The Future of Immersive Experiences

CHAPTER 01 Immersive Storytelling



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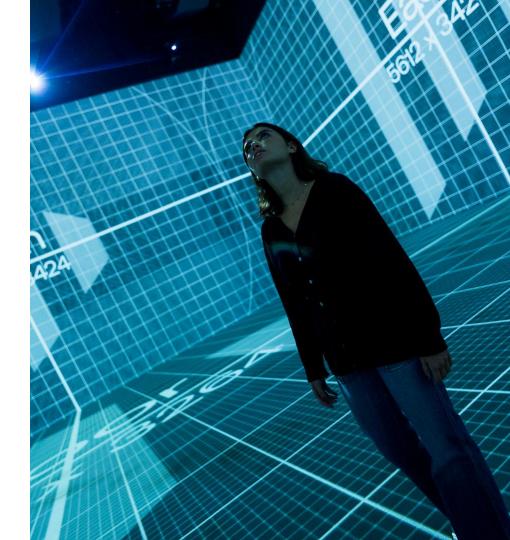
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The Future of Immersive Experienc

In recent years, **location-based experiences** have emerged as a transformative force, reshaping the way venues and destinations can engage with their visitors.

These location-based activations are opening up new ways for guests to interact with and experience a specific space. By seamlessly integrating cutting-edge technology, creativity, and storytelling to create an unparalleled feeling of immersion, immersive experiences have the power to elevate familiar environments and settings into something new and truly magical.

We're here to unpack what makes the most impactful, meaningful and memorable experiences as we move toward a new era of immersive, everywhere.





\$47.2bn estimated market value by 2033

+26.5% projected compound annual growth rate

74% prioritise spending on experiences vs goods

The experience economy is booming.

Location-based experiences are on the up, with the market set to skyrocket over the next ten years.

The desire for these experiences is evident across all generations, but primarily driven by Millennials and Gen Z, who <u>see more value in experiencing</u> a space rather than buying a physical product. The Instagram effect is sure to play into this, with younger audiences prioritising shareable moments they can amplify on social media.

As a result, brands and venues are increasingly seeing the value in immersive entertainment: this is not just a fad, but a profitable investment.

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The industries driving a location-based revolution

Increasingly, we're seeing these visually-driven experiences develop across a range of different industries—from sports, entertainment and hospitality to cultural hubs, leisure and retail. Each has the potential to draw audiences even further into the physical environment by uncovering unique experience opportunities that drive deeper connection.





A new era of unforgettable immersion

The most impactful experiences across all these industries have the ability to enhance the real world with layers of **interactive content**, **expansive visual effects, and real-time technologies.** Integrated audio, dynamic lighting, sensors, and other responsive technologies can also act as triggers, transforming passive observation into deep engagement.

These experiences are not designed to be merely observed—but felt. They forge deep emotional connections, offering audiences the chance to step into narratives in new, meaningful, and unforgettable ways.

We've identified three key pillars underpinning the most engaging immersive experiences.

Over the coming weeks, we'll be diving into each one to discover the trends, tools and technologies driving today's standout immersive experiences, as well as looking forward to what the future might bring.

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Immersive Storytelling

Real-Time Content and Interactivity

Technology and Tools For the first chapter \bigcirc of our series, let's explore:

Immersive Storytelling

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Image Credit: TOEI

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A new stage for storytellers

Immersive experiences are providing storytellers with a whole new platform for engagement.

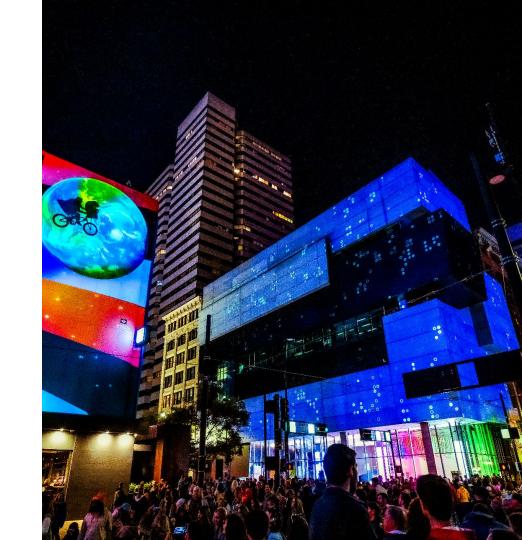
Moving beyond traditional storytelling, where narratives are passively observed or listened to, immersive storytelling puts audiences at the heart of the action, blurring the boundaries between content and experience. Stories can now be stepped into, felt, and lived.

The result is a profoundly personal and emotional connection that leaves a lasting impression, fundamentally reshaping how visitors engage with their environment.

So what types of stories can be told?

We've pinpointed three key applications that we feel immersive storytelling is perfect for:

- 1. Bringing other worlds to life
- 2. Making art multisensory
- 3. Boosting educational narratives



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Bringing other worlds to life

One of the biggest trends in immersive entertainment today lies in bringing alternative worlds to life, allowing visitors to discover new places or step inside fictional worlds they already love by blurring the lines between reality and storytelling.

Thanks to large-scale projections, virtual and augmented reality, spatial audio and sensory effects, audiences can explore fantastical landscapes without leaving their physical location. As technology advances, this world-building will become ever more realistic, facilitating deeper emotional connections and transforming how stories can be experienced.





Experiences like the Disguise-powered <u>Illuminarium</u> are redefining immersion, using ambitious 360° projections, spatial audio and haptic feedback to transport audiences across and beyond the world, from the African plains to outer space.

Companies are bringing their intellectual properties (IPs) to life at entertainment destinations, with theme parks transforming rides into immersive worlds. Disney's <u>Millennium Falcon: Smuggler's Run</u> is leading the way, combining complex projections with a flight simulator to bring the world of Star Wars to life for fans.

Similarly, Netflix is soon to launch <u>Netflix</u> <u>House</u>, a themed experiential venue that will bring fan favourite shows such as Stranger Things and Squid Game to the real-world through a series of immersive experiences.

These narrative-driven experiences are pushing the boundaries of imagination to transport visitors to a whole new world.



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Legend of Luna

Placing characters at the heart

Some venues are taking immersive storytelling even further - not just transporting audiences to fictional worlds, but bringing the characters themselves to life.

Great Wolf Lodge's Disguise-powered Legend of Luna experience, created by BRC Imagination Arts, exemplifies this evolution, transforming the resort's Grand Lobby into a living fairytale where Luna the wolf feels truly present. The experience seamlessly blends hidden lighting, projection mapping, fog effects and immersive audio to break down the barriers between fiction and reality. By integrating storytelling with cutting-edge media, resorts and other venues are allowing fictional characters to exist in our world, fostering deeper emotional connections and unforgettable experiences for guests.

What's next for character-driven immersion?

The evolution of immersive storytelling is transforming how audiences engage with characters, moving beyond passive viewing into living worlds. As technology advances, we expect to see more:



Holographic and AR enhancements

Digital characters will seamlessly step into real-world environments, allowing audiences to see, hear, and interact with them naturally

Real-time character interactions

Al-powered characters will react dynamically to visitors, remembering past encounters and engaging in fluid, unscripted conversations to continue the story.

Venue-wide interactive narratives

Characters and storylines will evolve throughout a visitor's journey at location-specific touchpoints, making every moment part of a larger, unfolding adventure.

These advancements will redefine character-driven experiences, making them personalised, persistent, and even more immersive. An exciting element to watch within world-building is advanced motion tracking, allowing audiences to step into the role of a character. As AI and digital humans evolve, storytelling will become more interactive and lifelike, blurring the line between audience and protagonist. Audio is another key frontier—AI-driven narration could transform experiences, from responsive museum tours to dynamic, real-time storytelling that adapts to the listener.



Alex Wills Chief Experience Officer at Disguise

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Making art multisensory

Immersive storytelling has redefined how audiences can experience art - whether by transforming static masterpieces into dynamic, multi-dimensional journeys of discovery, or surrounding visitors with creativity they can see, hear, touch and breathe.

This approach not only rejuvenates more traditional art, but can also encourage bold, creative experimentation on an unprecedented scale - a hugely exciting prospect for museums, galleries and other venues.





Venues are now being designed as blank canvases, providing the perfect base for projection mapping and immersive storytelling. These empty spaces are primed for digital art to transform their walls, floors and ceilings into living, multi-sensory art experiences. London's <u>Van Gogh: The Immersive Experience</u>

demonstrates this shift, using 360° projections, surround sound and interactive elements to bring the artist's iconic masterpieces to life all around.

Museums and galleries are also embracing this opportunity, using digital innovation to transform static displays into dynamic, participatory experiences. As technology evolves, immersive art is not only engaging wider audiences but also redefining how we connect with creativity—making it more accessible, interactive, and emotionally resonant than ever before.



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BLINK Cincinnati

Reimagining an entire city as an immersive canvas

Some experiences are taking immersive art to an entirely new level. Rather than using empty venues as canvases, they are transforming entire cities into large-scale digital experiences.

BLINK Cincinnati, the largest light and art festival in the USA, is a leading example, using the Disguise platform and projection mapping to turn urban landscapes into living works of art. Spanning thirty city blocks across three cities, BLINK merged technology and creativity to reimagine public spaces as dynamic digital canvases.

With real-time visualisation and precision mapping, artists saw their work unfold on towering buildings, while audiences experienced art on an unprecedented scale, redefining how we interact with creativity. e Storytelling

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The future of immersive art is about more than aesthetics - it's about interaction, connection, and deeper storytelling.

Festivals like **BLINK** Cincinnati have already demonstrated the power of projection mapping and large-scale digital art, but the next generation of immersive experiences will push boundaries even further.



We're expecting to see:

Interactive and Al-driven installations

Art that responds to audience movement, touch, and even emotions, evolving in real time.

Augmented Reality (AR) layers

Visitors using AR devices will see digital extensions of murals, uncover hidden stories, or interact with virtual characters.

Bringing immersive art to everyday spaces

From airport lobbies to retail stores, the next generation of digital and interactive art will transform ordinary and unexpected environments into living, dynamic canvases. Some of my favourite immersive art experiences are those created by Refik Anadol. His work exemplifies the power of immersive storytelling - where generative AI, Unreal Engine, and advanced colour workflows transform raw data into living, breathing art. Through the fusion of technology and art, Anadol redefines how we perceive and connect with other people through content—not just as something to analyse, but as something to feel.



Shae Langley

Head of Location-Based Experiences at Disguise

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Boosting educational narratives

Immersive storytelling is also enabling venues to deepen the learning experience for their visitors. Instead of passively absorbing facts, guests can now delve deeper into their favourite subjects thanks to immersive environments that make knowledge come alive.

Whether its learning about history by exploring ancient civilisations projection-mapped onto modern day surroundings, or being transported to the outer edges of our galaxy with wraparound visuals, by blending storytelling with technology these experiences can connect people to new information in an engaging and meaningful way.



Image Credit: European Southern Observatory/P. Horálek:



CREATED WITH DISGUISE DESIGNER

Vogue: Inventing the Runway

Retelling fashion history at London's Lightroom

A standout example of next-level immersive education is <u>Vogue: Inventing</u> <u>the Runway</u> at London's Lightroom, which turns back the clock to retell fashion history using stunning wraparound visuals, sequenced and composited using our Designer software.

Instead of a traditional museum exhibit or documentary screening, visitors feel like they are actually transported to witness the most iconic runway moments of all time thanks to projection-mapped sets and real-time animations. Applying immersive storytelling in this way makes information infinitely more memorable for guests, ensuring exhibits leave a lasting impression.

"Venues like Lightroom are pioneering the next frontier in storytelling. By intertwining cutting-edge technology with compelling narratives, they allow audiences to become completely immersed in the imagined world, experiencing the story in a far more impactful way."

Alex Wills Chief Experience Officer at Disguise

An interview with: Mark Grimmer, 59 Studio

We sat down with Mark to gain insight into the groundbreaking approach behind *Vogue: Inventing the Runway* and explore how audiences can engage with narratives more deeply.

"Our latest show at Lightroom, *Vogue: Inventing the Runway*, was bigger in scope than our previous shows, covering 150 years of fashion history with archives from hundreds of designers, Vogue, and Condé Nast. The challenge was turning largely two-dimensional material - photos and runway footage - into a three-dimensional, immersive experience that felt worth visiting in person.

A key focus for our storytelling was voiceover, with Cate Blanchett narrating and Vogue editors providing personal insights, creating a balance between visual spectacle and narrative depth. This time, we spent more time rehearsing in the Lightroom space itself, fine-tuning the rhythm and visuals to make sure the material worked in a physical environment. Like theatre, it all came together in an intense final stage an exciting process that keeps pushing us into new directions."





What excites me most about immersive storytelling is its inherently collaborative nature. The best experiences engage all the senses, bringing together sound designers, visual artists, musicians, and even experts in haptics and scent to create something truly multi-dimensional. It feels like a natural evolution-from theatre to museums to fully immersive spaces where digital and physical worlds merge seamlessly.

What makes this so compelling is the balance between cutting-edge technology and real human connection. The ability to layer digital elements onto tangible, real-world environments opens up endless creative possibilities. As immersive storytelling continues to evolve, the most exciting part is that almost nothing is off the table."

Mark Grimmer Co-Founder, 59 Studio

Read the full interview

The Hidden Forest

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at Gardens By The Bay

Next, let's see how **The Hidden Forest** uses immersive storytelling to bring nature to life.

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The Concept

Set within the iconic Gardens by the Bay in Singapore and created by NAKED, INC, *The Hidden Forest* is an immersive projection mapping installation that brings the symbiotic relationship between plants and animals to life. Combining real and virtual elements, the experience invites visitors to explore rare species through interactive digital art in a temperature-controlled conservatory, creating an unforgettable multi-sensory experience.



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The Challenge

The project required pixel-perfect projection mapping across uneven surfaces spanning two floors. Seamless interaction between real-time content and visitor engagement demanded precise alignment, dynamic playback and efficient workflows—all while accommodating last-minute adjustments and complex geometries. The

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The Future

The Solution

Disguise provided the integrated hardware and software solution that powered *The Hidden Forest* and addressed its unique challenges. Utilising the Disguise EX 2C, VX 3, and RX II media servers, the system delivered projection mapping and dynamic interactive content with unmatched precision.

The exhibition was divided into two independent systems, one for each floor. On the 4th floor, real-time content generated in Unity and TouchDesigner was rendered by a Disguise RX II and sent via NDI to a Disguise VX 3 server for flawless playback. On the 3rd floor, interactive content was powered by an EX 2C server, which supported simultaneous high-performance layers and integrated seamlessly with a laser scanner to create touch-responsive artworks.

To tackle the challenge of complex wall geometries, a 3D model of the venue was imported into our <u>Designer</u> software during the design phase. This allowed for highly accurate simulations, meaning the team could ideate together, ensure efficient projector alignment, and ultimately deliver a better outcome - all before they even reached the site.

18

weeks onsite

projectors



The combination of Unity and TouchDesigner within Disguise enabled us to deliver highly interactive content that was fit for purpose.

Shoichi Ishida

System Integrator and Programmer for TOEI TECHNO INTERNATIONAL Inc.



Image Credit: TOEI



Results

This integration, along with Disguise's API and external connectivity to tools like NDI, ensured a consistent and flexible system that adapted effortlessly to the evolving demands of the project. The result was an engaging, multi-sensory exhibition where visitors could interact directly with 17 different plants and 16 animals from cloud forest habitats across the world, fostering a deeper appreciation and understanding of biodiversity.

By merging nature and cutting-edge technology, *The Hidden Forest* set a new benchmark for digital exhibitions, delivering a memorable experience that highlights the powerful potential of immersive storytelling.

The technology driving immersive storytelling experiences

Seamlessly blending visuals, sound, and interactivity across physical and digital spaces is what elevates an experience from ordinary to extraordinary. As immersive storytelling evolves, the right tools and technology are essential to unlocking its full potential and delivering unforgettable moments.

Let's take a quick look at the most exciting technology advancements pushing location-based experiences forward.



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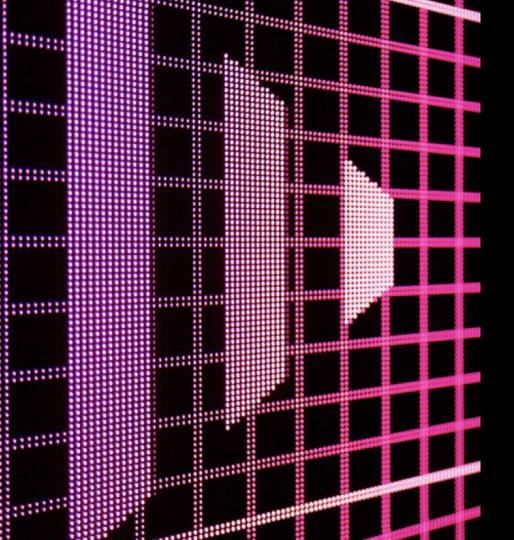
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Projection Mapping

The backbone of immersive storytelling

Projection mapping is evolving rapidly, pushing the boundaries of what's possible with complex surfaces, dynamic objects, and higher frame rate output. Typically projection systems have operated at 60 frames per second (fps) but emerging technologies now support 120 or even 240 fps. This means we can now map onto surfaces more seamlessly while minimising motion blur - particularly exciting when it comes to mapping onto a moving surface. As projection techniques advance—from static displays to intricate geometrical forms and kinetic installations—systems must adapt to handle these increasing demands. High-performance servers and real-time rendering solutions will be essential to power the next generation of immersive, fluid and responsive projection experiences.





"Historically, creating immersive experiences required a combination of props, lighting, and model-making, but advancements in AV technology—real-time video, LED, and projection—have made it far more accessible. Now, AV is becoming the key driver of immersion, enabling more bespoke experiences with real-time adaptability.

This shift allows creators to design dynamic, interactive environments that feel more believable and responsive, without the same physical limitations as before. The biggest opportunity lies in leveraging these advancements to push the boundaries of immersion in new and exciting ways."

Peter Kirkup Innovation Director at Disguise

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It's easy to get caught up in the excitement of innovation and put technology first. But it's vital to start with the story you're trying to tell, then bring in the technology that enhances it. It may feel like working backwards, but in reality, it's the only way to move forward.

Joshua Eason VP of Creative Services at Disguise



Key Takeaways

Immersive storytelling creates a closer connection between venues and visitors.

Alternative worlds can now be brought to life for visitors in more authentic ways.

Immersive art is evolving to make a memorable and multisensory impact. Educational narratives are becoming more engaging than ever before thanks to immersive technology.

Advancements in projection mapping are unlocking new opportunities for multi-layered storytelling

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Don't lose sight of the story at the heart - the technology is just there to elevate it.

How we can help

We've been helping our customers to deliver best-in-class visual experiences for over 20 years.

From initial consultancy and solutions design through to robust and reliable servers and software, on-site implementation and support, our team can partner with you every step of the way to ensure your immersive experience is a success.

DISGUISE PLATFORM



Visual Experience Platform

Industry-leading hardware and software to power and deliver groundbreaking immersive experiences.

DISGUISE SERVICES



Creative & Technical Consultancy

Covering solutions design, partner management, project management, content creation and on-site implementation.

DISGUISE CLOUD



Content Collaboration Platform

Real-time collaboration tools for content creation and pre-visualisation

Ready to discuss how Disguise can help support your next immersive experience?

info@disguise.one



Coming soon:



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