DIGITAL
MANUFACTURING
IRELAND

2 YEAR UPDATE

Q1 2025

5,000+

visitors from

600+

companies

(Agribusiness, Aviation & Aerospace, Automotive, Biotechnology, Consulting, Chemicals, Civil Engineering, Computers, Consumer Goods, Construction, Defence & Space, Mech/Ind Engineering, Environmental Services, F&B, Govt. Relations, HR, Higher Education, Healthcare, Industrial Automation, IT, Logistics & Supply Chain, Machinery, Med Devices, Renewables, Research, Retail, Telecomms, Textiles, Mining/Metals, Pharma, Packaging, Plastics, Training, Semiconductors, Utilities, Wholesale)

from 25+ countries

Austria, Belgium, Brazil, Bulgaria, Canada, Costa Rica, Denmark, England, France, Germany, Ireland, Israel, Italy, Japan, Malaysia, Netherlands, New Zealand, Northern Ireland, Poland, Scotland, Singapore, Spain, Sweden, Switzerland, United Arab Emirates, United States.

40

employees

Capabilities:

Transformation Strategy
Manufacturing Operations
Workforce Transformation
Digital Transformation
Change Management
Data Science
Digital Twin
Simulation and Optimisation
AI for manufacturing
Machine Vision
Cloud & IIoT
Project Management

Transforming Manufacturing Globally

DMI supports Irish based manufacturers and their global manufacturing partners. Working with client project teams in more than 20 international locations, DMI is expanding the reach of Ireland's manufacturing transformation ecosystem and strengthening the global manufacturing landscape.

High Impact Transformational Projects

Automated Maintenance

Develop and implement a state-of-the-art collaborative robot (Cobot) system that enhances the efficiency and safety of preventative maintenance tasks within complex manufacturing environments.

Factory of the Future

Create a best in class, smart manufacturing network that seamlessly integrates AI-driven processes, sustainable practices, and human creativity to increase safety, productivity and reduce errors and inventory levels.

Product Digital Twin

Use of a visual digital twin of a final product to simplify the customer configuration process which also delivered improvements through the full product life cycle - bringing improvements to the patient experience, the client sales process, operator training and waste reduction.

Site Automation

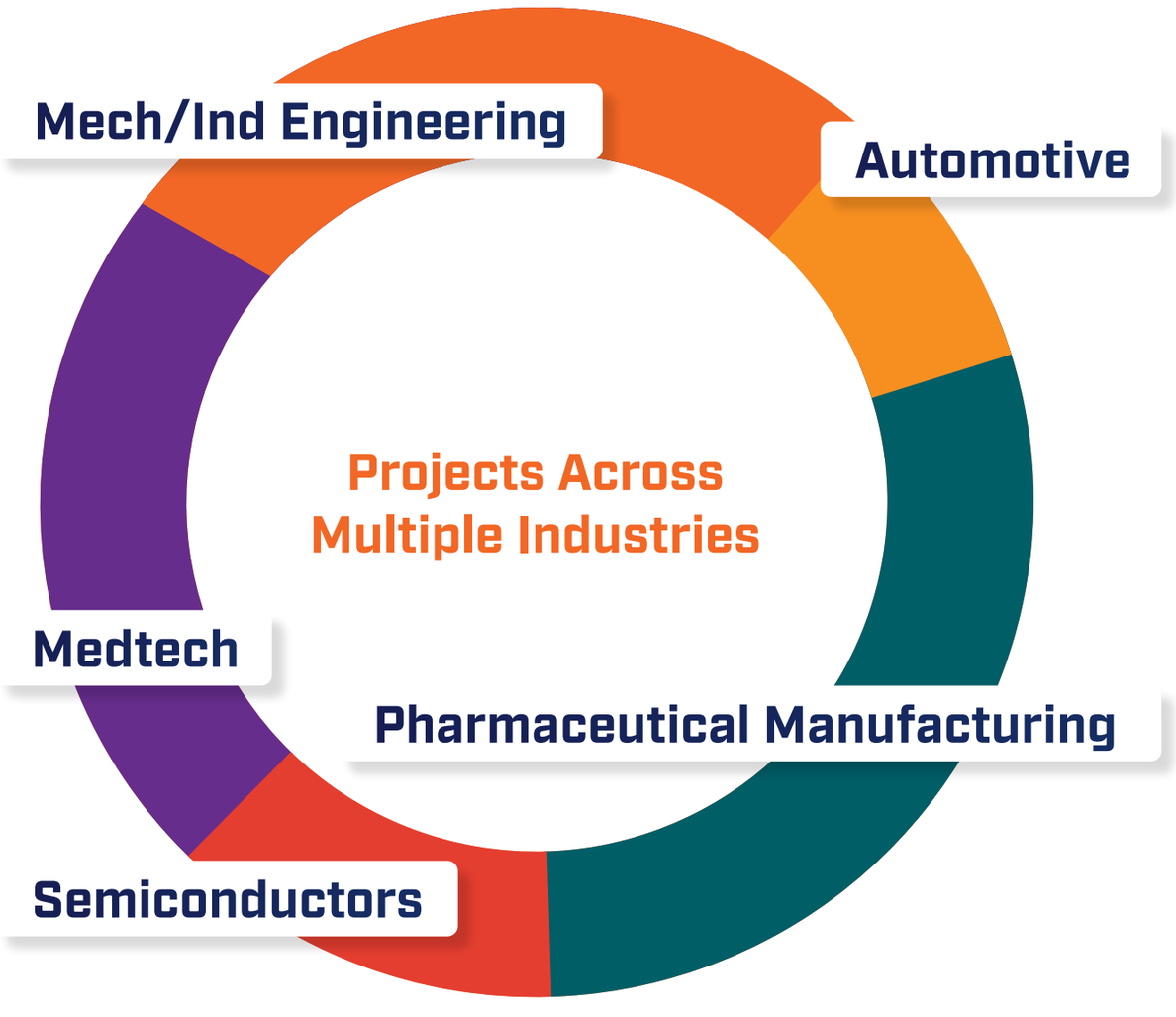
Optimisation of multiple manual production lines that will benefit from a comprehensive automation solution, resulting in increased operational efficiency and better utilisation of valuable resources.

Line Optimisation

A digital transformation project to optimise the sequence of equipment movements and streamline the new deployment, reducing the time taken to re-start production.

Cultural Transformation Programme

A series of workshops to support the leadership team to create a programme of cultural change as the company move towards 80% fully automated manufacturing process by 2025.



Research at DMI

Research Study in Collaboration with MIT

In 2023 DMI conducted a research study on human-centric manufacturing culture (HCM), in collaboration with the Sociotechnical Systems Research Center at the Massachusetts Institute of Technology (MIT) and the International Academy of Automation Engineering (IAAE). The goal was to gain insights and knowledge about HCM and HCM Culture to help position Ireland as a leader in both research and practice for human-centric manufacturing and workforce transformation. Our Human-Centric Manufacturing Research journal article has been published online by Taylor & Francis, Production & Manufacturing Research.

Donna Rhodes, principal research scientist at MIT, explains

“although numerous studies have investigated human-centric manufacturing, our first-of-its-kind study prioritises the cultural aspect, offering real-world, research-based insights to guide industry leaders in crafting an impactful digital transformation roadmap”.

Research Article: Human-centric manufacturing culture: a research study of MedTech manufacturers in Ireland.

Research

3 PhD Projects in Collaboration with i-FORM

1

Addressing the human side of implementing digital technologies (particularly artificial intelligence), within a manufacturing environment

2

Addressing image analysis during advanced manufacturing processing

3

Addressing advanced measurement of 3D nano-sized features using high-precision image metrology

These PhD projects are jointly funded by I-FORM, the Research Ireland Centre for Advanced Manufacturing, and Digital Manufacturing Ireland (DMI).

What Clients are Saying about DMI

"When we started off first what we did was we just got the DMI representatives you know and it was quite a broad range of people, and we got them to come out to both our facilities. The guys that were there if you did a tally there's probably well over a 100 years of experience in that crew. One organisation like ours is never going to have that level of knowledge, and practical application. That was really valuable to us."

Ger Grace – Edwards Lifesciences

"The advantage of what DMI are doing is that we're able to model multiple different scenarios, we can see the savings that we're making, and then we can use that information to help us work out a return on investment for automating various different aspects of the process for the future building."

Sean Nolan - West Pharma

"I think the relationship with BioTouch and DMI is just getting started. We're a global company, we have global manufacturing capability and needs, and we've just started to put our toe in the water with this growing relationship. We envision a really powerful collaboration where DMI is working with our global solutions in the US and other areas, to expand our automated and digital manufacturing capability."

Robin Hooker - BioTouch

"Special thanks to the incredible team at Digital Manufacturing Ireland for hosting us and leading the sessions. Your partnership and collaboration made this workshop a great success. Looking forward to building on this momentum as we continue advancing innovation".

Hayk Grigoryan – AbbVie

"As one of the largest beverage manufacturers in the world, we are very appreciative of DMI as an industry-led strategic partner and recognise the value that the DMI Team bring to our collaborations.".

A leading global beverage manufacturer

Launched: 30th May 2023

VISUAL COGNITIVE - MANUFACTURING GROUP

The mission of the Visual Cognitive-Manufacturing Group is to position Ireland as a global leader in the research, development and deployment of vision technology as used in the manufacturing domain. The VCMG aspires to enhance Ireland's reputation as the destination for manufacturing companies that rely on the adoption of computer vision technologies in their operations.

218 participants

106 organisations

Across 20 sectors:

Automotive, Aviation and Air Space, Biotechnology, Computer Hardware, Computer Software, Consumer Electronics, Electrical/Electronic, Food, Government Relations, Higher Education, Industrial Automation, Information Technology & Services, Machinery, Management Consultancy, Mechanical/ Industrial Engineering, Medical Devices, Pharmaceutical, Plastics, Research, Semi Conductors

Activity: 13 Industry Challenges

Some of our Industry Challenges

Proof of Concepts & Testing [DMI] – Centralising expert support, training, and cutting-edge equipment for hands-on experience with vision technologies.

Cost-Efficient Image Analysis [Ubotica] – Enhancing high-volume image analysis through cost-effective edge and cloud computing.

Validation of Vision & AI Systems [Boston Scientific] – Ensuring AI regulatory compliance via position papers, policy recommendations, and advocacy.

Reducing False Negatives – Improving machine vision accuracy by refining image processing and algorithms.

On-the-Fly Defect Identification & Sortation – Developing a vision-based system for real-time defect detection in production.

Precision Measurement for Micro/Nano Parts [Medtronic] – Advancing 2D/3D precision measurement for micro/nano medical device components.

What Our Partners are Saying about VCMG

“When you consider Cognitive Vision it can be divided into two sections. Firstly, the creation and capture of images that are compressed and decompressed, and used to inform us about the process, product or equipment. Secondly, and the more difficult part is the classification and cognition derived from these images. This knowledge construct can enable a better response to non-conformance, whilst building predictive insights. That’s where the challenge but also the magic will be for us as a group.”

Bill O’Leary – *West Pharma*

Launched: 26th March 2024

WORKFORCE OF THE FUTURE

The Workforce of the Future Centre of Excellence (CoE) aims to position Ireland as a global leader in human-centric manufacturing and organisational culture. Its mission is to promote agility and digital adoption in manufacturing by cultivating a culture that values human engagement and innovation.

73 participants

47 organisations

Across 16 sectors:

Airlines/Aviation, Automation, Computer Software, Electrical/Electronic Manufacturing, Food & Beverage, Higher Education, Human Resources, Information Technology & Services, Management Consulting, Mechanical or Industrial Engineering, Medical Devices, Non Profit Organisations, Pharmaceuticals, Profesional Training & Coaching, Research, Semiconductors

Through collaborative initiatives with academia, industry, and technology providers, the CoE will equip organisations with strategies, frameworks and sustainable models that drive a human-centric approach to digital transformation.

HCM Culture - Focusing on fostering mindsets and best practices that prioritise workforce engagement, leadership behaviours, middle management skillset development and competencies beyond technical skills, to enable a culture of innovation, collaboration and agility.

Connected Frontline Worker - Connecting digital transformation to frontline roles by defining enhanced responsibilities, competencies, and necessary supports while leveraging HCM principles to design better digital dashboards that enable predictive decision-making and foster a data-driven culture.

Skills, Learning & Development - With emphasis on continuous upskilling and development, micro-learning, and augmented and adaptive training to meet the demands of smart factories and digital maturity.

What Our Partners are Saying about WF

“For the past two years, we at Alcon have been collaborating with the DMI consultants on Human-Centric Manufacturing and Workforce Transformation, which is a cornerstone of the Alcon People Strategy.

Through this partnership, we are inspiring and empowering our people leaders with the skills, mindset, and confidence to drive meaningful organisational and cultural transformation.

By valuing and investing in our greatest asset—our Alcon people—we are fostering a culture of resilience, innovation, and limitless potential.”

Audrey O’Connell – *Alcon Laboratories Ireland Ltd.*

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GET IN TOUCH WITH DMI

Reach out to us via email

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