

Projection mapping turns any surface into a canvas for images

By Rich McPherson



Projection mapping uses projectors to display images, animation or videos onto flat or unconventional surfaces. Because it can transform any two- or three-dimensional surface into a showcase for still or moving images, projection mapping has become an increasingly popular enhancement – or main attraction – for concerts, art installations, advertising and countless other purposes.

For example, a 2018 projection mapping project in Chicago blended history, nature and technology into an audiovisual narrative that celebrated Illinois history. [Rooted in Greatness](#) projected videos of the faces of prominent people onto [trees at McCormick Square](#), and audio provided a brief biography of each person. The movement of the leaves provided a unique surface for the images. A Canadian team projection-mapped beautiful visuals onto the exterior of Barcelona's renowned Sagrada Familia cathedral, and even a space shuttle has been used as a canvas for creative presentations.

Not just for big-budget events anymore

New software tools designed specifically for projection mapping have made it much quicker and easier to create engaging projection-mapping displays. These tools do the hard work of aligning the content with the shapes of any physical object. That means projection mapping projects now fall within the financial reach of a growing number of organizations, whether to set the mood for a special event or to create an immersive experience for the senses.

Projection mapping possibilities

Any type of organization can move their presentations beyond the traditional screen and use projectors in a variety of ways to unlock the multimedia potential of any space. The ability to project sweeping images onto a building's exterior or interior surfaces opens up exciting new opportunities to wow audiences with an awe-inspiring and immersive experience.

Businesses can use their outdoor and indoor spaces to display brand-related or entertainment presentations. And projection mapping isn't limited to buildings. For example, car makers have used projection mapping on automobiles when launching new models, and Harrod's deployed projection mapping for a holiday window display promoting Fabergé products. These awe-inspiring projects attract and engage customers and reinforce brand messages.

Cultural, nonprofit and other organizations – including museums, galleries and government agencies – are using projection mapping to inform, challenge and entertain their audiences. For example, the iconic exterior of the Sydney Opera House was used as a canvas during Vivid LIVE, an annual festival of light and art, and the San Mateo County Museum has a permanent projection mapping installation on its façade. The U.S. National Oceanic and Atmospheric Administration uses projection mapping as an educational tool to teach Earth System science. The impacts for these organizations include advancing their mission, enhancing fund-raising efforts, and informing and entertaining audiences.

Houses of worship are also using projection mapping, transforming their religious ceremonies and educational programs – as well as weddings, senior gatherings, worship concerts for teens and other special events – into inspirational multimedia experiences. For example, animators turned the interior of a small Norwegian church into a mesmerizing digital canvas, and a North Carolina church uses a single projector to create inspiring multimedia sermons.

These presentations are particularly effective at exciting congregations and engaging young worshipers, turning services and events into spiritual adventures. They help houses of worship expand their spiritual outreach and deepen the religious experience of their congregations.

Embracing this exciting new technology

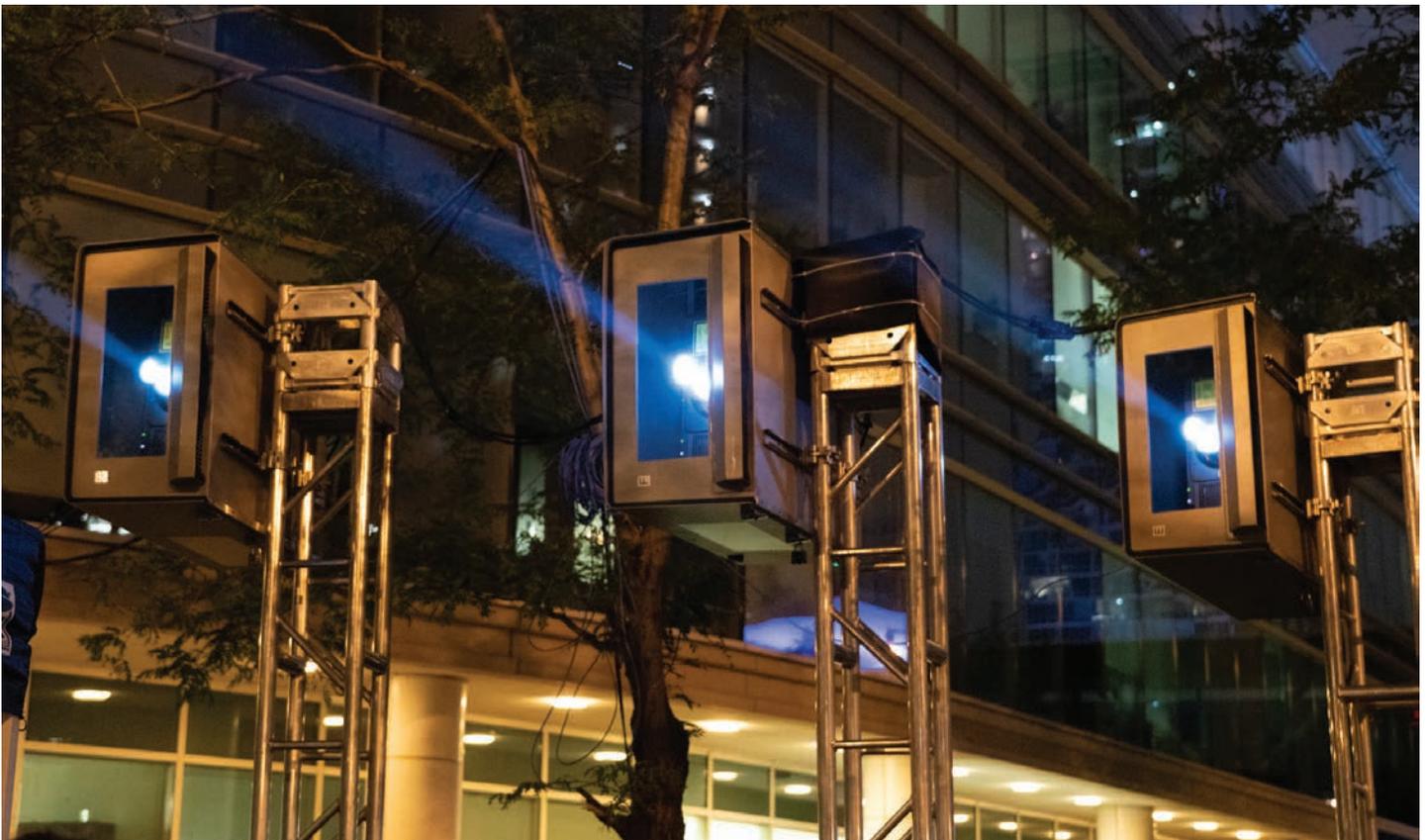
Projection mapping is a powerful tool that can engage audiences, expand outreach and create lasting memories. It allows organizations to use unique architectural or object shapes to tell their stories or to set a specific mood. Lively imagery engages audience, particularly younger ones that are more visually oriented than earlier generations.

Now that technical innovations have made projection mapping affordable, more organizations can enjoy the benefits of engaging their audiences, expanding their outreach and achieving their goals.

Although projection mapping may appear complex, a trusted AV partner can provide advice on options and set up a projection-mapping system – either permanently or for one-time event. They will also work with production partners to create exciting, customized presentations for any type of audience.

About the Author

Rich McPherson is a Senior Product Manager at Sharp NEC Display Solutions of America, overseeing the company's installation and digital cinema projectors. He has over 25 years of experience in the projection industry, and his roles have included customer service, engineering and product management.



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