



IRISH
MANUFACTURING
RESEARCH

Industry 4.0 Empowerment Programme

*Leveraging on
Smart Industry
Readiness Index*



SMART
INDUSTRY
READINESS
INDEX

WORLD
ECONOMIC
FORUM



14.0

Introduction



Industry 4.0 is redefining the global manufacturing sector through the convergence of the physical and digital worlds. It has the power to transform how products are created, how supply chains are managed and how value chains are defined. Industry 4.0 (I4.0) enables organisations to gain new competitive advantages through greater quality, productivity, speed and flexibility.

The success of an organisation's I4.0 journey relies on its ability to understand, internalise, and apply I4.0 technologies and solutions. It is imperative for organisations to understand their I4.0 readiness levels so that they can empower and mobilise their workforces and prioritise strategic opportunities and high impact initiatives.

To accelerate the manufacturing sector's I4.0 transformation, the Singapore Economic Development Board (EDB) partnered with other industry leaders to develop an industry transformation framework known as the Smart Industry Readiness Index (SIRI).

SIRI serves as a diagnostic tool for companies across all industries and sizes to understand I4.0 concepts better, evaluate the current state of their manufacturing facilities, and prioritise focus areas with the biggest impact to improve in quality, productivity, speed, and flexibility.

The recognition of SIRI by the World Economic Forum as the global standard for I4.0 transformation will further increase its adoption and ultimately catalyse the transformation of the global production sector.



The Industry 4.0 Empowerment Programme

Leveraging on SIRI, the key objective of the Industry 4.0 Empowerment Programme is to provide an effective initiation of the I4.0 transformation that spans the 3 fundamental building blocks of Industry 4.0: Technology, Process, and Organisation. By building knowledge and establishing factory-specific interpretations of key principles, concepts and technologies, customers are guided and then enabled to embark systematically on their I4.0 transformation journey.

During the 3-day programme, IMRs Certified SIRI Assessors will work with organisations to catalyse their I4.0 transformation targeting the following key objectives:

- **Education:** Acquire and gain knowledge of I4.0 and related technologies within the industry.
- **Evaluation:** Assess the current I4.0 readiness level, map company specific imperatives and benchmark against best-in-class companies, based on the global standard SIRI.
- **Execution:** Establish confidence in making the right strategic decisions and minimise uncertainty by understanding global best practices and applying practical guidelines.

What is really different about SIRI?

SIRI guides companies to the most **impactful** way to implement Industry 4.0; the **TIER framework** as seen below encompasses the prioritisation:

T



TODAY'S STATE

Develop an in-depth understanding of the company's current Industry 4.0 maturity level

I



IMPACT TO BOTTOM LINE

Analyse how distinct Industry 4.0 areas affect the company's profits and identify those that can generate the greatest financial return

E



ESSENTIAL BUSINESS OBJECTIVES

Determine the business objectives that are the most critical to the company to guide the selection of relevant Industry 4.0 areas

R



REFERENCES TO THE BROADER COMMUNITY

Emulate successes and learn from the mistake of the broader manufacturing community

Your business benefits

- Get ready to improve systematically in quality, productivity, speed, and flexibility by leveraging I4.0 solutions effectively.
- Gain critical knowledge about I4.0, for your company's specific maturity levels and the most impactful areas to focus on.
- Mobilise your workforce and suppliers for an inclusive transformation by establishing shared goals and a common understanding and language.
- Acknowledge and understand latest technologies and concepts to better tackle your challenges.

How can we help you?

We have 3 CSA's (Certified SIRI Assessors) who will conduct the OSA (Official SIRI Assessment) at your site as an independent, impartial party. We introduce the concept of I4.0, present the SIRI framework and conduct the assessment of high-impact initiatives. The results of the OSA will be presented in a report where we advise on the most impactful next steps and how you can master your own transformation journey.

Why choose IMR?

Driven by industry demand

Irish Manufacturing Research has become a leading Research and Technology Organisation providing a portfolio of research, training, and consultancy services to Industry across

4 thematic pillars: Digitisation, Sustainable Manufacturing, Design for Manufacturing, Automation and Advanced Control. IMR has a proven track record in I4.0 ideology and are part of a global network of organisations providing SIRI assessments across a large range of industries, with MNCs as well as SMEs. IMR has gained unprecedented expertise in I4.0 transformation. Agnostic to technology and vendors, we advise on the best solutions for your specific challenges and future needs.

Demystify, Derisk, Deliver

IMR's vision is to enable manufacturing of all sectors and sizes to be leaders in the world of advanced manufacturing so that they can compete and thrive in the global economy. As a leading manufacturing Research & Technology Organisation (RTO) with labs and industrial pilot lines in Dublin and Mullingar, IMR works with leading global and indigenous brands to demystify and derisk new and emerging technologies & to deliver high impact collaborative research.

IMR's ambition is to significantly accelerate the implementation of key elements of Ireland's industrial strategy and enable Irish based manufacturers to be early adopters and winners in the fourth industrial revolution. IMR enable industry to capitalise on these opportunities and tackle the threats head-on, through a broad-based service offering to ensure industry has access to the latest technologies and knowledge in a timely fashion that inspires trust in a physical and digital world to create a safer and more sustainable future.



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