



Comment

DAVID CHUTER – CEO and managing director, IMCRC

Accelerating Industry 4.0 uptake: five messages for SMEs

DESPITE the challenges of 2020 and the undeniable negative impact of COVID-19, the world has seen a rapid adoption of digital technologies over the past six months.

Satya Nadella, CEO of Microsoft, noted in April that due to the pandemic the business saw two years' worth of digital transformation in just two months. More recently, McKinsey reported the findings of a poll which stated C-suite executives believe COVID-19 has triggered a decade of digitalisation.

This shift was a key topic of discussion at the 2020 virtual Industry 4.0 Advanced Manufacturing Forum (I4AMF) conference at the end of October.

In my role leading the combined Technology Applications and Digital Business Models workstream of the I4AMF, it was a privilege to lead a webinar panel with five manufacturing experts who provided insights and advice for those looking to accelerate the uptake of Industry 4.0 technology applications and digital business models in Australia.

A questions that I, as well as my colleague and webinar co-host Simon Dawson, IMCRC's director of industrial transformation, often get asked, particularly by SMEs, are "How do I start? How, where and when should I begin to integrate the technologies of Industry 4.0?" – this theme provided the spark for a fascinating discussion.

Below are five key outtakes.

1. Industry 4.0 is a journey to both capture and create value

The panel unanimously agreed that Industry 4.0 is not a moment in time. Nor does it represent a fixed set of technologies.

In fact, investing in technologies of the time may be futile unless you are clear on why and how they will set your business up to adapt and thrive in a changing world.



The first step to begin the Industry 4.0 journey does not need to be a big one.

David Kaplan, co-founder and managing director of Sleep Corp, noted that although Artificial Intelligence, Virtual Reality and the Internet of Things are being adopted by many, technology on its own is not always the answer. Sleep Corp was aware of the need to transform its existing factory into a modern one to stay competitive in a global marketplace but was surprised to discover that digital transformation can be as much about upskilling an existing workforce or improving process flows as implementing advanced technology.

With the help of graduates from Swinburne University, and partners such as the Fraunhofer and IMCRC, Sleep Corp was able to redesign the layout for the factory, identify potential stress points and select the right technology and processes. By taking the company on the Industry 4.0 journey, Sleep Corp transformed itself into one that compete well into the future.

2. The first step can be small

For some, beginning the Industry 4.0 journey seems overwhelming. But our webinar panel demonstrated that

the first step doesn't need to be a huge leap.

Jamie Baensch, general manager of Air Radiators, spoke of how the company started its journey by looking at the way information flowed between its many systems. Air Radiators was finding that the complexity of its information infrastructure meant that its shop floor team members were not receiving the live data they required to serve customers effectively. To solve this problem, they introduced touch screens into the customer-facing environment and connected these to its enterprise resource planning (ERP) system via an IBM Cognos business intelligence tool. The touch screens reduced the need for keyboards and paper systems and allowed the shop floor team to receive live data from the ERP system.

Baensch explained that Air Radiators didn't set out to begin an Industry 4.0 project. But they ended up with one - a digitalised shop floor - setting in motion a culture of continuous improvement and adopting new ways of working to



improve productivity.

For SMEs looking to take their first step, Jamie's advice was to, "Start small. Find something that's really annoying someone – a system problem – and then look at it from the perspective of how technology can help solve this problem".

3. The right partners are important

There are many collaborators open to working with manufacturers across the country, but crucially businesses need to find the right fit. Each member of the webinar panel spoke about the importance of effective collaboration to evolve successfully with Industry 4.0 and create a long-term sustainable business.

Teaming up with the right partner(s) at the outset of a transformation journey will help you actualise your ideas. In Cori Stewart's experience as CEO of the Advanced Robotics for Manufacturing (ARM) Hub, SME owners tended to be technology leaders in their field with great business ideas but sometimes lacked the resources and broader know-how to adopt advance manufacturing.

Part of the ARM Hub's role is to help businesses identify and access the right information and people to solve whatever challenge they are up against, often connecting owners with owners and encouraging leaders to bring in experts and allow them the freedom to have their own conversations.

Dr Greg Whiteley, chairman of Whiteley Corporation, concurred and emphasised the importance of investing in and building the right partnerships. When setting out to advance Whiteley's research and development (R&D) and build a new Industry 4.0 enabled human therapeutics plant in the Hunter Valley, Dr Whiteley observed that communicating openly with partners,

understanding their relative strengths and weaknesses and having the right mix of skills was essential to the collaboration process. He also stressed the value of having aligned goals and performance objectives in place to ensure accountability and keep the project focused on achieving sustainable profitability.

4. Willing and ambitious business leadership is the catalyst

Throughout the discussion all panellists pointed out how important leadership is to the Industry 4.0 journey.

Business leaders and owners who are willing and ambitious to adopt new technologies and embrace new business models are well on the journey and reaping rewards. As Dawson highlighted at the onset of the webinar, Industry 4.0 is about being clear on the "why", embracing change and strategically 'having a go'. While being smart on how investments are made – the "how" and the "what" – not just in terms of cost, but also in terms of other critical resources such as people, skills, systems and collaborative partners are critical to successfully transforming a business.

A comment that Herve Harvard, founding director of the University Technology Sydney (UTS) Rapido, made during the webinar stuck with me. He encouraged SMEs to consider the impact of doing nothing and ignoring Industry 4.0, stating, "If you say you're too small to do this, you'll probably end up being smaller. You can't afford to wait a year, two years or three years because someone will move faster". This reminded me of another quote, "There are only two times in life, there's now and there's too late".

5. The time to start is now

Before the pandemic, Industry 4.0 and the associated technological advancements were starting to transform Australian businesses, creating opportunities for new digital business models and circular economies.

We have, collectively, made solid

progress over the last year. When asking this year's webinar attendees where they thought Australia was on the Industry 4.0 journey, 40 per cent said that Australian manufacturers were currently "adopting" Industry 4.0, whereas at last year's conference, 90 per cent responded to the same question with "exploring" or "accepting".

Hearing the stories of our panelists, as well as insights and comments from leaders across industry and government throughout

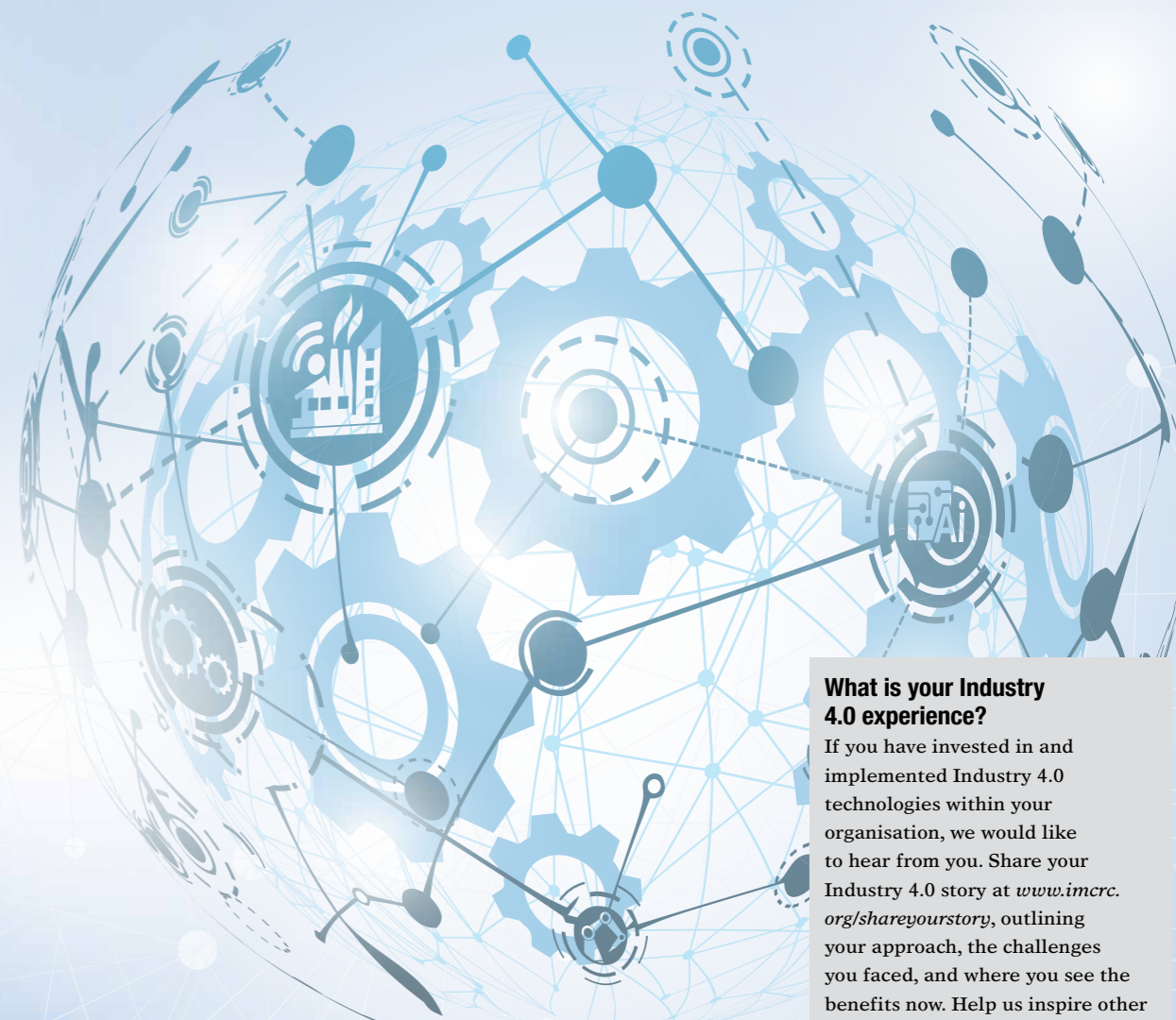
the I4AMF conference, I can't help but be excited and motivated about the future for manufacturing in our country, and for industry more generally in Australia.

However, the message at this year's conference was also clear: the future is predicated on all of us taking advantage and moving quickly to embrace and invest in technology, digital skills, business models, innovation, research and collaboration. As a country, we must help accelerate our small

and medium businesses and their participation on this journey.

Ultimately, the question of how to accelerate towards applying technology and implementing digital business models that create value is down to ambitious leadership, collaborating with the right people, and following a well-considered and agile strategy. Our conference webinar panel agreed that starting the journey requires confidence to embrace change and foresight to realise the necessity of adoption. **M**

The ARM Hub helps businesses identify information and people to solve challenges.



What is your Industry 4.0 experience?

If you have invested in and implemented Industry 4.0 technologies within your organisation, we would like to hear from you. Share your Industry 4.0 story at www.imcrc.org/shareyourstory, outlining your approach, the challenges you faced, and where you see the benefits now. Help us inspire other manufacturing businesses to follow in your footsteps and start their Industry 4.0 journey.