

Industry 4.0 – Today’s Technologies Powering Tomorrow’s Productivity

📅 FEBRUARY 23, 2023 | 🍽️ ARTICLES



The Fourth Industrial Revolution (Industry 4.0 or 4IR) is here. More and more organizations are harnessing new technologies to drive productivity, sustainability, and growth. Digitization, data analytics, enhanced connectivity, and human-machine interaction such as AI and machine learning, are setting the course for the next chapter in manufacturing.

The Global Lighthouse Network

The Global Lighthouse Network, a collaboration of the World Economic Forum and management consultant McKinsey & Company was created in 2018 to accelerate the adoption of

cutting-edge technologies in manufacturing across industries and around the world. “Lighthouses” are companies that elevate and integrate Industry 4.0 technologies quickly and effectively, pushing from pilot to scale, and leading others to increase productivity and profits in sustainable ways.

Founded with only nine “lighthouse” companies, the Network’s membership now exceeds 130. (weforum.org) Their success stories are shared broadly to serve as examples and learning opportunities, including:

- The consumer healthcare company that deployed an advanced sensor-fed system, cutting energy consumption by 25%
- The home appliance company that integrated data analytics and automated visual inspection technology, increasing production efficiency by 35%
- Lighthouse companies are 3X more likely to report advanced production using 4IR technologies, and 50% more likely to be ahead of schedule to scale them, vs. their non-lighthouse counterparts

Key 4IR Enablers – Talent, Leadership, Agility

A key enabler of the Fourth Industrial Revolution is talent. According to Jan Gunnar Storli, Partner at IMSA Search Global Partners Norway and Search House, “Companies must be willing to invest in upskilling their current workforce and attracting employees with the skills and knowledge to implement a complete digital transformation. The commitment of the C-Suite, with the support of the Board, is essential to prioritizing 4IR – making the right investments, breaking down silos, and mobilizing the entire organization.”

Agility is critical to driving scale at speed. Due to rapidly-evolving technology, uncertain global forces, and constantly shifting industry ecosystems, companies must be flexible, engage in scenario planning, implement those plans, and be willing to pivot as changes dictate. To accommodate this ever-present uncertainty, internal processes should be reconfigured to absorb rapid shifts.

Digital Plant Floor Networks, Robotics, 5G

The digital transformation of production on the plant floor is already well underway, with internet of things, cloud computing, analytics, AI, and machine learning increasing in many industries. “The plant floor extends to ocean space in maritime, oil & gas, food (fishery and sea farming), and renewable energy (offshore wind, tidal energy and wave energy) where remote operated vehicles (ROV) and autonomous underwater vehicles (AUV) are being used for projects, inspections, and maintenance,” adds Jan Gunnar Storli.

The number of industrial robots in use has exploded, growing from 97,000 in 2004 to 384,000 in 2020 to an estimated 518,000 in 2024 (statista.com). Allied Market Research projects the global digital manufacturing market to reach \$1.37 trillion by 2030, while the Manufacturing Leadership Council, representing 14,000 member companies in every industrial sector, reports 58% of manufacturers surveyed worldwide either already have extensive digital plant floor networks or will have them in 2 years.

Widespread 5G connectivity has enabled faster data transmission, expanded bandwidth, and enhanced security, which support Industry 4.0 at scale. In the midst of a constantly changing world, some things remain the same: Innovations will continue to occur. New issues will continue to arise, with new solutions to address them. Companies that embrace the Fourth Industrial Revolution will find themselves well positioned for the Fifth Revolution when it arrives.

About IMSA Search Global Partners

With 50+ offices in 25+ countries on 6 continents, our 300+ Executive Search experts span the globe to identify the right candidates to successfully lead teams and organizations locally, regionally, and globally. <https://www.imsa-search.com/>

