Christie and Microsoft tech mashup blends people, places and smart light



Where's the dividing line between virtual and physical reality? In the rear-view mirror.

We have blurred, crossed and continue to move farther away from the line between what's real and what's virtual with technology that blends people, places and smart light.

Transitions of state, between experiences, are an extension of personal computing – a focus at Microsoft. Using technology mash-ups, Microsoft Kinect engineers are exploring mixed-reality that offers seamless transitions between virtual and physical realities, reminiscent of science fiction – or more accurately, they're bringing science fiction to fact.

With the launch of Windows 10 and a cultural shift championed by Satya Nadella, CEO of Microsoft, their vision is "to empower every person and every organization on the planet to achieve more." With this sense of collaboration and strategic design, Microsoft Kinect teamed up with Christie® engineers. The results were two unique and magical experiences for visitors at Microsoft Beach Club in Cannes, France – Light Mural and Light Marketing. These experiences were meant to foster collaboration-driven engagement to ignite a sense of wonder and compel visitors to consider new possibilities during the Cannes Lions International Festival of Creativity.

"I love that we can partner with Christie in their forward-thinking and the work they're doing with projection mapping, and partner with other companies in AR, VR, and holograms. Let's just see where this is going and how quickly can we bring the future here."

Rick Barraza

Design strategy and creative engineering

Partner Catalyst Group

Microsoft

Customer:

Microsoft

Location:

Cannes, France

Industry/market:

Museums

I heme parks Retail spaces

Digital signage

Projection mapping

Requirements:

- High brightness
- Seamless warping and blending
- Heat resistant
- Ability to withstand the elements
- Small footprint
- System customization

Summary:

Microsoft worked with Christie to demonstrate how interactive and immersive real-time projection mapping can enhance how people understand, interact and engage with the world around them.

Products:

- Christie Mirage HD14K-M
- Christie DWU951-Q with Christie ultra-short throw lens

Results:

Dynamic, mixed-reality experiences at Microsoft Beach Club were an exhibition of what's possible when real time sensory information is combined with projection mapping technology and expertise.



Light Mural – Interactive digital canvas

Battling against challenging environmental conditions, Microsoft and Christie projected animated content onto a 10-by-4-foot display. Using the sensory capabilities of Microsoft Kinect coupled with a Christie DWU951-Q projector and ultra-short throw lens, people could stand inches away from the projected mural. Not only was the light path uninterrupted by their proximity, but visitors could also tap the animation to uncover additional digital layers to the story – a story focused on celebrating creativity.

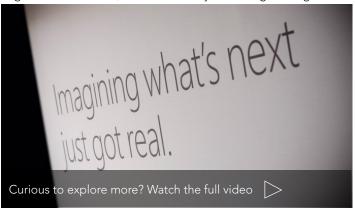
Smart light for Light Marketing

Chad Faragher and Rick Dalley from Christie worked with Microsoft to create mobile projection mapping canvases – using real people. With Microsoft Kinect, they were able to read and assimilate the geometry of moving bodies, then use that data to project content onto people walking through the entrance of the Microsoft Beach Club. This dynamic projection mapping was achieved using a Christie Mirage HD14K-M projector calibrated with Microsoft Kinect.

For Christie, projection is an important component of creating shared augmented reality experiences that are increasingly social. Instead of accessing augmented content via a mobile device, as an individual, projection allows groups of people to experience the same content together in a truly augmented version of the world around them.

Proof of concept and onsite demands

While the engineering designs for Light Mural and Light Marketing promised to be a showcase of next-gen creativity, the true testament to Christie system design flexibility came through in the onsite set-up. Christie engineers responded to the challenges of working with beach flooding, high levels of sunlight, hot temperatures, blowing sand, salty air and flooring that reverberated as people walked. Faragher and Scott Kinnebrew, field application engineer from Christie, fine-tuned the system design during the





How did Microsoft and Christie meet?

At a Microsoft Kinect for Windows Hackathon at the University of Waterloo, Microsoft Kinect engineers met the brilliance of Christie innovators. After learning how to use Microsoft Kinect that same evening, Chad Faragher and Rick Dalley from Christie combined their new learning with their understanding of projection technology to map superhero costumes onto real people, in motion. Intrigued by the immersive potential, Microsoft reached out to Christie to create Light Mural and Light Marketing.

"The project was a fascinating marriage between technology and creativity; engineers worked to overcome all these challenges and the artists providing the content were able to use technology in a way that could inspire storytellers in museums, theme parks and retail spaces," elaborates Barraza.

Finding better ways to tell stories

As more creative people understand how immersive technology works and what tools they have at their disposal, we will continue to discover exciting ways of communicating. Barraza gives us his outlook, "If we're really smart about it – if we get great creatives, great technologists, great visionaries – and we have these companies come together, we can start creating these experiences where projection-based technologies and perception-based technologies create this mixed reality."

Contact Christie

<u>Contact us</u> today to find out how your organization can benefit from Christie solutions.