

# EY Digital Operations Hub @ MxD

Where innovation meets operations

The future today.



Building a better working world











# Table of contents

Why this exists

1

Who we are

3

What we do

4

Why this is better

5

How it works

6

Where to learn more

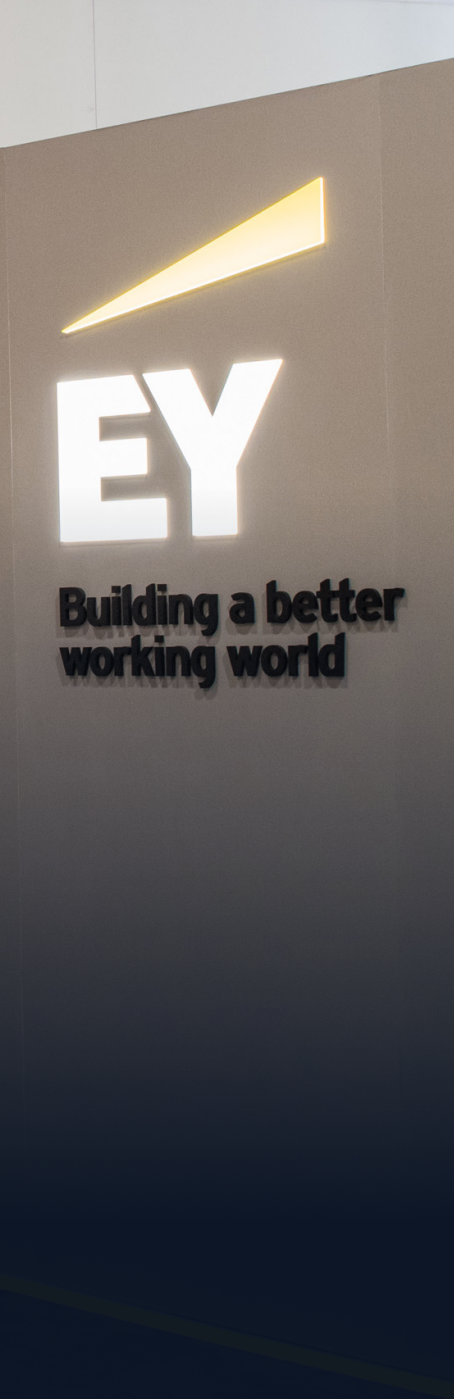
7





**The Operations Hub  
exists to help our clients  
satisfy these needs**





# Why this exists

Harnessing the potential of manufacturing modernization at scale has been a challenge since the expression “Industry 4.0” entered our vernacular more than a decade ago. Also, when stepping back and reflecting upon the upstream and downstream components of end-to-end supply chain (plan, source, make, deliver and service), numerous adverse events have shown us the importance of hardening core supply chain processes, especially visibility.

Meeting these challenges is a big part of the impetus for the EY Digital Operations Hub - and why we made this investment at MxD in Chicago. Technology has matured to a point where the promises of Industry 4.0 are truly attainable - the “smart factory” must be more than a single lighthouse facility - and the tools are available to make end-to-end supply chain integration a reality.

Our investments have also been informed by the expectations of our clients. Relative to the future of manufacturing and supply chain, the sentiments they have shared can be distilled into four basic concepts:

1

## Be an end-to-end collaborator

Modernization programs in this space are complex - we need a collaborator who can work with us from concepts through operations at scale

2

## Convene AND activate the right ecosystem of partners

Bring us the right collaborators at the right stage in our journey

3

## Show me how the pieces fit

Bring us real solutions that align the best of what the industry has to offer in conjunction with the technology I have in place today

4

## Do real work

Move beyond presentations and conference rooms - this space is characterized by physical processes and tangible products - success in this space means doing real work

# Who we are

---

At its core, the Digital Operations Hub focuses on the two broad disciplines of manufacturing modernization and supply chain optimization. We focus on activating the “digital thread” that runs across numerous assets and technologies. This is the key to giving words like modernization and optimization a tangible impact.

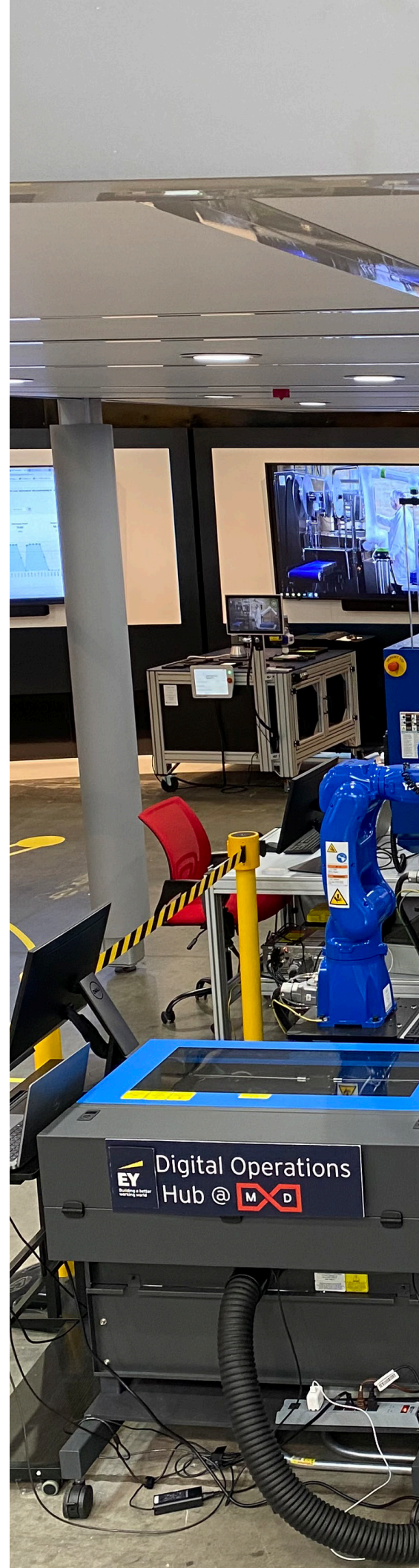
The hub also offers a discrete capability focused on Long Term Value Engineering (LTVE). Supported by a 4,600-square-foot product tear-down lab, LTVE operates at the heart of issues that integrate product and manufacturing.

From a risk management perspective, the hub also boasts a robust capability focused on OT Cyber assessment, monitoring and management. Clients benefit from experience modules that focus on various OT Cyber insights that are incorporated into their broader hub experience.

The role of people is pervasive to every experience we curate. For all the gains to be made in technology and process improvement, success ultimately depends upon people. We focus on helping clients win the war on talent, activate the convergence of technology and people, and create environments that foster an improved work experience.



Please click on the image or scan the QR code to see our introductory video.







Global network of industry and subject-matter resources across 700 EY offices

Recognized business and technology consulting leaders

Core competencies - technology consulting, business consulting, people advisory, sector expertise

“

We focus on activating the ‘digital thread’ that runs across numerous assets and technologies.



Nonprofit launched by the Department of Defense in 2014 to focus on increasing US manufacturing competitiveness.

275+ members, including 15 government partners, 37 academic institutions, and 210 manufacturers and technology solution providers.

74,000 SF center, including 22,000 SF manufacturing floor featuring MxD projects and member solutions.

# What we do

With capabilities and assets from EY US and our ecosystem partners, we help businesses improve their operations, reduce risk and leverage practical applications of technology to change the way they do business.

## Our capabilities

### Manufacturing modernization

Optimize your manufacturing assets



### E2E supply chain orchestration

Strengthen your supply chain from forecast through fulfillment



### Long term value engineering (LTVE)

Engineer value into the product that carries through manufacturing and the customer experience



### OT cyber

Managing risk across your operating assets



### Humans@center

Unlock the value of your people, as an asset that lies at the center of innovation and modernization



## Key questions we explore

- ▶ How do I drive greater efficiency and productivity in the design and production of good?
  - ▶ Help me design my modernization blueprint
  - ▶ Help us scale our vision across our existing footprint
  - ▶ How do I optimize the investments I've already made?
- 
- ▶ How can I get better access to reliable data through the systems I have in place now?
  - ▶ What's the next step in terms of visibility?
  - ▶ How should we move toward a more automated / autonomous supply chain?
- 
- ▶ How can sustainability benefits be engineered into product design?
  - ▶ To what extent can more proactive design for manufacture decisions impact margin?
  - ▶ How do I better incorporate supply chain considerations into product design?
- 
- ▶ How do I determine the appropriate coverage model for my existing assets?
  - ▶ How can I increase OT cybersecurity understanding across my organization?
  - ▶ How should I most effectively manage / operate an OT cyber improvement program?
- 
- ▶ How do we win the competition for talent?
  - ▶ What role can technology play in keeping my workforce more engaged and effective?
  - ▶ To what extent has the expectation on retention changed?



# Why this is better

One of the most powerful aspects of the Digital Operations Hub is the ecosystem of partners that we convene and activate to help our clients address their most significant modernization and innovation challenges.



DoD-funded  
Broad member network  
Solves real problems  
Focus on manufacturing

Give me access to an environment that brings a broad and objective perspective to manufacturing innovation.



Dell  
GE Digital  
Microsoft  
P&G  
PTC

Help me work with a family of partners that can help me design and deliver my modernization plan where all the pieces fit and work together.



Asset management  
Cybersecurity  
Information management  
Operational excellence  
Supply chain management  
Talent management

Bring capabilities that carry me through the journey - from product to profit.



# How it works

The key to curating a powerful experience at the Digital Operations Hub is preparation – both in framing the “exam question” we will work to answer and investing to gather the right level of data, insights and observations needed to drive toward a desired outcome. This level of pre-experience diligence enables the most critical aspect of the experience – getting something done / doing real work. Our objective is to convene the right group of stakeholders to leverage real-world data in order to meet a clearly defined challenge.

## Aligning your ambition and potential



The experience starts with a conversation around ambition and potential – understanding the investments you’ve made, the ground you’ve covered and the perspective you have for what lies ahead.

## Framing the exam question



Once this foundational understanding is established, we work together to frame the exam question – the modernization opportunity we will work to make a reality. **This is the focal point that guides the rest of the experience.**

## Curating a powerful and impactful experience



After we have a clear exam question, the experience begins to take shape starting with pre-session preparation, which may include interviews, surveys, site visits, review of existing information and culminating in the session itself. We also integrate key ecosystem partners throughout the process.

## Achieving the outcome of your ambition



The final step in the experience is making the pivot to action. We often leverage our EY wavespace™ team to facilitate a structured series of activities that leverage the insights from preparation and our time at the Digital Operations Hub to create the formal roadmap forward.

### The power of preparation

The majority of effort associated with an experience at the Digital Operations Hub is directed toward preparation. We strongly recommend visiting our client’s facilities and spending time with a broad range of stakeholders as part of the preparatory process. When it comes to realizing gains in manufacturing modernization and supply chain orchestration, the details truly matter. This is why we put such a strong emphasis on this aspect of the experience.



# Where to learn more

Every organization has the opportunity to accelerate digital transformation and shape the future of manufacturing. Whether you are looking for ideas to get started or for guidance to navigate the path forward, we are ready. Contact us directly or scan the QR code below to get in touch with us.



## Contact us



**Mark Heidenreich**  
*Managing Director &  
Digital Operations Hub Leader*  
Ernst & Young LLP  
mark.heidenreich@ey.com



**Scott Dixon**  
*Managing Director*  
Ernst & Young LLP  
scott.dixon@ey.com



**Ed Markowski**  
*EY Americas Markets Director*  
Ernst & Young LLP  
edward.markowski@ey.com



**Silver Park**  
*EY Americas Markets  
Associate Director*  
Ernst & Young LLP  
silver.park@ey.com



## EY | Building a better working world

EY exists to build a better working world, helping to create long-term value for clients, people and society and build trust in the capital markets.

Enabled by data and technology, diverse EY teams in over 150 countries provide trust through assurance and help clients grow, transform and operate.

Working across assurance, consulting, law, strategy, tax and transactions, EY teams ask better questions to find new answers for the complex issues facing our world today.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. Information about how EY collects and uses personal data and a description of the rights individuals have under data protection legislation are available via [ey.com/privacy](https://ey.com/privacy). EY member firms do not practice law where prohibited by local laws. For more information about our organization, please visit [ey.com](https://ey.com).

Ernst & Young LLP is a client-serving member firm of Ernst & Young Global Limited operating in the US.

© 2023 Ernst & Young LLP.  
All Rights Reserved.

US SCORE no. 18954-231US  
2301-4172552  
ED None

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, legal or other professional advice. Please refer to your advisors for specific advice.

[ey.com](https://ey.com)