



## Request for Proposals: MxD Virtual Tour

### Introduction

MxD, the nation's digital manufacturing institute, is where innovative manufacturers go to forge their futures. In partnership with the Department of Defense, MxD equips U.S. factories with the digital tools, cybersecurity, and workforce expertise they need to begin building every part better than the last. As a result, our nearly 300 partners increase their productivity and win more business.

MxD is a public-private partnership non-profit organization with an array of industry, academic, and government members and is funded in part by the U.S. Department of Defense, as an investment in U.S. manufacturing competitiveness and a healthy, innovative U.S. industrial base.

MxD operates from a nearly 100,000-square-foot innovation center near downtown Chicago. Its factory floor features some of the most advanced manufacturing equipment in the world. Many partners, including Siemens, Autodesk, and McKinsey & Company, use the floor for experimentation and training on everything from augmented reality and cybersecurity to advanced simulation and next-generation communication technologies.

### Project Goals and Scope

Throughout its history, MxD has leveraged its ever-evolving 22,000 square foot future factory floor to make real and tangible the potential of digital technologies in manufacturing and to educate and demystify workers on the skills need to thrive and be secure in a digital manufacturing environment.

MxD's future factory features various technology testbeds and partner showcases used for demonstration, education, testing, and validation for priorities and technologies across the digital thread. The factory floor is regularly changing, highlighting new and relevant uses of technologies to solve real manufacturing problems and working in coordination with our cross-sector partners during tours, workshops, technology showcases, and educational opportunities.

Motivated by the COVID-19 crisis, MxD is looking to build on its factory offerings by creating a comprehensive, cohesive, and agile virtual experience of its factory floor. To do so, MxD is seeking the services of a firm to help plan and execute development of a virtual experience of its facility, including its future factory floor, that can be used flexibly and can be easily augmented and updated, reflecting the ever-changing nature and endless possibilities enabled by the digital thread.

Some virtual tour participants will need the baseline – video content with links – and they may want to pick and choose which sections they view. More engaged participants will want something immersive and the ability to explore. The ideal solution will allow for both.

MxD has already captured video footage for seven areas of the factory floor and intends to capture additional videos in the near term – thus the interactive virtual tour provider would not need to film video content for the most part but would need to create the more immersive tour aspects (e.g. augmented reality/3D walkthrough) and integrate them into the full experience.



Additionally, MxD has several top-tier partners that are present on our factory floor that have their own interactive virtual tour experiences. The solution will allow users to navigate to that content if they are interested.

We anticipate that each “stop” on the tour would include video content ranging from 3-12 minutes, possibly breaking up the longer content into multiple sections. There would be about 20 stops on the tour overall.

MxD’s goals for this project are ultimately to:

- Provide greater value to our member ecosystem (including small manufacturers and other companies located across the United States) by enabling a robust experience of our factory floor and of digital technologies without ever having to walk through our doors
- To provide an opportunity to MxD members to showcase their technologies, solutions, and factory floor showcases, particularly during times of travel restrictions and reduced foot traffic
- To broaden MxD’s reach to a greater contingent of the manufacturing industry and better advance our mission
- To utilize innovative digital technologies in providing the value case for digital adoption and modernization

Key deliverables of the project include:

*Required*

- A comprehensive virtual tour, able to be hosted live or pre-recorded utilizing any number of technologies (video, 3D walkthrough, AR/VR, mixed reality, live-stream, holographic) that moves through the factory space and/or greater MxD facility, taking advantage of the extensive physical assets on-site
  - Area covered would be mainly 22k sq-ft factory floor with possible additional areas to include atrium, office area, conference rooms, and outdoors in front of building
- Flexible experience ranging from the least common denominator (video series/links to content) to a more immersive experience (AR/VR) to accommodate stakeholders with different levels of time and bandwidth
  - Ability to incorporate previously recorded video footage as well as text boxes, downloads, and links to MxD website and partner platforms
  - Ability to create and integrate more interactive/immersive elements
- Seamless integration of highlights and virtual experiences of MxD-led testbeds and member spaces
  - Guidance on what types of partner experiences can and cannot be accommodated
- Option for on-demand; hybrid (virtual/live) and fully live experiences
- Strategy for maintaining and updating content to ensure its relevance and freshness as the MxD factory floor changes over time and technologies continue to change
- MxD ownership and access to footage captured through virtual tour process
- On-time and on-budget delivery with overall project cost and payment schedule clearly outlined



### *Preferred but not Required*

- Ability to customize or individualize the virtual experience based on need (e.g., a customized cyber experience highlighting cyber components across the factory floor; a “what’s new” experience, only including what’s changed in the last XX time period; the workforce/skills experience; the past project outcomes experience)
  - Ability to gate/password protect content for subsets of users
- Dashboards to track and assess analytics
- Experience working with non-profits
- Woman-/Minority-owned business

### **Timeline**

Submissions are due no later than 5pm CT, October 30, 2020. Send submissions to [alyssa.sullivan@mxdusa.org](mailto:alyssa.sullivan@mxdusa.org).

### **Proposal Elements**

- Vision
- Technical proposal
- Project management plan
- Timeline (with milestones) - prefer 6 months or less to completion with interim deliverable at 2 months
- Budget, including itemization of costs and fees
- Examples of previous work

### **Evaluation Criteria**

The winning proposal will be evaluated based upon an evaluation of the proposal elements described above. The selected proposal will clearly demonstrate the ability to design and deliver an innovative, cohesive, and agile virtual experience of MxD’s factory floor, partner showcases, and other facility assets. Demonstrated past success in completing projects on schedule and on budget, as well as overall cost and expediency, will also be strongly considered in the selection.

### **Contact Information**

Contact Alyssa Sullivan, Director of External Relations, at [alyssa.sullivan@mxdusa.org](mailto:alyssa.sullivan@mxdusa.org) with any questions regarding this request for proposals.

The answers to any questions received will be posted in an updated RFP document on the website.