity."

Looking to the future, Pépin sees everchanging advancements in technology as the way forward to creating an even grander spectacle, with an array of new advancements offering exciting ways to create audience engagement.

"I wouldn't say that the next step will be, for example, VR," he says, "We shouldn't think this way. We should think about how this new technology connects and what it means for the overall experience.

"VR and 3D are already in existence but there are still tools to invent. There will be a way of communication to bring people together and to invent. The next step will be discovering new ways to link people and to bring them together."

#### Pearls of wisdom

For someone wanting to replicate Pépin's success, what advice would he give?

"I've worked in this field for a long time, primarily on outdoor attractions and shows. I'd tell people to be ambitious and never being satisfied with anything. Have that level of ambition for the audience. Always think if you can do more or do better. Can you get deeply into the heart of the people? This is what must drive you."



#### PÉPIN'S PROJECTS

- 1998 FIFA World Cup, Paris, France: Stade de France was transformed into a magical garden, with fantastic and colourful "insects" performing around and above giant buds that bloomed to reveal flowers concealing sign footballs within their petals.
- 2000 Eiffel Tower Millennium show, Paris, France: The first ever pyrotechnic display to be installed directly on an historic monument and launched from it.
- 2002-2004 Luz Y Voces Del Tajin, El Tajin, Mexico: Paying homage to Totonac cultural heritage, the show was conceived as a 1.2km (0.75mi) route through a historic archaeological site, with visitors enjoying displays of light and images projected onto the various monuments of the site, such as the famous Niches Pyramid and the ritual "pelota" playing field.
- 2002-2006 Magical Sentosa, Singapore: The multimedia water show played out as a competition between a live conductor and Kiki – a virtual monkey. In the show, each tried to control the Musical Fountains of Sentosa.
- 2004 Tokyo Disney Sea BraviSeamo, Tokyo, Japan: Telling the tale of the meeting of the Water Spirit and Fire Spirit, this development included several technical firsts for Disney's park shows. Running until 2010, it used a range of cutting-edge technology and equipment, including a giant mechanical underwater creature and a water spirit character.
- 2008 Beijing Olympics Ceremony, Beijing, China: The event took place inside the Bird's Nest stadium in front of a worldwide audience of approximately four-and-a-half billion.
- 2014 Akshardham Temple Show, New Delhi, India: An immersive water show based on the story of Kena Upanishad. The show is created using water fountains, music, fire, lasers, video animations, projections, pyrotechnics and live acting.
- 2018 Lost in Space, Toulouse, France: A spectacular staging of US DJ Jeff Mills' creation, with Prabhu Edouard on the tablas and Christophe Mangou directing the Orchestre du Capitole.



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### **NEBULAZ**

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## SUPERSONIC

A host of fast-paced, high-action rides have opened in

recent months. We take a look at some of

the most significant around the world



#### **DESMO RACE**

Mirabilandia Park

Ravenna, Italy

The new 35,0000sq m (377,000sq ft) Ducati World area of Mirabilandia Park opened its doors in July, with its signature attraction coming in the shape of a worldfirst interactive duelling coaster.

Called Desmo Race, the ride is themed on the Italian motorcycle manufacturer's Ducati Panigale V4 Superbike, with passengers actually race each other, with the bravest outracing the other.

The 60-second race takes place on two separate intertwining tracks, both 1050m (3,444ft) in length. The aim is to replicate a World Superblike race, with each rider having their own drive system. Using a throttle grip, riders can determine exactly how fast they want to go. The ride vehicles contain an powerful electric drive, which, if required, can catapult riders to a top speed of 26.2mph (42.2kmph) with a torque of 1050Nm within a few seconds.



The ride climbs to 22m (72ft) during the experience. Based on Maurer's Spike coaster, planners were able to create the route and ride elements with freedom, as the Spike configuration means, unlike a conventional coaster, it doesn't need block brake sections and drive straights. The design of the vehicles sees passengers almost sitting on the ride rail itself. Original components such as display and lights are fully functional. In addition, a sound generator provides the full Ducati sound when accelerating to create an authentic overall experience.

#### UNTAMED

#### Walibi Holland

Biddinghuizen, Netherlands

The first of several recently-opened hybrid steel-wood coasters in Europe, Walibi's Untamed, is the rebirth of the park's only wooden coaster, which has been transformed into an all-new ride with a record-breaking five inversions and 14 air-time moments.

To convert the former Robin Hood wooden coaster into a hybrid, changes were made to the supporting structure, extending the ride length by around 50m (164ft) and increasing its height by around 5m (16.4ft). It now reaches a top speed of 92kmph (57.1mph), 12kmph (7.5mph) faster than the previous version.

The ride uses Rock Mountain's I-Box system, with the new track being a conversion of the previous version.



#### TMNT SHELLRAISER/ THE SHREDDER

Nickelodeon Universe

New Jersey, US

Part of the brand new Nickelodeon Universe indoor theme park at the American Dream mega-mall in New Jersey, New York, two major rollercoasters by Gerstlauer feature, with both themed on the world of Teenage Mutant Ninja Turtles.

The first, called TMNT Shellraiser, is a steel coaster based on Gerstlauer's Euro-Fighter model, with this particular version holding the record for world's steepest plunge on a rollercoaster.

Reaching heights of 141ft (43m) and speeds of up to 62.1mph (100kmph), the LSM launch coaster feature a vertical drop of 121.5°. At its peak, the ride will pause at the top of a 122ft (37.2m) drop,

SERSTLAUER

Sey,

as a a roon

The two new coasters anchor the theme park development



The second ride is another record-setter. Called The Shredder, the steel coaster features spinning cars and intertwines with TMNT Shellraiser on its course. With a track length of 2,247ft (685m) and reaching heights of 85ft (26m) the ride now holds the record as the world's tallest and longest free-spinning rollercoaster.

Two other smaller coasters feature in the park, with the Chance Rides-manufactured Nickelodeon Slime Streak and the Intaminmanufactured Sandy's Blasting Bronco.



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#### ► ZADRA

#### Energylandia

Zator, Poland

A new hybrid coaster at Energylandia, Zadra holds the distinction of being the world's tallest wooden rollercoaster.

Zadra – the Polish word for splinter – is Energylandia's 15th rollercoaster and features a 90° drop and three inversions, one of which is a Zero-G Stall. Towering at 63.8m (209.3t) and reaching a top speed of 75.2mph (121kmph), the ride uses Rocky Mountain Construction's I-Box Track, which consists of a steel track on wooden supports. A first for the manifacturer, this is the first coaster to be built from scratch using I-Box rather than having the track built onto a restling wooden rollercoaster.

Zadra takes the record of world's tallest wooden rollercoaster from the T Express at Everland and Wildfire at Kolmárden in Sweden, both being 56m (183.8ft) in height. The ride is primarily made of pine, an extremely weather-resistant material sourced from the US state of Georgia.

With its wood/metal combination, the ride has an old school feel with a modern approach. A combination of technology from Rocky Mountain Construction and Vekoma, the build



Zadra is the signature attraction of Dragon Castle – the new themed zone at Poland's Energylandia

took 11 months, starting in November last year with completion in August.

The ride opens as part of a new zone for the park. Called Dragon Castle, the medieval fantasy land is sited on the 50,000sq m (538,000sq ft) surrounding Zadra and is made up of periodic gothic architecture and the ruins of elaborate castles. A smaller second Vekoma coaster – Frida – is a family-friendly option for kids.



"With its wood/metal combination, the ride has an old school feel with a modern approach"

#### STEAM RACERS/FLYING EAGLE

Wuxi Sunac Land Jiangsu, China

Opened in August, this new ride from Mack is a steel launch coaster reaching speeds of up to 62.1mph (100kmph), shooting riders out of the station up into an arched horseshoe roll. At its peak, Steam Racers reaches 124.7ft (38m).

The ride is a key attraction for Sunac Resort – a new cultural tourism zone opened in June this year. Covering 240 hectares, the massive resort development features eight areas, including Sunac Land, a waterpark, snow park and Ocean Park.

Sunac Land also features the Flying Eagle a suspension coaster which is the fastest in the park, reaching 118kmph (73.3mph). Soaring through a set of artificial mountains the ride recreates the flight of an Eagle, reaching heights of 197.5ft (60.2m).





#### MIDNIGHT RIDE

**Lionsgate Entertainment World** Zhuhai. China

Entering the world of *The Twilight* Saga, Midnight Ride is a VR experience taking guests on a motorcycle thrill ride with Jacob and his Wolf Pack.

Using a real-world motorcycle on a usercontrolled motion base, guests wearing headsets ride through a moonlit setting. On the ride, vampires are on the prowl, with riders helping to draw them out so the Wolf Pack can regain control of the town of Forks.

Playing as avatars, 24 guests can enjoy the experience in VR at once. Branching paths and choices offer alternate experiences, increasing replayability.

The experience is a combination of CAVU's ride systems and VR specialist DreamCraft's technology, while Thinkwell led the production and creative process, and Framestore created the media.

To create the immersive experience, several special effects are used, including haptics and offboard and onboard audio.

"Guests can move through the Twilight world and interact with friends, family and familiar characters using our highly responsive motion base," said Mark Stepanian, VP of Innovation and Engineering at CAVU. "Coupled with force feedback haptics, wind and seent, the ride is designed to fully engage all the senses and makes for a ground-breaking experience."

"The ride is designed to fully engage all the senses and makes for a ground-breaking experience"



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#### LAVA DRIFTING

Haichang Ocean Park

Haichang, China

The world's first spinning rapids ride to actually feature rapid rivers, Lava Drifting is the latest addition to China's Haichang Ocean Park.

Also the longest spinning rapids ride in the world, Lava Drifting is themed after a volcano, with the 1km (0.6mi), 11-minute ride culminating in a steep drop from the wings of a manta ray.

It takes visitors around the park, with multiple viewing spots and vantage points for other visitors.

The preliminary layout was developed by Legacy Entertainment. The ride features a control system designed to ensure safety, precision and accuracy. This includes multizone control and advanced vehicle tracking.

"The ride path has been carefully woven through the Rainbow Falls section of the park,"said Legacy's Taylor Jeffs. "This symbiotic relationship is instrumental in activating the land."



"Lava Drifting is themed after a volcano, with the 1km (0.6mi), 11-minute ride culminating in a steep drop from the wings of a manta ray"

#### WILKOŁAK Maialand Kownaty

Lubusz, Poland

The Polish word for Werewolf, Wilkolak is a new addition to Polish theme park Majaland. Described as a family coaster, the ride is based on Plopsaland's Heidi The Ride, and is a steel-wood hybrid reaching heights of up to 22m (72.2ft) and speeds of up to 71kmph (44.1mph).

The ride follows the theme of a horror film, with the station stylised as an abandoned, haunted house standing on the edge of the forest. In here lives the werewolf, which has left its mark on the train carriages in the form of claw marks.

Developed at a cost of 67.5m (US\$8.2m)
The Great Coasters-designed Wilkolak is
the first wooden rollercoaster to come
to Poland since the closure of Warsaw's
Sto Pochiech amusement park in 1939.
It would be followed shortly by another
wooden hybrid – Zadra at Energylandia.



The werewolf-themed Wilkołak was developed at a cost of €7.5m

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# RULANTICA RISING

Germany's top theme park is about to launch a €180m addition with the

opening of its long-awaited second gate. Attractions Management looks

at Rulantica and how the new waterpark addition is taking shape

phoenix from the ashes might be quite a dramatic way to describe one of Europe's most opoular destinations. But after a year which literally saw sections of Europa Park reduced to cinders, the analogy is quite apt.

It was 29 May 2018 when a fire broke out, destroying a historic ride and consuming a large chunk of the park's Scandinavia and Norway-themed areas. Fast forward to the end of 2019 and, like the aforementioned phoenix rising from the ashes. Europa Park is rapidly rebuilding

what was lost, while also adding brand new attractions, primarily in the shape of its second gate – Rulantica.

A €180m (US\$197.8m) investment, the waterpark marks a significant milestone for the park, representing both its largestever single investment and its first gate outside of the main complex.

Complete with its own themed hotel, Rulantica takes visitors into a Nordicthemed fantasy world, with nine themed areas inside the 450,000sq m (4.8 million sq ft) resort extension based on the mysticism and beauty of Scandinavia. "We've tried not to make it feel like a second Europa Park," says Michael Mack, managing partner at Europa Park, "We created our own fantasy history with Rulantica, which is the first time we've done a park under a different banner. It was quite a hard fight within the family but Rulantica will really separate our brands and give them two distinct identities."

#### Immersive worlds

One of Europe's largest waterparks, Rulantica will feature a total of 25 attractions, including 17 slides inside the







32,600sq m (351,000sq ft) space. At the park's forefront will be its mascot Snorri – an octopus who takes two orphans on a journey to the Nordic island of Rulantica.

"The Macks made a commitment to doing something different and everything you see in this project is different," says Chip Cleary, a former IAAPA president and chief executive who has a long-held association with Europa Park as a senior consultant on a number of projects.

"The big difference is from the second you walk in, you're totally immersed in a different world. You're in an old fish factory that one of our characters, Bubba Sven, used to store his magical things in.

"Once you leave the lobby, you're going to go into locker rooms that don't exactly look like normal locker rooms. They're not hospital white, tiled, beautiful things. They're old factory locker rooms with the old lockers from the workers. You're going to be in an immersive area. From the moment you walk in, whatever language you say 'wow' in, it's going to be a 'wow' moment.

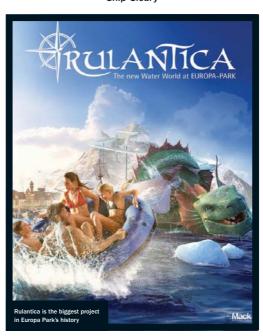
"It's a very story-driven project, this being the first step of many chapters. What you're going to see when we open in November is just phase one."

Vinterhal is the first of the nine areas, with a glacial mountain which is home to a number of slides that are protected by the frozen sea snake Syalgur. Next is Traildal, a larger water playground for younger visitors. In Rangnakor – a city on stilts – are a number of slides, as well as a restaurant and bar. In the outdoor area of Rulantica is Vildstrøm, a wild river travelling through Nordic landscapes. Also outside is the Fig Tempel – a pool featuring a swim-up bar. Back inside, Snorri's Saga is a lazy river flowing around all the areas of Rulantica.

Themed area, Skip Strand, is an adventure playground with a sailing ship, steamer, slides and climbing opportunities,

"The Macks made a commitment to doing something different and everything you see in this project is different"

Chip Cleary











"Our aim is to keep our visitors in the town of Rust for longer, which

we plan to achieve by investing more and more in our hotels and destinations"

while offering almost the complete opposite, Skog Lagune is a relaxation oasis equipped with bubble loungers and a swim-up bar. Finally, Lumáfals is a colourful grotto, waterfall and wave pool, complete with the Lumálunda restaurant.

#### The hotel

This Rulantica story starts with Europa Park's new hotel – Krønasår. Themed as a natural history museum, the 304-bedroom four-star hotel forms a major part of the new development, with Snorri taking visitors from the hotel to the waterpark on his magical adventure.

"There's a need in Germany, and also in France and Switzerland, for a staycation destination," says Mack. "It gives us a chance to have a second gate and to keep people in the area. Our aim is to keep our visitors in Rust for longer, which we plan to achieve by investing more and more in our



Michael Mack, managing partner at Europa Park

hotels and destinations. Our average length of stay per visitor is 1.4 nights, which we expect to increase with our sixth hotel."

The hotel opened ahead of the waterpark earlier this year and has so far been a big success, with high occupancies.

"Krønasår connects directly to the story of Rulantica," says Mack. "It's a museum

hotel, where artefacts connected from the journey to Rulantica have been placed on display. It also features Bubba Sven, which is so far our biggest restaurant in the entire hotel complex.

"We had concerns that occupancy at our other five hotels would drop with the new opening, but we've actually had very high occupancy rates. Through the summer months, we achieved 100 per cent occupancy in all of our hotels. It's been a huse hit for families."

#### Creating a new IP

Rulantica's influence extends beyond its walls. As part of repair works following last year's fire, a new Snorri dark ride by Jora Vision has been installed in the Scandinavian area of Europa Park.

The rebuilt area now offers an ice cream parlour, play area, restaurant and photo opportunity with a great white shark









model. The key attraction, however, lies underground, with the new dark ride, Snorri Touren. Currently in pre-opening phase, it's set for a full launch in December.

"My grandfather always had the idea to put something underneath the Scandinavian area of the park," says Mack. "We always had the space available but over the years it was filled with things like merchandising, so it was full and we never could actually do a ride down there. We took inspiration from Rulantica, which means guests, if they choose, can experience the Rulantica story without getting wet."

The ride takes guests on an adventure through the magical world of Rulantica, with riders meeting trolls and sea people before coming face to face with the sea servent Svalgur.

Dark ride experts and themed attraction designers Jora Vision collaborated with Mack Solutions, Mack Rides and Mack Animations on the ride, working from concept through to completion.

"The story is very cute," says Jan Maarten de Raad, Jora Vision CEO.

Snorri Touren is a new dark ride in the Scandinavian area of Europa Park based on Rulantica's octopus mascot

"Snorri collects objects to put in the museum hotel. He starts this tour operation, with the idea of sending visitors to Rulantica. It's a perfect integration of special effect, media and ride system."

Europa Park's ambitions for Snorri and Rulantica go beyond the park, however. A series of children's novels are now available in German bookstores, with plans to roll out the series across Europe in 2020. The operator has also created a musical to promote the Rulantica story, while there are plans from Europe Park partner MackMedia for a full-length animated feature film to be released in 2021.

"When the Mack family decided to build a waterpark, they really wanted to build their own integrated story world," says Tobias Mundiger, head of animation, brands and licensing at MackMedia. "This fantasy world will become our brand. We're not only planning to invest in the Europa Park waterpark but also in the story world and the brand, of which we can do a lot of other things.

"Creating a story gives us new opportunities, which we've already used to promote the waterpark. We created Rulantica the musical to really bring the story and the characters to the people. It's a big thing we're doing to really bring the story into their homes and to make the brand as well known as possible."

#### **Building anticipation**

Rulantica is set to open on 28 November and anticipation is through the roof, with Europa Park currently applying the finishing touches to its new addition.

"We've already sold more than 25,000 hotel and park tickets ahead of launch," says Mack. "Day tickets have just gone on sale. We have some theming details to finish but everything is moving along nice and smoothly. The team is there and we're ready to start welcoming customers to Rulantica."



# PARISIAN MAGIC

Disney is spending €2bn (US\$2.2bn) on a major expansion of its European stronghold, adding a new themed land and an immersive hotel to its portfolio. Daniel Delcourt and David Wilson share more about the landmark development





Daniel Delcourt (left) and David Wilson (right)





t was February last year when Disney first announced plans to completely transform its European home.

The crown jewel of the European theme park sector, Disneyland Paris will be completely reconfigured.

Touted as one of the most ambitious development projects at the park since its opening in 1992, the investment will see the creation of three new themed lands and is a commitment from Disney to the long-term success of the resort as its brand beacon in Europe.

"When we were considering how to transform this park, we kept several principles in mind," says David Wilson, Disney Imagineering site leader for Disneyland Paris. "One that we really focused on was franchise development, which is at the heart of our global park expansion strategy, Our stories, characters and franchises fuel the experience at Disneyland Paris and will continue to be key differentiators of our unparalleled experience for our guests and for our cast."

Following this ethos, Disney has announced plans for giant themed lands based on Frozen, Marvel and Star Wars, and has announced an immersive Marvel art hotel themed on New York City.

Set to break ground in 2021, the multiyear plan will include a significant expansion of the main Disneyland park. In addition to the three new themed areas, the park will also gain a new lake, which will act as a

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## We're creating a unique content ecosystem that no other company can match

focal point for entertainment experiences, while also connecting each of the new areas with the rest of Disneyland Paris.

"As the affinity for Disney, Pixar, Marvel and Star Wars continues to grow, box office success is only the beginning," he says. "By incorporating those story worlds into our portfolio, we're creating a unique content ecosystem that no other company can match."

#### WORK IN PROGRESS

With Marvel, Frozen and Star Wars among Disney's biggest hitters when it comes to its vast range of IPs, it makes sense that the operator is focusing its development dollars on these franchises.

"They continue to have a high appeal in France and across Europe," says Wilson. "Our fans tell us they want to see the characters and stories they love both on and off the screen. We know there's a huge appetite for guests to immerse themselves in our stories in the real world."

Each of the new areas will be highly immersive, all-encompassing with new attractions, restaurants, merchandising, live entertainment and immersive

environments. With a team of 350-plus Imagineers, Wilson is the man in charge, leading the multi-year expansion for Disney.

#### WINTER WONDERLAND

Frozen, which made its mark when it was released back in 2013, was seen in cinemas by more than 120 million moviegoers around the world. Since then,

its popularity has grown exponentially, with the new *Frozen*-themed area the biggest addition of the franchise to any Disney park.

"As soon as guests enter, they will see Arendelle Mountain, rising up in front of a beautiful lake that will be the new heart of the park," says Wilson.

"Approaching the new land, they will discover the castle inside a Norweiganinspired kingdom. A new attraction will take guests into the heart of this kingdom, as well as characters, shops and a restaurant.

"This will be the destination for all Frozen fans who wish to live adventures alongside Elsa, Anna and their friends, and with even more immersive experiences."





#### ► THE ART OF MARVEL

Marvel will have the largest presence of the new additions, with a themed land and a hotel both in the offing.

Called Disney's Hotel New York – The Art Of Marvel, the new addition to open in Q2 2020 will combine superhero-themed works of art with the atmosphere of New York City, home to many of Marvel's most iconic characters.

"We've always strived to deliver an unparalleled guest experience that brings our characters, stories and franchises to life," says Wilson. "This immersive storytelling and these unique characters and worlds are what set us apart and increasingly our hotels are also becoming part of that storytelling and extend the experience even after the parks are closed.

"This will be the first hotel dedicated entirely to Marvel art. New York is home to many superheroes, as well as the artists who created them. We thought this was the perfect chance to bring the two together."



The 561-bedroom hotel will be styled as a luxury Manhattan location. Its interior design will be "sleek and cosmopolitan in the style of Tony Stark and the Avengers Headquarters", with the "Art of Marvel" showcased through the hotel.

"As soon as our guests enter the lobby, they will feel as though they're inside a contemporary Manhattan building," says Wilson. "Each side of the lobby will have backlit panels featuring black and white comics. Our guests will also discover Iron Man suits of armour on display and pieces of Marvel art on the walls."

The hotel will feature the largest collection of Marvel art in the world, with more than 300 unique curated Marvel

works of art. There are exclusive works of art being developed especially for the property and the collection will be unique, with comic books, comic book covers, posters, concept art from films, storyboards, production design, props, original sketches, media and more.

Younger hotel guests can visit the Marvel design studio, a space which is themed after a real Marvel animator's bullpen and where they can learn how to be a comic book artist.

For guests who want to meet their favourite characters, there will be a part of the hotel called Super Hero Station where guests can meet superheroes and villains in themed environments.



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#### AVENGERS ASSEMBLE

In addition to the hotel will be Disnev's first dedicated Marvel-themed land. Called Avengers Campus, the addition will immerse guests in the Marvel universe "like never before", according to Disney,

"The experience is part of a larger story that takes part on a global scale. with Avengers installations being set up at our parks around the world," says Wilson. "Avengers Campus will include the first Disney ride-through attraction to feature Spiderman, helping him collect spider bots that have run amok. This is just one of the many adventures guests will experience in Avengers Campus, set up by The Avengers to recruit the next generation of superheroes."

The Campus will also feature the Ant-Man and The Wasp-related Pym Test Kitchen eatery, where Pvm Tech Technologies is using the latest innovations to grow and shrink food.

"The Marvel heroes inspire us at Imagineering as they inspire millions across the globe," says Wilson.

"We are, and we always will be, focused on immersing our guests in the stories they love, putting them right at the heart of the action."

#### THE FORCE AWAKENS?

Still shrouded in relative mystery is the new Star Wars land, which Disneyland Paris is remaining tight-lipped about.

The Star Wars addition will be smaller than the new Galaxy's Edge expansions in the US, roughly half the size at 30,000sg m (326,000sg ft), compared to 57,000sq m (614,000sq ft).

Concept art shows Poe's X-Wing parked instead of the Millennium Falcon. suggesting that Rise of the Resistance at Galaxy's Edge will feature instead of Smuggler's Run. The area will definitely include a major attraction, a dining location and character encounters.

#### **NEXT STEPS**

The new areas will be rolled out by Disney over the course of several years, with Marvel or Frozen expected first in 2021 and Star Wars at a later date.

Disneyland is a key part of France's tourism sector, with the park representing 6.2 per cent of the country's entire tourism income. Hiring more than 16,000 employees and welcoming more than 320 million visitors since opening, it plays a key role not only for Paris, but the entire region.

The multi-year plan will strengthen that position, significantly increasing the park's footprint. The plan is also key to turning around the fortunes of Disneyland Paris, which Disney took full ownership of in 2017. The attraction has struggled financially and in 2014, the company carried out a €1bn (US\$1.1bn) restructuring of its debt. In June 2017, Disney forced a mandatory buyout to shareholders, delisting its shares from the stock exchange.

"Disneyland Paris is a place where dreams come true," says Daniel Delcourt, COO, Disneyland Paris. "Making dreams come true has been our guiding principle.

"We're the leading destination in Europe and the continent's showcase for everything Disney, Our job is to breathe life into our stories and give them life in our hotels, theme parks and on our cruise line."

Even with much work still to be done on this latest development, Delcourt already has one eye on what comes next.

"Disney just bought Fox, which adds an incredible number of IPs for us," he says.

"Our teams have done such amazing work. Their creativity knows no bounds. We seek to provide complete immersion to our guests - from the time they arrive to the time they walk back out through our gates. There's much more to come."



t's been a year of change for IAAPA and as part of this, there's also been a significant shift for its European trade show, which for the first time was held under a new name – IAAPA Expo Europe.

Taking place in Paris, the former Euro Attractions Show brought together 15,900 participants, including 11,100 buyers and 648 exhibitors – a 13 per cent increase from last year's event in Amsterdam.

This year's European event featured the largest show floor in its history, with 17,500sq m (188,000sq ft) of exhibition space for the event held at Porte de Versailles in the French capital. Unlike 2018's event, which was spread over multiple spaces, this year the entire show floor was located inside a single hall.

"It was a remarkable week," says IAAPA president and CEO Hal McEvoy. "Attractions industry professionals from around the world came together to focus on the future. We celebrated the industry, discovered innovations, discussed emerging trends, and explored opportunities that will help companies take the guest experience to the next level."

There were a number of product launches at the show. Among them, Simorx showcased its AVG Dark Ride and Mini Flying Theatre, while Sally revealed two new attraction concepts developed with Aardman. Zamperia staged a press conference to launch its gamified swinging pirate ship Galleon+ and its Super Air Race product, which has recently been introduced at Coney Island's Luna Park. Clip 'n Climb also showed off its new Clip 'n Score technology, which was revealed to the public for the first time at IAAPA Expo Europe.

#### Networking with style

The opening reception was hosted at the newly revamped Jardin d'Acclimatation. Dating back 159 years, the attraction reopened last year following a €60m (US\$66.7m) renovation. Operated by Compagnie des Alpes (CDA) on behalf of the Louis Vuitton Foundation, more than 1,200 attendees at the event got a chance to try out some of the amusement park's vintage-style rides.

WhiteWater held one of the most eye-catching networking events, with a











IAAPA Expo Europe saw 15,900 people attend the show, with 11,100 buyers, 648 exhibiting companies and a range of speakers all taking part

rooftop champagne reception overlooking the Eiffel Tower and River Seine.

The Themed Entertainment Association (TEA) held its special mixer event at the famous Musée Grévin - one of the world's oldest wax museums. There, attendees got to explore the museum and later mingle with industry colleagues alongside a collection of quiet but famous faces.

#### Education

During the week, IAAPA offered more than 100 hours of conferencing, with special programming including the IAAPA Institute for Attractions Managers at Disneyland Paris; a one-day waterpark forum; and an IAAPA Safety Institute session at Parc Astérix.

Puy du Fou's Nicolas de Villiers delivered the keynote speech, detailing the success of the operator, its approach to live entertainment and its international

expansion plans, most recently opening a new Puy du Fou operation in Spain.

Delivered in both French and English, Disney's Daniel Delcourt and David Wilson spoke about the operator's future plans in Europe, particularly focusing on its planned €2bn (US\$2.1bn) expansion of Disneyland Paris, which will feature Frozen, Star Wars and Marvel-themed lands (see P56).

Sharing best practices, understanding the economic climate and learning about trends in the industry were also core ideas shared during the conference, with 131 industry experts from 21 countries speaking during the course of the week.

#### Moving forward

IAAPA's Global Outlook Report 2018-2022 says that theme parks across Europe will entertain more than 179.6 million visitors in 2019, with the industry projected to

thrive as new rides and expansions debut in the coming months. According to IAAPA EMEA executive director Jakob Wahl, this year's event showcased this.

"The show floor was the most expansive IAAPA Expo Europe has ever had, which gave attendees more to be inspired by," he says, "Our outstanding speakers - many from France - ensured the conference was valuable for all attendees."

#### London 2020

The next edition of IAAPA Expo Europe will kick off on 22 September 2020, with the three-day show taking place in a post-Brexit London at the ExCeL exhibition and convention centre. Home to some of the world's most revered and most visited attractions, more than 500 companies have already reserved a place for the event. To find out more, visit the IAAPA website.





## THE DIARY OF A BUILD

Simworx, a media-based attractions specialist, is globally renowned as one of the industry's leading suppliers in the design, development and manufacture of 3D/4D Dynamic Simulation Attractions and 4D effects cinemas. CEO, Terry Monkton, takes us through the development of two unique projects, from conception to creation

aving designed, manufactured and installed its products in locations across the world, Simwork is capable of adapting to any challenge.

With products in operation everywhere from the UK to Europe, North and South America, Asia, New Zealand and

the Middle East, the company has proven

its ability to produce high quality and

highly-innovative attractions worldwide. Simworx offers its clients full turnkey 'standard' ride solutions, custom product development, manufacturing, service support, film content, motion programming and fully themed attractions.

"When responding to an enquiry for a media-based attraction, and following discussions with the client to understand their creative aspirations for the ride, we produce a project proposal document detailing the scope of the ride and including concept images and in some instance



Terry Monkton, Simworx CEO



Following discussions with the client to understand their creative aspirations for the ride, we produce a project proposal videos," says Simworx CEO, Terry Monkton, explaining the process.

"Once the project is initiated and a contract signed, preliminary and final designs are created by Simworx and subsequently approved by the client," he continues, "This is an essential stage of the process, as the detailed drawings produced will be used for the manufacture of the attraction."

Following the completion of the design stage, the next step for Simvox is procurement and manufacturing. "At this point, all purchase orders are sent out to our supply chain," says Monkton.

This is followed by the assembly stage, which includes safety and operational checks on mechanical, electrical and hydraulic components and then installation.

Here we look at two major projects from the company have been the installation of its first Mini Flying Theatre and the development and installation of the new Immersive Superflume at Trans Studio.



### Mini Flying Theatre debuts in Vietnam

ith the first example being produced for Baosun Wildlife Park in Hanoi, Vietnam, Simworx's Mini Flying Theatre has brought this kind of attraction into the reach of smaller operators.

This version of the ride offers a more accessible price and also a smaller overall footprint than a full-sized Flying Theatre, but with the same cutting-edge ride technology being utilised.

The ride has an hourly capacity of 250 and is capable of seating 20 people at a time over two rows, with seats all mounted on a central structure.

Including its dome, the Mini Flying Theatre has a footprint of 16m x 18m and requires 11m height clearance in which to operate.

Guests board the ride from the floor, meaning there are no huge infrastructure costs for operators in terms of building lifts, stairs or wall reinforcements.

The attraction then lifts guests into the air with a smooth transition to panorama mode, with the rear rows of seats moving above those in front.





#### MINI FLYING THEATRE

Client: Baosun Wildlife Park
Capacity: 20 seats
Ride capacity: 250 people per hour
AV: Immersive dome screen supplied
with 10.2 surround sound audio and
a 4K projection system
Safety: Retractable safety monitored
restraints, height requirement of 1.1m
Dimensions: 16m x 18m x 1.1mH
Film supplier: Metropolis

Guests experience movements perfectly synchronised to the on-screen media content, including a programmable tilt, combined with the seats moving forwards and backwards, while the sensation of flying is enhanced with riders' legs dangling freely.

"Once the Mini Flying Theatre is built, it goes through a rigorous Factory Acceptance Test (FAT) and programming procedure before we pack and ship the attraction," says Monkton.

"Here, we also try out the ride ourselves for the first time and really get a feel for what it's like when onboard. This is the fun part for us and we're able to give our opinions on the movement and the overall experience. We're all big ride fans at Simworx so everybody is always excited when we get the chance to have a go on something new."

Supplied by film maker Metropolis, the "Fly Over Vietnam" film specially commissioned for this project lasts nine minutes and 50 seconds, with the experience playing out on a large-format dome screen. Supplied with 10.2 surround sound audio and a 4K projection system, in addition to the motion synchronisation, the attraction is fully interfaced with projection and sound systems and uses custom showreels on a digital format AV solution.

"It will take around a month for the Mini Flying Theatre to reach Vietnam, where it will then be unpacked and assembled," says Monkton. "It will again go through rigorous testing on-site during the commissioning stage.

The Flying Theatre will also be tested with the AV to ensure it's synchronised.

The Simworx team will then train the client's staff on-site on how to operate and maintain the ride, before finally handing it over to the park.

Once the ride is opened to the public, the Simworx after sales service team will always be available to offer support to customers where necessary.



### New Immersive Superflume provides brand new water ride experience

joint venture between Simworx and water ride manufacturer Interlink has brought together each company's strengths to create a brand-new experience.

Called the Immersive Superflume, the attraction puts a new spin on the traditional log flume with the incorporation of an Immersive Tunnel and other AV elements.

Developed for Trans Studio, an indoor theme park in Jakarta, Indonesia, the ride's footprint covers 6,325sq m (68,000sq ft) and it can accommodate approximately 780 people an hour.

After entering the attraction, visitors are seated in a 16-person themed boat, which takes them on a 300m (984ft) long log flume-style ride, with the added element of AV technology.

During the Immersive Tunnel section, each boat is fixed onto a highly dynamic, 3DDF motion base and surrounded by 3D film projection. During this part of the ride guests experience physical platform drops, rolls, dynamic lighting and surround sound, all of which combine to give an amazing new style of adventure.

"As the Immersive Superflume was a partnership project with Interlink, there were two sides to this build," says Monkton. "The water log flume ride was created by Interlink, while we focused on our Immersive Tunnel element."





Entering talks with Trans Studio, Simworx sent the park its sales proposal and concept images of what it imagined the ride would look like. This, says Monkton, helps the client to visualise how the ride system can be integrated into the chosen venue and the theming that could be used to bring it to life.

After the contract signing, Interlink and Simworx had a launch meeting where they talked through the specific details that needed to be considered and the 'ins and outs' of exactly how the ride would operate.

Following this, Simworx issued a final design document to the client for approval and at this point, the

The Jurassic Island installation at Trans Studio is the first time Simworx has combined its Immersive Tunnel with a water ride

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The immersive screen had to be custom made from fibreglass to accommodate the flume boat passing through built-in doors



procurement stage began, with the buying of materials required for the project, "Purchase orders are sent out to our supply chain and following their delivery a few weeks later, the assembly process can begin," says Monkton.

> "This project was assembled at Trans Studios itself, so prior to that, all the parts had to be built and shipped over to Jakarta," he continues.

#### Custom-made screen

"The immersive screen had to be custom-made from fibreglass to accommodate the flume boat actually passing through it via built-in doors," says Monkton. "These had to be able to open and close while also blending in with the rest of the screen and projected media.

"Once complete, the dome moulding was broken down into parts for shipping," says Monkton. "The motion base that allows for movement of the boat in the tunnel was also manufactured and tested thoroughly before shipping."

#### **IMMERSIVE SUPERFLUME**

Client: Trans Studio Capacity: 5 x 16 seat boats Footprint: 115m x 55m

Length: 300m Vertical lift: 12.5m

Chute: 12 5m

Total ride time: 6 minutes 10 secs Ride capacity: Approx. 780 people

#### ner hour

- AV: Curved 270 degree concave custom 3D screen with integrated drive through automated exit doors, 5 off Christie Mirage 304K Projectors,
- 7.2 Surround Sound Audio System Safety: Electric motion base with custom top frame, conveyer and safety locking interface
- 4D effects: wind, water spritz. rainforest aroma, dino breath aroma Film supplier: Falcon's Creative

Groun

The immersive screen was custom-made from fibreglass to accommodate the flume boat element of the ride

Once the immersive tunnel was complete, the next thing to be addressed was AV and motion base programming. Simworx's specialist AV technicians worked to create an immersive experience with the use of wind, projection, aroma. lights and audio, all programmed in time with the on-screen media.

For this project, Simworx worked with Falcon's Creative Group, which produced a custom film and audio soundtrack that takes riders on a journey through Dinosaur Island. During the ride, visitors are thrust into a battle between the rulers of the prehistoric world.

#### Waterproofing

The project is the first water ride Simworx has worked on and there were a number of challenges to consider, as Monkton explains: "We don't usually deal with water in our immersive tunnels," he says. "This meant dealing with challenges such as making our 3D glasses waterproof and working out how the water would be drained away from the motion base.

"Interlink also had to come up with a boat locking solution to ensure the boat could be secured to the motion base allowing for movement, but then released to allow it to continue the ride. Even small things such as finding a waterproof paint finish for the screens had to be considered." •

#### CONTACT SIMWORX

Phone: +44 (0) 1384 295 733 Fax: +44 (0) 1384 296 525 Email: sales@simworx.co.uk Website: www.simworx.co.uk

## WATER WORLD

A vast waterpark is the crown jewel in a masterplan designed to enhance the city of Debrecen in Hungary. Tom Anstey speaks to Peter Bordás, the architect behind the iconic addition to the city

ebrecen is Hungary's secondlargest city. One of the country's most important cultural centres in Europe, the 9th century settlement is undergoing a HF200bn (US\$653.8m) transformation – its most significant in nearly three decades.

Called the New Phoenix Plan (ÚJ Fōnix Terv) the investment programme started in 2004 and has so far included a new cultural centre, the conversion of Great Forest Park's outdoor stage, a new stadium and a sports pool among its developments. Still to come are a transformation of the Debrecen Cultural Park's zoo and theme park, and a new architecture icon for the city – the Aquaticum Water Park.

Based in Nagyerd – also known as the Great Forest of Debrecen – the combination of spa, lido and waterpark will be presented in unique fashion, with a structure of cascading waterfalls laid out over multiple storeys.

In 2015, Debrecen Spa held an architecture competition, inviting entries to build an iconic waterpark for the Aquaticum Spa and Wellness Centre. The city laid out the plans with the intention of creating a "high-quality, loveable, family centred and attractive waterpark".

Following a judging process, Hungarian firm BORD Architectural Studio were selected to design the new attraction.

#### Green architecture

With offices in Budapest, Debrecen and Zurich, BORD was founded by Peter Bordás in 2006 and places its focus on creating environmentally conscious and sustainable buildings, a key feature for the new waterpark, which will be enveloped by the protected Great Forest. Considering the existing forest surroundings, the planned scheme follows the original layout of an old lido that previously occupied the site.

"This was an experiment for us really that resulted in the creation of an unconventional, three-dimensional water experience, which at its heart features a cuboid shaped visual module made entirely of water, reflects the green colours of the surrounding," says Bordás. "Our concept was to place the different theme elements





The development is a long term, large scale investment strategy involving Nagyerdei Stadium and the rehabilitation of Békás lake



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into this environment as if they were pieces of a mosaic. In the middle we visualised a statue-like design that elevates the water and greenery to a different dimension, emphasising the outstanding natural surroundings of the Great Forest."

#### Inspiration from nature

Debrecen is located on Hungary's Great Plains, a dry region in the eastern part of the country. Protected by Natura 2000 – the European Commission's network of core breeding and resting sites for rare and threatened species – the forest is home to the steppe iris flower, as well as several rare species of beetle, butterfly and bat.

"We build each project around a story, which inspires the architectural concept and leads the project like a guiding thread, giving individuality to each of our buildings," says Bordás.

"In this particular case, we imagined a tiny puddle in the middle of the desert. Then we visualised a pair of magic hands pulling a cube out of this mass of water.

"This newly-created world, this little oasis, then gradually began to fill up with life. All sorts of plants and animals dwelled in it and finally the forest appeared too, treasuring the waterpark as the symbol of life at its centre.

"At the core of the forest hides the waterpark, which uses water so rich in minerals that it offers natural healing remedies for a number of ailments. These geographical circumstances, the presence of spa water and the protected forest all

#### LÁSZLÓ PAPP, MAYOR OF DEBRECEN

What do you want to achieve with the development?

The goal is to create a grove in the Great Forest, which will attract the people of Debrecen in winter. Not only can waterpark guests use these restaurants, but also those who are walking in the streets and exploring the forest."

### What kind of challenges did you face?

"There have been comments saying that water coming from a 12m (40ft) wall will make a lot of noise. The design team of Péter Bordás has come up with a practical solution for this: the water wall will get a glass cover, so the water will not be too loud."

### When can we expect the first guests?

"We will all be able to splash here next

inspired our work. The story behind the concept should remind us how important it is to protect the environment."

#### Tourism aspirations

The waterpark has been created primarily for the citizens of Debrecen, but it's also expected to be a tourist draw with capacity for up to 6.000 people a day.

The waterpark is laid out as an open, freely accessible construction that encompasses adventure and sport pools into one space. Each pool experience is separated by walls that will either be covered by glass with water cascading down like a curtain, or will be covered by green plants as a living wall.

Above will sit a 12 metre-high (40 foot) sun deck, with loungers, spa pools and entry to waterslides, which are being supplied by Hungarian manufacturer Eleven.

The largest space will be a 1,160sq m (12,500sq ft) adventure pool featuring a water cave, a lazy river, a bar and four different types of slides.

A second 1,100sq m (11,800sq ft) space will offer visitors training pools and a water polo pool. Nearby will be a diving pool with three diving stages up to 4m (13.1ft).

The kids' area has its own distinct look different from most waterparks.



66

## IT'S THE LONG-TERM PLAN OF THE CITY TO MAKE THE PARK FOREST A SIGNIFICANT DESTINATION FOR BOTH DOMESTIC AND FOREIGN TOURISM



► Tied in with its surroundings, instead of brightly coloured waterslides, attractions will be clad in wood. Based on the 2002 animated science fiction action adventure film Treasure Planet – an adaptation of Robert Louis Stevenson's adventure novel Treasure Island – Eleven and BORD dreamed up a pirate ship supported by a zeppelin, with water cannon and slides coming out of the structure. The area also offers 990sq m (10,650sq ft) for swimming, a 290sq m (3,100sq ft) spray park and a 620sq m (6,670sq ft) wave pool.

A second block will feature the main entrance and a food court. Restaurants in the area will not only serve visitors to the spa, but will also be accessible to walkers on the Nagyerdei path outside the building. Also planned are thermal pools and a children's theatre. Overall, the waterpark will cover 5,700sq m (61,300sq ft). "On the long, flat volumes of the building, a green, wave-like roof slopes up from the direction of the spa," explains Bordás. "The central visual attraction of the spa is the 12m cubold. This module is open and





Debrecen-based Hunep Universal Construction is acting as general contractor, with the development on course to open in May 2020

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Creating an active connection with nature was a high priority during the project, with its influence resonating throughout the entire waterpark development

permeable on all sides and encompasses several functions, such as the thermal bath, relaxation areas, pools, slides, sunbathing area and bars.'

#### Making progress

Debrecen-based firm Hunep Universal Construction is acting as general contractor for the development, which is currently progressing. Breaking ground in November 2018, the site reached its highest point at the end of July, with a topping out ceremony held to mark the occasion.

"We are well on schedule," says Bordás, "The central attraction and the entrance area are structurally complete. The kids' world is still under construction and we plan to open to the public on 1 May 2020."

With such a substantial development, there have been challenges and with its Natura 2000 status and a remit set out by the city, BORD was under strict guidelines.

"We've designed something in a treasured forest area where environmental protection is the top priority," says Bordás.

"On the construction side of things, we had to build arched concrete surfaces

which presented a challenge and then, technically, we had to find a way to deal with the immense vapour and sound coming off of our artificial waterfalls."

#### **Developing Debrecen**

For the city, Aquaticum represents the next step in its vision for the future. With the Great Forest known as the most popular area for sports, relaxation and leisure activities, the renewal of the lide as an extensive waterpark facility °will enhance that reputation even further.

"It's the long-term plan of the city to make the park forest a significant destination for both domestic and foreign tourism," says Bordás, "The most strikingly visible innovations of this project include Nagyerdei Stadium, Bekas Lake, the Nagyerdei Open Air Theatre, Nagyerdei Water Tower and the Mist Theatre. One of the last elements of the renovations is the waterpark.

The city requested a concept that could become another iconic representative of Debrecen and Nagverdo and we look forward to welcoming visitors in 2020."

#### ÚJ FÖNIX TERV

#### **Employment**

The New Phoenix Plan encompasses Debrecen's entire infrastructure. In addition to investments, the plan has focused on economic development for both large and small operations. To this end, new areas of industry are being designated, with enhanced support for innovation and highvalue industrial development. Called the Employment Pact, the scheme aims to create thousands of new jobs across multiple sectors.

#### Transport

The transport development programme will be crucial to improving business and tourism links for the city, while also making everyday life for its residents easier and more comfortable.

Improvements include the main railway station on Petofi Square, with transport links improved to include more tram and intercity bus services.

A new bypass is being built to better connect the airport and the southern area with the rest of the city. Road resurfacing is also taking place, transport hubs are being expanded and new cycle paths are being built.

#### Districts

New housing developments will address deficiencies in the city dating back decades in some places. Around these developments, parks, playgrounds and parking infrastructure will be renovated, with particular focus on the eastern and southern districts of Debrecen.

#### Nagverdei Stadion

Opened in 2014, the HF11.5bn (US\$43.7m) Nagyerdei Stadion has the capacity for 20,340 spectators, making it the third-largest football stadium in Hungary. The stadium primarily hosts Debreceni Vasutas Sport Club's home matches and features rail seats to facilitate safe standing at domestic matches. It's also the home stadium for the Hungarian national football team.

#### Debrecen Cultural Park Located in the Great Forest, Hungary's

oldest conservation area, Debrecen Cultural Park opened in 1958 as the country's first zoo outside the capital Budapest. The park also now houses a botanical garden and amusement park and is undergoing a multi-million dollar transformation, which will largely be completed by the end of 2019.



## RAISING SAFETY

Safety is the highest priority in the visitor attractions world. WhiteWater's Una deBoer tells us how the company maintains elite safety standards in waterparks and the steps operators can take to improve safety across the entire industry



y workday starts by reading industry news round-ups and our google alerts to track what's happening in our world. Sometimes my heart sinks because I read about an accident on a ride and my empathy – as a mum – kicks in, especially if I read about injured children or parents.

It's worse somehow when a place created for the purpose of joy suffers a tragedy. I don't think my somewhat emotional reaction is unusual – at WhiteWater we all take our responsibility very seriously. We love that we bring families together and we know their safety is also in our hands. Each of our designers and engineers knows that keeping people safe is our number one priority, while still offering a fun, and at times thrilling. ride experience.

Keeping that balance between thrilling rides and safety should be the top of every park and manufacturer's mind, but is it something we talk about enough as an industry? I feel safety becomes part of the industry narrative more when an accident hits the press. We need our efforts in safety to be more visible at all times, not just when there is an issue to address.

Accidents do happen and we need to be prepared. That means proactively managing risks related to rider behaviour, maintenance procedures, operational training, or design.

#### Safer slides by design:

Waterslides are much more technical than they look. Consider that in a rollercoaster, the rider is in a restraint in a vehicle on a fixed path. For a waterslide, a rider is in vehicle that can vary in inflation, weight and water flow, and the operator relies on the behaviour of the rider to maintain the right body position. Both people and water behave dynamically so we have to be exacting in our design methodology.



Entertain the Possibilities

Keeping that balance between thrilling rides and safety should be the top of every park and manufacturer's mind, but is it something we talk about enough as an industry?

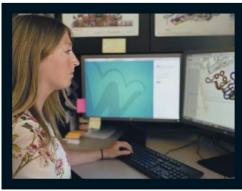


WhiteWater design so that all of our rides meet geographic AHJ (Authority Having Jurisdiction) requirements - the recognised international standard - as well as our own strict internal design guidelines. This includes taking into account factors such as g-force, rider/ vehicle dynamics, and the rider envelope.

Every new ride goes through an internal review process, which includes ride validation to pass tolerance criteria in order to meet our internal safety standards. This ensures the best combination of safety with fun and excitement.

"There isn't a school that teaches a course in this, " says chief waterslide designer, Bruce Bradley. "Experience is of supreme importance. You need that knowledge-base to properly design in the fun and avoid the risks."

To validate that the ride works and meets our intended design for safety and fun, we test it through our proprietary simulation system. Our team developed



New rides go through a review process based on a set of strict guidelines

#### **PROMOTION**

this software internally over a decade ago and have been feeding data from the hundreds of attractions we install every year, which makes the system a valued tool with a fidelity that allows us to manufacture and install rides with confidence.

We don't stop at the ride path. We're also exacting in our approach to structural engineering. We insist on custom-designing every ride for its site, where we take into consideration the soil, topography, and wind/seismic/weather conditions.

For example, the waterslide tower for Royal Caribbean's Perfect Day Island 135ft (41.1m) was designed to withstand winds of up to 180mph and shortly after opening, it survived the category five Hurricane Dorian unscathed, coming back into operation the following weekend.

Our simulation results are carefully calibrated on-site during the commissioning process. We do this to make sure the ride is performing as designed and provide guidance for adjustments that can be made by our expert installation supervisors.

This is when final water-flows are set through testing, first with surrogates and finally with riders of different weights and raft combinations. Final commissioning documentation, including the operator's

> We don't stop at the ride path. We're also exacting in our approach to structural engineering



manual, is provided, with an orientation to hand the ride over to the client. This sets the stage for operators to coordinate their internal testing and any AHJ inspections, ready for public operation.

#### Influencing rider behaviour

A focus on staff is important because they're the safety front-line, managing a major risk you face: rider behaviour. Riders don't always behave as requested. They don't hold on, they don't stay in raft positions – worst of all, they jump out. But to manage your liability, it's important that you can prove your staff were attentive and trained to instruct riders. Good signage and entrance waivers also help make sure you've clearly informed riders of the expected safety behaviours.

#### Importance of safe surfacing

People running and slipping or falling in water is the number one cause of waterpark injuries, which is why WhiteWater's safety commitment has extended to an exclusive distribution agreement with LifeFloor – the only aquatic flooring to meet the newly launched NSF50 flooring safety standard in the US.

This foam-rubber flooring system has a rippled, textured surface that provides traction when wet and a nonabrasive impact absorbing surface if someone does fall, so kids can run and jump as they play in water.

#### Safety is part of our DNA

Safety is a cultural factor, not a box to tick. It really matters to us at WhiteWater.

We want you to choose WhiteWater products, but most of all, we want guests to be safe, because accidents erode consumer confidence across the whole visitor attractions industry.

So, when considering new rides, please ask tough questions of your suppliers and make sure they can show clear evidence to support their safety claims; you don't ever want to be in a position where you find out too late that they don't. ●

www.whitewaterwest.com



Franceen Gonzales is executive VP or business development at WhiteWater

### Championing safety

Franceen Gonzales, who leads The WhiteWater sales team in the Americas, spent 30 years operating waterparks as a pool technician, lifeguard, and manager. She's an industry liaison and is one of the company's safety champions.

Gonzales is currently vice chair of ASTM F24, serves on the IAAPA Global Safety Committee and is board president for AIMS.

"I learned many hard lessons in my operating days," she says. "Over time I established what works when it comes to creating high-performing teams.

"Having worked for companies large and small, the best advice I can give is to keep it simple." Set standards internally, then clearly communicate safety expectations and goals to all staff, not just management
 Resource for implementation and train the team to meet and exceed your standards
 Measure and celebrate success – coach for improvement, ensure accountability for failure

When asked which has the most impact, Gonzales doesn't hesitate to say staff training because it's how you ensure a safety culture permeates an entire organisation.

"If I had to choose between people, process, or product, I'd start with people," she says. "If they don't see the vision or their purpose in the organisation, it doesn't matter if you have the best process or product. Your people drive the use of the other two."



#### **Minimising incidents**

Even the best designs could fail due to operational issues, which is why it's essential that slides are operated in accordance with the manufacturer's operating and maintenance manual.

This documents prescribed parameters, including correct water-flow rates and levels, rider height and weight ranges, and maintenance schedules.

We can't emphasise enough that set parameters should be followed. The manual is a tool to set operators up for success and makes the information available to everyone. Some important elements include:

Managing issues around height and weight

Follow height and weight requirements as listed, by posting clear signage, training your staff, and providing tools to enable people to measure their height and weight. These two parameters are important to keeping the rider/vehicle on the designed path.

Regularly inspecting and maintaining your ride

Finding an issue before someone is injured by following instructions in the manual is one of the most effective forms of risk management. We also recommend Mobaro, an easy-to-use app which details each person's responsibilities, provides check-lists, captures task completion time stamps and geo-tracking to provide an audit trail, should you ever need it, without creating more paperwork.



can help to minimise any potential incidents

Checking water flow and quality

Having the correct water flow enables the slide to perform with the right speeds, whether accelerating or decelerating having a way to measure flow and check it before, during, and after operation is important. Related to this is maintaining proper water quality. The wrong quality can eat away at surfaces or deposit calcium, which can cause vehicles to slow down on chalky or pitted surfaces.

Using the correct ride vehicles

Ride vehicles are tested by the designer of the ride and so only approved vehicles should be used. Maybe you can find it cheaper elsewhere but it may not perform well.

Don't gamble on safety to save a little bit of money.

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# DARK DAYS

The attractions industry is all about enriching lives and giving its audience smiles and treasured memories, but very occasionally mother nature intervenes or something goes horribly wrong. Kath Hudson looks at what can be learned from the experiences of those unfortunate operators who have had to react when disaster strikes...

in February 2011, a 6.3 magnitude earthquake hit the centre of Christchurch in New Zealand, leading to the loss of 185 lives and interrupting power, water and sewage amenities for weeks. Canterbury Museum was in the epicentre and has been contending with the fallout ever since.

"We always knew a major earthquake could happen, without ever believing that it actually would," says Lesley Colsell, strategic projects advisor at Canterbury Museum. The event itself was terrifying – all the lights went out and the power went off. The evacuation went well, with no one hurt and the staff staying in their



positions to guide people out. The ground was rolling when we went outside." Since the museum underwent

earthquake strengthening in the 1990s, it was much more resilient than other

buildings of its age and managed to stay intact. Luckily the water pipes didn't rupture, so there was no water damage to contend with. Out of its 2.3 million objects, 92,000 were damaged of which 73,000 were acetate negatives. Luckily two important exhibitions which were at the museum at the time – one from Buckingham Palace and the touring exhibition, Scott of the Antarctic – were both unharmed.

But the repercussions of the earthquake have caused years of problems. Colsell says it's only now that they are finally getting back to business as usual after a protracted insurance claim, which wasn't settled until 2018.











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#### **DEALING WITH TRAUMA**

"The aftershocks went on for a couple of years and were almost as bad as the quake and terrible for your mental health," says Colsell, "Lots of people didn't feel safe living in Christchurch, or had lost their homes, and so moved away. Businesses had to relocate because the centre was cordoned off and visitors didn't want to come in to the city.

"Every time there was an after shock we had to have structural engineers in to see if the building was safe. Before the earthquake we were a very successful museum with rising visitor numbers, afterwards they went right down and suffered for a long time. It only feels like we are now getting back to business properly."

It was six weeks until access to the museum was permitted and then only the senior management team went in to start planning and fix collections, so that no further damage could be done by the aftershocks. Everyone was very tired, so staff were only asked to come in for short periods of time and for specific tasks.

that an event like this has on staff," says Colsell, "They all care deeply about the



#### THE INTERNATIONAL MUSEUM COMMUNITY IS PROVIDING HELP AND EXPERTISE TO SAFEGUARD SALVAGED SPECIMENS

museum and its collections, but were also having to deal with devastation at home. so were having to use chemical toilets in the streets. Lots of people camped,

With hindsight, Colsell says she wishes the team had sat down with the insurance company at the outset to agree on a strategy, as no one had ever dealt with a claim like this before.

No one had running water for weeks,

or lived in broken houses for years."

#### CALLING ON THE PROFESSIONAL NETWORK Brazil's oldest and most important

historical and scientific museum, Museu Nacional in Rio de Janeiro, suffered a catastrophic fire in September 2018, destroying the majority of its two million artefacts. An old building, containing lots of wood and flammable materials. it burned quickly and, to make matters water because two hydrants were dry.

The museum's vice director, Luiz Duarte, said: "It is an unbearable catastrophe. It's 200 years of this country's heritage. It is 200 years of memory. It is 200 years of science. It is 200 years of culture, of education."

Duarte blamed the government for failing to support the museum, which had fallen into a state of disrepair. In what he describes as a terrible irony, the museum had only just closed a deal with the government's development bank for funds, which included a fire prevention project.

It was a huge loss for Brazil and all the museum can do is move on, with plans in place to rebuild the historic structure. The international museum community is providing help and expertise to safeguard salvaged specimens and digitise collections. The Museu Nacional and the Natural History Museum in London have signed a memorandum of understanding for future collaboration, which will lead to workshops and shared expert knowledge. >

'You can't overestimate the impact worse, the firefighters didn't have enough

#### **OPERATIONS**





Ensuring animal safety, Zoo Miami has a set plan in place for hurricane preparation





▶ Sir Michael Dixon, director of the Natural History Museum, was part of an expert team which travelled to Rio de Janeiro in August. In the light of this incident, he says it's important for the museum community to collaborate: "The fire at Brazil's National Museum was not only a tragedy for the global museum community but for anyone who loves the natural world.

"We're making this declaration of support to one of our international counterparts, because we understand the global necessity of these collections to further advance our scientific knowledge of the planet we live on and to help humanity make better decisions now and for the future."

#### MAKE PREPARATIONS

Managing director of Zen Communications, Felicity Wingrove, is a crisis management expert and says that while the public understand life is unpredictable, it is essential for operators to demonstrate that they have been as robust and prepared as possible against any eventuality, whether that be a natural disaster or an accident.

"Art galleries and museums are custodians of irreplaceable works of art and there is no excuse for not ensuring they are fully protected," she says.
"Evervone understands there can be



Ron Magill is goodwill ambassador and communications director at Zoo Miami

acts of God, but even with this there should be an element of preparedness, making sure that everything possible is done in advance to limit damage."

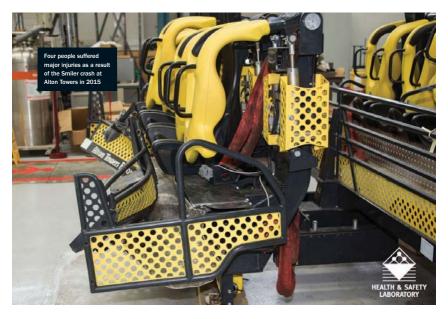
Having had to endure a number of devastating hurricanes, Zoo Miami has expertly honed its hurricane protocol. "At the beginning of hurricane season, trees are trimmed and other landscaping done to minimise damage which could be caused from debris," says zoo spokesperson, Ron Magill.

"Extra quantities of medications are also ordered and once a hurricane watch is issued, extra food is ordered and stored in secure facilities. All back up generators are tested and topped off with fuel and fuel storage units are filled to capacity. Any tarps and signs which could be dislodged are taken down and loose items, like wheelbarrows and rakes are secured."

Animals are not evacuated, as this could cause further stress and as hurricanes can change direction, could put them in further danger. So birds and smaller animals are removed from open habitats and placed in secure holding within reinforced structures on zoo property.

Refrigeration trucks are reserved in case the storm destroys refrigeration units. 
"These mobile refrigeration trucks proved to be some of the most valuable pieces of equipment following Hurricane Andrew, as they provided a means to store food and ice for both animals and staff during a very hot and humlid time," says Magilli.

Arrangements are also made with other zoos for a post-storm evacuation should the damage be substantial enough to reduce the zoo's ability to safely maintain any animals.



#### CAREFUL COMMUNICATION

In extreme cases, things can go badly wrong and people get hurt. Alton Towers faced the worst case scenario in 2015 when there was a collision on the tracks of The Smiler ride. Four people suffered major injuries, and two young women had to have lower leg amputations.

A horrendous situation which could have been catastrophic for the park and Merlin Entertainments, it was handled so well that negative publicity was minimised. Merlin chief executive, Nick Varney, came across as very human in his response: "From the beginning, the company has accepted full responsibility for the terrible accident at Alton Towers and has made sincere and heartfelt apologies to those who were injured," he said,

"Alton Towers - and indeed the wider Merlin Group - are not emotionless corporate entities. They are made up of human beings who care passionately about what they do. In this context, the far greater punishment for all of us is knowing that on this occasion we let people down with devastating consequences. It's something we will never forget and it is something we are utterly determined will never be repeated."

According to Wingrove, Merlin Entertainments' response was lauded



#### OPERATORS NEED TO SHOW TRUST. RESPONSIBILITY, TRANSPARENCY AND RESPOND IN A TIMELY MANNER, WITH A REASSURING TONE. THE LANGUAGE USED IS CRUCIAL

across the PR industry as being textbook: "They did so much that was right: coming across as human and personable. demonstrating remorse, making it clear that the human element was the real issue and not the share price, they freely gave financial support to the victims, they used the right language and responded in a timely fashion, taking responsibility."

In these cases, Wingrove says it is vital for the head of the business to take responsibility, show genuine regret and that lessons have been learned: "Operators need to show trust. responsibility, transparency and respond in a timely manner, with a reassuring tone. The language used is crucial."

#### ALWAYS FORWARD

Can something positive come out of a disaster? The answer is, sometimes, ves. A disaster can lead to a review of the vulnerabilities, tighten up operations and ensure that such an incident won't happen again. The best case scenario

is for this to be done in advance, but not all eventualities can be predicted.

Canterbury Museum has dealt with years of hardship, but Colsell says that one positive to come out of the earthquake was the city was littered with artefacts which were gathered for a new branch of the museum, telling the story of the earthquake. Quake City displays the cathedral spire, as well as exhibits like a car door, and a chemical toilet, which were ubiquitous at the time

The solidarity shown by people to put things right can also be heartwarming. The Eden Project, in Cornwall, suffered millions of pounds of damage and lost revenue when it flooded in November 2010, but its director, Tim Smit, found a silver lining: "It's really odd that after a week you can look at something that was damned awful and almost look at it as if it's a good thing. Yes, it did a lot of damage. But it was also just so exciting to see the Eden team kicking into action and determined to be open as quickly as possible. They worked 24/7."

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## **WORLD TOUR**

A new study has found that the global museum exhibitions market is worth almost US\$6bn and it looks set to continue to grow. Kath Hudson finds out more about the potential of touring exhibitions and pop-ups

ouring exhibitions should be able to offer an experience visitors can't get anywhere else," says Paul Lee, design director at Mather & Co.

"Whether that be a unique object or collection, a behind the scenes visit, or an exhibition which captures a personal story or important moment in time, it should stand out by being engaging, relevant and appealing to a wide range of people.

"A good exhibition should immerse visitors. It should be a form of escapism."

According to Vastari's Exhibition Finance Report, touring exhibitions are a buoyant growth sector and can be a powerful way to engage with new audiences. The study, which focussed on 20,000 members of the International Council of Museums, found that on average museums hold seven exhibitions a year.

museums hold seven exhibitions a year.

The main motivation is to display new material and attract a wider audience, with "building public profile and reputation"



Paul Lee, design director at Mather & Co

A GOOD
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ESCAPISM

coming a close second. Surveys from Imagine Exhibitions found that an average of 40 per cent of visitors to its exhibitions are first time visitors to the host venue, proving that travelling exhibitions are an excellent way to engage new audiences and deliver mission-based programming to different communities.

#### Content is king

President and CEO of Imagine Exhibitions, Tom Zaller, says to stage a successful exhibition it's crucial at the outset to find out the client's goals – for example, to boost ticket sales, or provide robust educational content – and then tailor the experience accordingly. 90 per cent of Imagine's visitors rate experiences 4/5 or 5/5, which Zaller reckons ups the likelihood of them returning to the institution in the future.

Compelling experiences with a strong narrative are what people are looking for: "People want immersive, shareable, interactive experiences, with a story at the core," says Zaller. "They're no longer interested in a separation between themselves and the experience – they want to be inside the experience, to be a part of fit.

Venues are looking for the same. According to Imagine's recent industry survey, more than 50 per cent of venues who book travelling exhibitions are seeking tactile, hands-on interactives as a part of the experience.

Visitors, says Lee, should be drawn into the narrative through engaging design, creating an emotional journey. "Good exhibitions typically have a change of pace throughout the visit to keep it fresh, which can be delivered through visual stimuli, standout "wow" moments and clear communication from the exhibition to the visitor." he saws.





#### **EXHIBITIONS**

#### Staying on trend

As well as reaching new audiences, travelling exhibitions allow venues to stay relevant at a much lower cost than a permanent exhibition. In a recent industry survey, Imagine found that climate change, dinosaurs, artificial Intelligence, immigration and space were the subjects which venues are most interested in discussing. To stage new permanent exhibitions could be prohibitively expensive, but touring exhibitions make delivering these experiences much more feasible.

Lee also points out that touring exhibitions can be good revenue generators in themselves: "The temporary exhibition programme is a vital part of revenue generation, whether firsthand through ticket sales and merchandise, or passively through secondary spend, which can be incorporated through promotional addons, such as photo opportunities."

Going forward, Zaller predicts there will be an ongoing use of IPs to create strong storylines which people are familiar with, making for an easier sell: "We licensed and developed a successful Jurassic World exhibition a few years ago," he says, "and have worked on producing Hunger Games: The Exhibition, as well as many



Tom Zaller, president and CEO of Imagine Exhibitions

ANGRY BIRDS
IS A GREAT
EXAMPLE WHAT STARTED
AS A GAMING
APP HAS NOW
GROWN INTO A
FILM FRANCHISE

other popular IPs. If the right IP is well executed, there's a lot of opportunity."

Mather & Co spent three months meeting the producers and creators of Downton Abbey before committing to a final design of the exhibition. "As it uses real objects and props from the show, as well as its characters, it needed to feel authentic," says Lee. "We had the creators, producers, directors and writers of the show working alongside us the whole time to ensure it was soot on."

#### Up next

Lee says that within the museum sector there's a small shift towards venues being created which focus on delivering a temporary or changing rotation of stories and collections through exhibition programmes and the downsizing of permanent displays. "There's a definite requirement in all the projects we work on for the capacity to update, refresh, generate new content and ensure repeat visitors are as much of the target audience as new visitors," he says.

Another burgeoning trend is allow digital

access to exhibitions. "I don't believe that virtual or digital exhibitions will ever





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#### Key findings of Vastari's Exhibition Finance Report

- The annual global museum exhibition budget is worth US\$5.9bn
- There are an estimated 55,000-80,000 museums worldwide, and the largest 20,000-35,000 museums account for the bulk of spending on touring exhibitions
- The average number of exhibitions per
- museum each year is seven

  The average cost, excluding shipping
- and insurance, is US\$57,000

  The total insured asset value globally each year for exhibitions is around US\$87bn
- Demand outstrips supply for
- travelling fine art exhibitions
- The main reason for hosting is to expand audiences, raise profile, enhance reputation and generate revenue
- 65 per cent of institutions host externally

produced touring exhibitions

- More than two thirds of institutions plan their exhibitions more than 12 months in advance
- o 64 per cent of institutions work with both
- exhibition producers and other institutions

  32 per cent work exclusively with other institutions
- 4 per cent work solely with exhibition producers
- 41 per cent of hosts of fine art exhibitions do not
- choose to work with exhibition producers

  Art institutions tend to have lower average
  hosting budgets than science institutions
- Art exhibitions tend to have higher value objects and be more logistically complicated than science exhibitions

The report can be found at www.vastari.com. Data in the report is anonymous to subscribers

 replace the tangible, sensory nature of visiting the real thing, but it's allowing access to be granted to a wider audience, extending the brand and providing a dialogue with new generations of visitors, which can only be a good thing," adds Lee.

In terms of content, Zaller says the world of video games and apps are opening up a whole new realm of fandom: "Angry Birds is a great example – what started as a gaming app has now grown into a film franchise, with a second film released this year alongside the existing live entertainment brand extensions like Angry Birds Universe."

Consumer trends suggest touring exhibitions and pop-ups are here to stay. Millennials prefer to spend their money on an experience rather than material items. Also, as online retailers are

leading to a weakening of the physical retail landscape, Zaller points out that this leaves developers re-imagining and repurposing existing assets in new ways

"The "pop-up" trend has started to grow, especially in the US," he says. 
"There's also a hunger for live experiences. 
People will always crave opportunities to make memories together and share them with each other. Travelling exhibitions, immersive experiences and entertainment are the perfect platform for consumers to come together and share in a meaningful experience."

#### Does size matter?

In terms of the perfect host venue, a good sized space which is easily accessible and with high footfall is ideal. However, not ticking all of these boxes doesn't mean a venue won't be a success. A popular exhibition can draw visitors to out of the way locations and flexible design can allow unlikely venues to accommodate touring exhibitions.

Lee says that small, intimate spaces often lend themselves well to this use. Zaller says if the host is keen they can usually come up with a creative solution – in the past this has involved using climate controlled tents in the grounds of a venue.

Another concern which is sometimes voiced by venues is the maintenance of high tech interactives. Imagine has overcome this barrier by working with Scitech which designs robust interactives, many of which can be maintained remotely. ●



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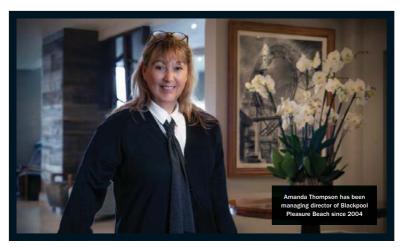






# AMANDA THOMPSON

From celebrating its centenary to launching its new global headquarters, 2019 has been a big year for IAAPA. Tom Anstey speaks to Amanda Thompson, the organisation's new chair for 2020, as IAAPA's leadership team maps out its plans for the century ahead



#### AMANDA THOMPSON / INCOMING IAAPA CHAIR

manda Thompson is only the third female to chair IAAPA in its history. The managing director of Blackpool Pleasure Beach in the UK since 2004, Amanda has set her sights on the year ahead as IAAPA continues to evolve and grow under new leadership.

#### What's your background?

I first worked in the amusement park industry at the age of seven. I was desperately in love with the thought of owning a pony, so I was put to work on our pony ride at Blackpool Pleasure Beach so I could learn to look after one. After that my life in the amusement park industry stopped and I became a guest for the next few years.

When I was 14 or 15, I spent a summer holiday handing out certificates on the Revolution and my love for the industry began again. Next I worked in Blackpool and in the US within the entertainment sector and when I was 20 years old, I began a new company, Stageworks Worldwide Productions, which took shows out into the world of amusement parks, theatre and television.

I worked in Myrtle Beach producing shows at our park, Magic Harbour, then I worked for 1.3 years at Europa Park producing their ice show, followed by work at Liseberg, Siam Park, Boudewijn Park, Efteling and many many parks in Europe and of course Blackpool Pleasure Beach, I worked all over the UK taking shows to theatres and I worked for IAAPA on

the What's New Theatre and the closing events. I've also done television work for the Royal Variety Performance and all types of shows all over the world.

#### Do you have any key goals for your year as IAAPA chair?

To unite the amusement park world with safety, security and sustainability.

## You will become only the third woman to chair IAAPA in its 100-year history, how important is that?

It's particularly important because I'm the first European woman and it's been a while since a woman has chaired the association. Hopefully I can encourage more women to step up to the plate and take on the role of chair.



has chaired the association. Hopefully I can encourage more women

to step up to the plate and take on the role of chair

#### What excites you most about the industry?

Change. Change is extremely exciting and our industry changes every day. We all have unique experiences in every park around the world, every single day.

You take over the chairship as a British theme park operator in the year of Brexit. How will that affect your operations at the park and how do you plan to help IAAPA's British members through this uncertain period?

I don't know how any of us can respond to Brexit at the moment because no one knows what will happen, including the European government in Brussels and our government in the UK. Unfortunately it's going to be one of those issues that you can't plan for, that you have to hope that you can deal with when and if it happens

#### Your predecessor, David Rosenberg, highlighted sustainability as a key issue. Is that something you want to continue to focus on?

Yes, it's a very important issue which will affect our industry so I intend to carry on the work that David has started.

Where can the industry improve?

A weakness is definitely not having a global safety standard. This is something

which needs to be addressed and that would be something I would love to see happen during my tenure.

## How do you see the attractions industry changing in the coming years and what trends are emerging?

People are going to want more experiences when they visit amusement parks. Virtual reality has become popular but! I think it's going to swing back and people are going to want more of a hands on experience, whether it's a pop concert, going on a rollerooaster, or even eating. I think festivals and events within amusement parks will also become bigger and take on more importance.



#### ► DAVID ROSENBERG / OUTGOING IAAPA CHAIR

aking up the chairship during
IAAPA's centenary year, David
Rosenberg is the first IAAPA
member to lead the organisation
from the zoos and aquariums
sector. During his year as chair,
Rosenberg set his sights on sustainability.
He looks back and tells us what's next for
incoming chair, Amanda Thomsoon.

#### How have you found your year as IAAPA chair?

2019 has been very busy and exciting. IAAPA is about making connections with each other and I was very fortunate this year to have the opportunity to meet and connect with so many outstanding industry professionals all around the world. No matter where we were, I was constantly struck by the passion and depth of commitment everyone has for their facilities and organisations. I often felt I was with people who had found their "true cailing". It was inspiring.

#### You highlighted sustainability as a key thing for you to address during your year as IAAPA chair. What progress has been made on that front?

I've continued to be a part of the industrybased, global conversations about embracing sustainability. Clearly, corporate social responsibility (CSR) is more than a buzzword it has made its way into more business plans than ever before. Industrywide, more and more of us recognise that a commitment to sustainability is about more than just embracing green initiatives—it's about meeting our guests' growing expectations that we not only continue to be fun places to visit, but also an industrywide force for good.

#### What else have you achieved during your time as chair?

This year hasn't been about my accomplishments, it's been about everyone coming together to continue to serve the global attractions industry. The incredible IAAPA Board of Directors, supported by our team, all worked together to accomplish

so much. This year's Expos grew in both scope and attendance; and IAAPA launched many new important member benefits, services and events, all with the goal to help members become more connected to the association and each other.

I'm proud to have served on the Sustainability Task Force this year. The work is just beginning, and I'm excited that the Board of Directors approved our request to make this group an ongoing committee so that this important topic will remain a key focus for IAAPA.

#### How has the attractions industry changed over the last year?

I think the key word for us is 'growth'. The industry continues to grow and expand, especially into new markets and emerging markets like the Middle East and Asia. At the same time, public expectations of the attractions industry continue to evolve. We've been keeping a close eye on the changing perception of animals in professional care and how that may



impact attractions with animals. And of course technology continues to evolve rapidly and our manufactures and suppliers are keeping the pace by introducing new products that we could not even have imagined just a few years ago.

#### Have you seen any particular areas of growth?

I'm really intrigued and struck by how important immersive experiences have become, and how they can change the expectations of our visitors. A strong intellectual property (IP) connection is the central premise for many of these experiences, demonstrating that brand affinity for certain pop culture franchises remains stronger - and more important to attractions - than ever.

#### What trends are emerging in the attractions industry?

For years the industry has talked about creating immersive attractions and experiences and I think we see that now

more than ever. New lands and themed areas transport guests to different times and places. The full story is told as guests journey through retail areas, or stop for food and beverage. Theming, imagination, innovation, technology and storytelling are all coming together in new ways.

#### What are the strengths and

weaknesses you see in the industry? The global attractions industry's greatest strengths are the people and the teams who all come together to create fun for millions of guests. The creativity and passion that unites and drives our industry truly sets us apart. Being in the business of creating fun helps drive this passion and the forward momentum of our industry.

IAAPA serves the attractions industry, and one of the best ways industry professionals as individuals, as well as team leaders, can continue to learn and grow is by connecting further with this organisation. I am often surprised to learn IAAPA members do not take full advantage of the many benefits

on offer. The association is about much more than trade shows - it's a source of networking, education, government relations and so much more.

#### What needs to be addressed in the industry?

The shift in guest expectations, particularly from the millennial generation, is having many ripple effects on our industry. It's important we understand that these expectations are changing and that we're able to react and adjust in a timely manner. We must strive to be proactive by understanding guest behavior, needs and expectations and understand how to design, create and enhance our facilities to meet these needs

I am also proud to say the focus on safety and security remains at the forefront of everything we do. IAAPA continues to bring together the industry and share best practices so we can learn from each other and continue to provide safe experiences for our guests and our employees.



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## IAAPA Attractions Expo

The 2019 IAAPA Attractions Expo kicks off on 18 November. Here's what's on offer, plus news from a selection of visiting exhibitors

t last year's IAAPA Expo, the organisation celebrated its centenary. This year, it looks to the next 100 years, as record numbers of industry professionals descend on Orlando for the attractions industry's

Orlando for the attractions industry's largest annual trade show event.

Expected to draw more than 38,000 people this year from more than 100 countries, the expo serves the U\$\$360bn global attractions industry, with more than 1,000 exhibiting companies represented over the course of the week.

IAAPA offers a programme of more than 100 educational sessions and presentations by leading operators

on industry trends, new technology, marketing and communications, entertainment, government relations, safety and security, food and beverage, games and merchandise, facility operations, human resources and more.

Speakers this year include keynotes Christine Duffy, president of Carnival Cruise Lines; Vince Kadlubek,

NEED TO KNOW
What: IAAPA Attractions
Espo 2019
When: 18-22 November
Where: Orange County
Convention Center,
Orlando, Ronida, US
How much: General registration
US\$164 (US\$299 non-member),
Education Conference included
with registration (US\$359 nonmembers), Child registration
(0-12 years) free, Students

US\$50 (US\$100 non-members)

co-founder and CEO of creative firm Meow Wolf; and the always popular Legends panel, hosted by BRC's Bob Rogers.

In these sessions, Duffy will look at the integral role attractions are playing in the cruise line sector, Kadilubek will discuss the consumer's movement towards creative experiences; and the Legends Panel will go behind the scenes of the creation of Star Wars: Galaxy's Edge in Disney theme parks.

The conference takes place from 18-22 November and the trade show from 19-22 November. Buyers and decision makers from the world of theme parks, waterparks, FECs, museums, zoos and aquariums will all be in attendance at the show.

The trade show floor will fill 560,000sq ft, (52,000sq m), with companies showcasing their latest products and services. For the second time, the show floor will extend beyond thee walls of the convention centre into an outdoor structure built for the event. Called the Exploration Station, this area creates exhibit soace for more than 130 new exhibitors.



#### **EXHIBITOR NEWS**

#### ]RA

Booth: 1369

To celebrate the 25th anniversary of one of TV's most popular shows – Friends – JRA has collaborated with Warner Bros and Superfly to create a month-long pop-up experience in New York City.

JRA provided planning, design and implementation services for the attraction, which sold out three hours after going on sale and was heralded as "the Louvre of Friends fandom". The nostalgla-packed space offered fans the opportunity to capture photos with the set recreations, props and costumes from the show. Visit JRA to hear more about this and other projects from its portfolio.



#### Zamperla

Booth: 2031

Zamperia will be showcasing Galleon+, a new interactive add-on for swinging pirate ship rides. During the ride, guests are divided into two teams, with a gesture control system and scream meters scoring them for volume and lifting their hands when the galleon reaches the top of its arc. Two different captain's voices encourage riders to play along. A sensor measures the galleon inclination and a camera installed on the mast records the hands lifted. The system assigns points to each team and at the end of the ride, one team is the winner. In parks where lifting hands is not allowed due to safety procedures, the scream meter system is used instead. To find out more, visit the Zamperla booth.



#### Kraftwerk

Booth: SPONSOR

Kraftwerk Living Technologies' SFX Motion Seats have been successfully implemented in the largest 4D theatres in the world, rounding off its expertise in creating immersive 4D theatre solutions. With clients also asking for a solution for smaller venues or even individual seat set-ups for VR applications, the audiovisual system integration experts have now introduced an electric drive version of their seats, in addition to the pneumatically driven version.

With the introduction of the electric drive, Kraftwerk Living Technologies is opening up new market segments not just in theme parks but also in museums, science centers, FECs, brand centers and planetariums.



#### Simte

Booth: 1783

Simtee will present the new generation of Hexafilte flying theatres, which is a further development of its successful Hexafilte product sold more than 20 times worldwide. On display at its booth will be its ScreenFilte system, which puts ads, information and messages in motion. Stop by and talk to the Simtee team to find out what solution it has available for your new attraction.

#### Holovis

Booth: 1378

Holowis has launched HoloTrac – its proprietary solution that transforms destinations into intelligent, connected spaces to extend and enhance guest experiences and transform operations, security and safety. Object, gesture and voice recognition capabilities let guests naturally interact with a space to engage in personalised adventures. Behind the scenes, intelligent real-time tracking systems monitor people's movement to deliver extensive insights into operations and security. HoloTrac uses advanced computer vision and tracking technologies to produce powerful data analytic visualisations and actionable insights into part dynamics.

#### ► IAAPA SHOW PREVIEW

#### **EXHIBITOR NEWS**

#### Forrec

Booth: 2869

Creating inspiring entertainment designs for places of escape and destinations of distinction, Forrec has worked with some of the world's biggest brands and will be showcasing a number of its projects slated to open next year, including Changsha Dawang Deep Pit Water World. This site's unique elevation allowed the team to design a multi-level waterpark. In addition to waterparks, Forrec designs theme parks, visitor attractions, mixed use entertainment and resorts.



Severn Lamb designs, supplies and manufactures light urban, leisure and resort transportation. This year the company has had several new commissions around the world, with a new Texan at Fuwah Park and two of its western-style Lincoln trains at Suzhou Forest World in China. There were three new SL road trains to hit the UK - one at The National Railway Museum, one at Marwell Zoo and the other Colchester Zoo. Visit the Severn Lamb booth to see what services and attractions could suit your needs.



Lagotronics Projects celebrates its 40th anniversary at this year's IAAPA Expo. Since 1979 the company has created an array of experiences and projects, all including the 'show-factor'. From interactive dark rides for theme parks to immersive experiences for FECs, museums and experience centres. Lagotronics' popular GameChanger will also be present. The company is currently working on a GameChanger for Shimao's Smurfs theme park in Shanghai, which is completely themed in Smurfs-style.

#### Technical Park

Booth: 4735

Technical Park will be on hand at IAAPA, highlighting options to help you boost your business. Speedway is a new family rollercoaster recently developed by Technical Park. The company is also presenting a new flyer ride under the name of Flying Dutchman, offering a great interactive experience, where riders can sail, sway in the breeze, pick up speed during rotation and lift up in the air as they like.

Booth: 3069/3269

Simworx is promoting it's latest product, the Metro of Time a twist on the traditional 4D cinema, that takes riders on a journey through the ages in a metro-themed carriage. Alongside this, it just launched its AGV Darkride. With no tracks or power cables, it has an acceleration unrivalled within the industry. Its recent projects include the first installation of the Mini Flying Theatre in Vietnam, as well as their Immersive Superflume in Jakarta. Read

more about Simworx on p62.

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#### ► IAAPA SHOW PREVIEW

#### **EXHIBITOR NEWS**

#### Vekoma

Booth: 5124

Some of the world's most popular amusement and theme parks work with Vekoma to create new experiences that move their business to the next level. Vekoma says no challenge is too big or too difficult and they will be on-hand and assist you at IAAPA.



# A PARA A STATE OF THE STATE OF

#### SimEx-Iwerks

Booth: 2288

Visit SimEx-lwerks to meet one of the largest distributors of cinematic content for 4D Experiences, Motion Ride Simulators and Fly Theatres in the world. During this year's show, it will introduce eight new 4D Experiences including blockbusters Aquaman and Wonder Woman. Let your guests soar with the innovatively designed Flying 4D Experience and check out 10 new flying theater films.

#### Intamin

Booth: 3424

Linnamäki in Finland has announced the opening of the Intamin-designed LSM Double Launch Coaster Taiga. Meanwhile the Tigeren pendulum is in full swing at Djurs Sommerland in Denmark and Dueling Dragons, the Dueling LSM Tiple Launch Coaster successfully opened at Guangzhou Sunac Land in China is now in operation. At this year's LIAPA Expo, Intamin will present a number of new LSM Launch Coasters, Family Launch Coasters, Tower Rides and several different Water Rides. Nist the booth for more information.



#### OpenAire

Booth: 3048

OpenAire's newest waterpark, opening in 2021, will be part of the massive 520-acre OWA resort destination on the Gulf Coast in Foley, Alabama, US. This new park will be 65,000sq ft (6,040sq m), and will be the largest indoor waterpark on the Gulf Coast. OpenAire has been designing and manufacturing retractable roof structures and skylights for 30 years. Headquartered in Oakville, Ontario, Canada, OpenAire is approaching 1,000 projects throughout North America, Europe, and the Middle East.

#### iPlavC0

Booth: 4062

iPlayCO has announced its new 'iPlayCO/Tag Active' Cyber Towers and expanded Tag Active systems product line. Cyber Towers are two side-by-side timed vertical obstacle towers. The towers are independent of each other but players can race together in the separate towers. These gamified Ninja/Cross fit attractions allow for social media marketing integration, and worldwide gamification events for individual players, groups, and teams of all ages.



NOVEMBER 19-22 BOOTH 8 11月19日至11月22日 展位号872

**BOOTH 872** 





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### PRODUCT INNOVATION

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

Lauren Heath-Jones, products editor, Attractions Management

> For the latest supplier news and company information, visit attractions-kit.net



• The Metro of Time attraction is available with specially designed custom film content to suit a client's venue and theme

#### Terry Monkton unveils Simworx's new Metro of Time ride

imworx, a UK-based developer of dynamic mediabased attractions, is set to launch a brand new attraction.

Metro of Time takes guests on an adventure through history. On the ride, guests will experience a prehistoric safari, a treasure hunt through an Ancient Egyptian tomb, a Medieval quest and a chase across the Wild West.

Available for a 2020 install. the Metro of Time attraction consists of four Metro-themed 4D cinemas, each with a 40-person capacity. The units,

available individually or in multiples, each feature 3D0F motion seats, surround sound audio, on-board special effects A motion simulator experience, and seven LED screen 'windows'.

> The ride pre-show will feature a geomagnetic storm. which rips a hole in the spacetime continuum and causes the trains to malfunction. sending riders back in time.

As guests arrive at each 'destination', the carriage wall opens revealing a huge projection screen which, alongside the on-board screens, creates the immersive



Terry Monkton, CEO, Simwork

experience. The ride, says Simworx, is available with custom film content created to suit the client's needs and theme.

"Our development team are always working on new and innovative ways to offer a thrilling experience to our clients," said Simworx CEO, Terry Monkton. "Available in a full turnkey solution, this truly unique attraction is also ready for install early 2020."

ATTRACTIONS-KIT KEYWORD

SIMWORX



#### June Ren introduces Jora Vision's concept for new panda museum in China

for the breeding facility are contacting Jora Vision for

from Jora Vision is planned

ora Vision has won a competition to develop a museum experience at The Giant Panda Breeding Research Base in Chengdu, China,

Officials at the facility, a renowned panda protection and research institute, challenged competition entrants to create an experience that would meet tourism demands, whilst working within the limited space.

Jora Vision impressed the judging panel with its concept of a walkthrough experience, which offers a 'well-defined storvline' and combined interactive exhibits with immersive theming and digital guidance solutions.

"We're very proud to work with the Chengdu Giant Panda Breeding Research Base, a famous institution in China and around the world," says June Ren. MD Asia for Jora Vision.

"It's great to see that more and more tourist attractions, museums and heritage sites



June Ren. MD Asia. Jora Vision

our expertise of creating visitor experiences in an educational yet entertaining way."

The museum will provide an immersive and educational environment showcasing the important work the facility does in researching and protecting pandas.

ATTRACTIONS-KIT KEYWORD

JORA VISION

#### SimEx-Iwerks reimagines children's classic with new film says Mike Frueh

mEx-Iwerks is set to launch a new animated 4D experience based on Rudyard Kipling's iconic children's novel. The Jungle Book. The film, which is slated

for release in 2020, is called Mowgli's 4D Jungle Adventure and is being developed by UK-based animation studio Red Star 3D

It will take audiences on a 10-minute adventure with Mowgli, Baloo, Shere Khan and Bagheera, as well as several new characters. A modern retelling, the story tackles the



Licensing and Distribution atSimEx-Iwerks

thorny issue of wildlife trafficking, as the characters must band together to protect a group of tiger cubs from poachers.

The custom script was written by Gary Grant and Howard Brodsky, director of Licensing and Distribution at SimEx-Iwerks.

Mike Frueh, senior VP of Licensing and Distribution at SimEx-Iwerks, said: "We recognised a need for highly entertaining, conservationbased content from a powerful brand that has instant name recognition, Mowgli's 4D Jungle Adventure delivers."



 Mowgli's 4D Jungle Adventure is slated for a 2020 release

ATTRACTIONS-KIT KEYWORD

SIMEX-IWERKS

## Kunibert's Abenteur will showcase Lagotronics capabilities, says Mark Beumers

agotronics Projects is set to create a new interactive dark ride at the Wild and Freizeitpark Klotten wildlife park in Cochem, Germany.

Called Kunibert's Abenteuer, Lagotronics will be responsible for all the design, theming and storytelling elements of the new ride, as well as its installation.

Expected to open in April 2020, the ride will be a contemporary spin on a traditional ghost train attraction.



Mark Beumers, CEO, Lagotronics

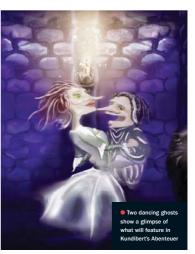
Kunibert's Abenteuer will be based on the legend of a folkloric Germanic knight, who has been sent on a quest by his mother, Frau Schrute, to prove himself as courageous.

On-board, riders will come faceto-face with Kunibert's ghostly ancestors, who are planning a spectacular ball to celebrate his return. As they make their way through the ride, guests must use interactives to light candles and reveal hidden blacklit scenes.

"Kunibert's Abenteur is a funny, Interactive experience for the whole family, and really showcases our capability. as a company," says Mark Beumers, CEO of Lagotronics Projects. "We deliver rides and attractions with a story. From design to installation, we create the experience."

ATTRACTIONS-KIT KEYWORD

LAGOTRONICS PROJECTS



#### Howard Kiedaisch announces major partnership with B&B Theaters

ediaMation, a supplier of turnkey 4D theatres, has announced a partnership with US cinema chain R&B Theaters.

The partnership will see MediaMation supply 10 of its MX4D theatres at B&B locations across the US.



Brock Bagby, EVP, B&B Theatres

Billed as a new 'evolution in the 4D cinema experience', the MX4D provides a completely immersive environment, enabling guests to 'feel' the action. The theatre features motion seats that can move in sync with the movements on screen. In addition, the seats and theatre are equipped with special effects, including jolts, pokes, water, wind and aroma effects.

"The expansion of our relationship with MediaMation proves our belief in MX4D," says Brock Bagby, executive VP of B&B Theaters.

"We'll have three more MX4D auditoriums open by the end of this year in Texas, Missouri and Kansas, and have at least seven to follow next year.

"The occupancy rates are exceptionally high for



The MX4D provides a completely immersive environment

these fun and immersive MX4D auditoriums." Howard Kiedaisch, CEO of MediaMation, added: "B&B's

Howard Kiedaisch, CEO of MediaMation, added: "B&B's commitment to increase their MX4D footprint is a testament to the mutual success of this valued partnership. The B&B is clearly leading the industry in creating innovative and exciting cinema formats and experiences."

ATTRACTIONS-KIT KEYWORD

MEDIAMATION









#### QubicaAMF creates a new generation of pinspotter technology

#### QubicaAMF Worldwide.

the world's largest bowling products company, is proud to announce the launch of the EDGE String, the amazingly simple way to offer bowling.

The next generation of string pinspotter technology, EDGE String combines revolutionary electromechanical design and intelligent software into a single unit, making it possible for any centre to deliver the fun of bowling at a very low operating cost. Its simple and robust design means any member of your staff can operate it.

Operation of the new EDGE String pinspotter is made even easier with Tech Wizard, an innovative smartphone app

that proactively notifies staff of any potential issues.

Thanks to the app, staff can focus more of their attention on the customers and their experience, rather than worrying about pinspotters. It informs users of any operational alerts and guides you through resolving any issues or routine maintenance with simple instructional videos.

In addition, its cloud-based management tools put machine performance data, service history and reporting capabilities at your fingertips, from anywhere.

"With EDGE String in your centre, you will be blown away with how easy and low cost delivering the fun of



 Neil Pennington, director, performance equipment at OubicaAMF

bowling can be," says Neil Pennington, director performance equipment at QubicaAMF.

"In about an hour your staff will learn to use EDGE String and they will receive guidance from Tech Wizard, making operation even easier."

The QubicaAMF EDGE String's simple and robust design will provide peace of mind and will keep guests returning over and over for authentic bowling fun.

To learn more about EDGE String and the amazingly simple way to offer bowling, visit www.qubicaamf.com/edgestring

ATTRACTIONS-KIT KEYWORDS

QUBICAAMF

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