



A practical journey to a digital future

In December 2018 eight GAMBICA Industrial Automation members gathered around a table at the King Power Stadium in Leicester to be recorded discussing IT, cyber security, cloud computing and of course automation and what it all means for Smart Manufacturing. In a special three part serialisation in Smart Machines & Factories, Victoria Montag – sector head for Industrial Automation, GAMBICA, will be looking at the output of the discussion that took place and covers a pragmatic guide to getting started on your smart manufacturing journey.

The Fourth Industrial Revolution (4IR) is, as far as Industrial Revolutions go, notable not only for the fact that it was hailed as such almost before the fact, but also because it is the first revolution driven not so much by technology, but by capability.

I represent GAMBICA's UK Industrial Automation Sector, and I spend a lot of my life talking about automation technologies. But when it comes to 4IR, most of my members will tell you that the technology has existed for a long time, even the connectivity of these products to local and wide-area networks, but it is the lowering of cost, increased capacity for storing data, greater processing power and speed, that has allowed industrial transformation to happen.

But even though the technologies

have existed for a long time, there still is a lot of noise and confusion around the subject. The numerous names that are bouncing around doesn't help, Industry 4.0 (I4.0), The Fourth Industrial Revolution (4IR), Smart Manufacturing, Industrial Internet of Thing (IIOT), not to mention the vendor trademarked terminology. My personal preference is "digitalisation" because it describes something, like "mechanisation" and "automation" (1st and 3rd Industrial Revolutions respectively). But generally speaking the terms can be used interchangeably.

Secondly, with so many sectors with a vested interest in the implementation of smart manufacturing; telecoms companies, data analytics and artificial intelligence developers, cloud storage providers etc., the topic seems so

huge it's hard to crystallise into one imaginable "thing". Furthermore, because so many sectors are in the smart manufacturing space, and each has their own narrative on what smart manufacturing "is", geared towards selling their product, it's difficult to hear a consistent message.

This is also true of the automation sector, but with automation technologies being the work-horse of smart manufacturing, there is an appreciation among automation vendors that all stakeholders are all needed in order for Smart Manufacturing to be realised. Put simply, that their message cannot be about their piece of the Smart manufacturing pie.

Continues on page 25