When a world-famous wax museum sought multiple display technologies to create an immersive exhibit around the “Ghostbusters” movie reboot, it asked its digital design agency a question:

“Who ya gonna call?”

Madame Tussauds, the New York offshoot of the original museum in London, is a popular Times Square attraction. Traditionally known as a wax museum featuring hyper-lifelike statues of celebrities, musicians, sports stars and historic figures, the attraction now is turning its attention to exhibits that wholly immerse visitors in a new world – and that means incorporating technology.

In late 2015, for its upcoming “Ghostbusters” exhibit, the museum tapped OpenEye Global, a digital experience design agency that it had used in the past for a variety of technical projects.

“For Madame Tussauds, it was all about moving from wax statues to more of a theatrical experience that would resonate with visitors, something that told a story and brought the movie to life,” said Bryan Meszaros, CEO and founder of OpenEye Global. “Our responsibility was to help them find the right technology to accomplish that goal.”

After reviewing a theme book developed by MXW Studios, a creative consultancy in the United Kingdom, OpenEye Global began parsing out the different technologies it could incorporate to bring the creative ideas to life while accommodating the museum’s requirements.

“For us, it was all about what we could use to create the most authentic experience that was also cost-effective and fit into the budget,” said Eric Fluet, head of marketing and sales for Merlin Entertainments, the museum’s parent company.

There were technical requirements as well as budgetary and creative must-haves, Meszaros added.

“Especially for one section of the exhibit, we knew we wanted to use display technologies, because there would be no other way to get the desired effect,” he said. “We needed to be able to color balance them for a more subtle effect – visitors would still know it’s technology, but we wanted it to be less obvious they were looking at a display.”
The Solution

OpenEye Global recommended NEC Display Solutions for the digital display technologies the exhibit required.

“We’ve used NEC’s displays and projectors before and never had any failures or issues,” Meszaros said. “We always recommend NEC based on quality as well as warranty and affordability.”

The museum purchased four 32-inch NEC V323-2, seven 42-inch NEC V423, one 46-inch NEC V463 and one NEC NP-P502H projector for the exhibit, in addition to other technologies, and the team got to work.

Using MXW’s designs, OpenEye Global created all the motion graphics and visuals in the exhibit and worked with Sony Pictures to ensure animations were true to the movie, including filming costumed actors in front of green screens to recreate movie characters. Czinkota Studios built the physical exhibit.

“We had to be conscious of how much room [Czinkota] had to integrate the displays when they were building the set,” Meszaros said. “We had to make sure the technology didn’t take up too much room, but these displays were slim enough that they worked well for what we were looking for.”

Meszaros said they ran into a challenge toward the end of the installation: The 32-inch NEC displays they had planned to use in one area of the exhibit were in high demand, and the team was unsure if they were going to be able to secure them in time for the exhibit’s opening on July 1, 2016.

“NEC was very helpful, and we got them in time,” he said. “They were a good resource for us.”

All things considered, the installation went well, Fluet said.

“The Exhibit

As museum visitors enter the Ghostbusters Experience, they walk down a stairway that appears to be part of a New York City subway station, including tiled walls and signage for the G and B lines. As they pass a 46-inch NEC display at the bottom of the stairway, a video of Al Roker is triggered, warning New Yorkers that the city is in chaos from apparent hauntings.

As visitors continue past an animated video of a ghost on the subway wall, they come face-to-face with a replica of a subway car. The windows of the subway car are actually three 42-inch NEC displays showing an animation of an unhappy phantom named Sparky, a deranged prisoner executed by electrocution. The animation moves across the three displays, appearing and disappearing as Sparky menaces visitors and giving the effect that he is pacing around the subway car.

Madame Tussauds

Meszaros said that an important feature of the displays made the animations much more believable: the ability to calibrate depth and color balance.
“It’s one thing to adjust brightness and contrast, and another thing to adjust color tones or RGB values,” he said. “These monitors make it easy to control [those aspects].”

Next, visitors arrive in the hallway of a haunted mansion, where several portraits hang on the walls. At first, everything seems normal – until the exhibit-goers realize that the portraits’ eyes are following them as they move down the hall.

The portraits are actually Madame Tussauds employees shot to look like old paintings, shown on four 32-inch and four 42-inch NEC displays. The hallway ends at a portrait of Gertrude, who appears human until she morphs into her supernatural form and spits “ectoplasm” on passersby – water that comes from a jet above the portrait, triggered by a motion sensor.

“There are gags that are not digital, such as cold air blasts coming out of walls, transparent cement lit from behind that appears to glow, rocking chairs that move on their own, smoke, music – it’s coming at you from all angles,” Meszaros said.

Visitors proceed to the Ghostbusters’ headquarters, which features wax figures of the characters working on ghost containment technologies in their lab. Guests can marvel at the holographic ghosts captured in a containment box before they encounter the green blob-like apparition Slimer, created using the “Pepper’s Ghost” technique, in which an image is reflected off plexiglass at an angle.

As they exit, visitors are shown off by one last wraith flying through the fog, projected onto a fog screen using an NEC projector.

“It’s a 360-degree total sensory experience,” Fluet said. He added that visitor feedback has been “fantastic.”

“People who come through are floored with the experience,” he said. “Even locals from New York and New Jersey have come here and said it was worth the trip and they’d do it again.”

According to Fluet, the almost 200-year-old brand is planning similarly tech-heavy exhibits for the future.

“As Madame Tussauds evolves as a brand, we are looking to do more to engage guests … and create an experience that makes it worth their time and dollars,” he said. “The Ghostbusters Experience exhibit takes them to the next level – they’re not just experiencing the figures and interacting with them; now they’re being placed in this whole new world. This is the direction we’re going – to create more immersive experiences for the guests.”