We must transition to collaborative working

Mike Wilson, Chairman of the British Automation and Robot Association (BARA), says that more UK manufacturers are looking at robot technology to ensure they have the resilience to stave off potential long-term adversity caused by Brexit and COVID-19.

2020 World Robotics report, published by the International Federation of Robots (IFR) in September 2020, found that the number of industrial robots operating in UK factories had increased by 5% year on year; something that Mike believes could be the catalyst to re-energise the UK manufacturing industry.

This period of growth is supported by BARA's own industry research, which concluded that the number of industrial robots sold in the UK during the first two quarters of 2020 is on par with the number sold for the first three quarters of 2019. The Food and Beverage industry was the largest adopter, culminating in 29% of all industrial robots sold in the UK during the height of the COVID-19 pandemic.

Mike believes that more UK manufacturers should follow in the footsteps of the automotive industry to ensure that businesses have adopted the latest automation technologies to guarantee they remain competitive when we are outside of the European internal (single) market in January 2021.

However, while the unemployment rate is expected to rise significantly in 2021 as a direct result of COVID-19, perhaps the biggest unknown is whether the food and beverage industry – the largest manufacturing sector in the UK – can comply with complex social distancing measures and also meet its staff quota. This follows a sizeable reduction in EU migrant labour over the past 18 months and uncertainty if UK workers wish to take on those roles?

In 2019, the Office of National Statistics reported that, for the first time since 2006, the majority (56%) of people migrating to the UK for work in 2019 were non-EU citizens. This migrant trend reversal could now pave

the way for more UK manufacturers to reevaluate their plans and consider automation as an alternative to scarce labour.

Mike said: "The food sector, including those working in agriculture, has experienced a notable decline in available migrant labour, which has been perpetuated by Brexit and more recently COVID-19. This has driven more enquiries in respect of automation, as more companies realise that they need to do something different to mitigate the shortfall.

"There are a lot of opportunities to automate relatively simple applications outside of the high care environment, where the product is already packed. Remarkably, a lot of these palletising and pick and place tasks are still done by hand, where automation can easily assist. These are the tasks that manufacturers should be looking to automate," he added.

Despite the UK trialling many of its European counterparts in terms of robot density, Wilson believes that Brexit and COVID-19 will drive more businesses to recalibrate and take stock of their operating model.

As with all things, there is a financial tipping point where robot automation becomes justifiable. The automotive sector surpassed that years ago, whereas food manufacturing is still on the incline. Other manufacturing nations have progressed further than the UK, principally born out of a culture to invest, a less flexible labour force, and, as a result, acceptance of longer returns on investment.

While robot density in the sectors outside of automotive is still relatively low, there are increasing levels of interest in collaborative robots (cobots).

"Cobots are generally easier to programme, and the cost of installation is lower. This is mainly because they don't require the same guarding as



non-collaborative robots or need to be installed by a specialist integrator. However, appropriate risk assessments must be conducted, and the systems are safe to operate," continued Mike.

"The trick to effective automation adoption is to automate the things that are easier to automate first, and then look at the more challenging tasks to automate.

"Invariably, once people are happy and comfortable using cobots, the next job might require an industrial robot installation; and because they already had a good experience using cobots, they are more comfortable with making that switch.

"BARA can certainly help to signpost companies in the right direction, and the High Value Manufacturing Catapult (HVMC) centres, such as the MTC (Manufacturing Technology Centre), are happy to visit and undertake line walks, identifying good opportunities for automation, as well as helping companies to better understand the potential to automate; what to automate; and how to go about it to avoid the common pitfalls," Mike concluded.

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