

What the Government must do to drive manufacturing growth in UK PLC

Second roundtable event covers a wish list for Government

The second panel discussion organised by the UK Automation Forum took place on stage during the MACH exhibition organised by the MTA in April. This live event outlined several trade association's demands for the current/future Government to ensure the delivery of a coherent industrial strategy going forward.

The panel of experts included participants from Automate UK, the MTA, Make UK and GAMBICA.

The subject came about in this, an election year, to inform Government what is needed to help manufacturing across the UK, to flourish.

Takeaways from the event were:

- A simple step for Government to make a big difference in facilitating the adoption of automation would be to help make finance more available, and cheaper, across hardware, software and engineering support
- A long-term industrial policy would give investors more confidence in supporting UK manufacturing
- The Government needs to help dispel the myth that automation and robotics take jobs and instead promote the fact that they actually create new roles, more interesting, safe and secure jobs
- Government could help in adjusting the attitude of educators and parents to what manufacturing firms look like in 2024 and the opportunities that it offers

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111

e info@ukautomationforum.com

w ukautomationforum.com

- The Government should not become obsessed with future technologies like AI/digital/advanced manufacturing to the detriment of automation that is readily available for support today.

Firstly, the panel was asked about one simple thing the Government could do to support the adoption of automation that would in turn help boost productivity of manufacturing in the UK.

One panellist felt the most important thing that any Government could do would be to make finance cheaper for adopting a complete automation system. As most automation projects include not only hardware, but also software and engineering, the available finance rates are not always either available, nor favourable.

It was acknowledged, that there is lots of finance available at very good rates for hardware as this has a residual value. However, as the hardware is often only a fraction of the cost of a project and getting finance at affordable rates for software and engineering elements (which have no residual value) is where the Government could really make a tangible difference.

If, for example, the Government brought it into the scope of the British Business Bank, where it guarantees the loans to the finance houses, then more competitive rates on the total automation project package could be offered. And this would make a real difference to adoption rates, especially for SMEs.

There has been a chronic lack of investment in the UK, as the banks are nervous to lend, as there's not been a long-term ambition, or a long-term industrial strategy, for investors to feel confident that the UK is a good place to invest. So, a coherent long term plan from the top would help bring more confidence into UK manufacturing, and therefore more investment.

Also, if the Government could focus on software, and not just hardware, this would make a difference for net zero targets as much of the new software today has a direct impact on the energy usage of a whole range of equipment.

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111
e info@ukautomationforum.com
w ukautomationforum.com



Some might point to the Government's recently announced Advanced Manufacturing Plan as a way it is supporting manufacturers, but as no one really knows what 'advanced manufacturing' means, it is not seen as the most supportive approach. The panel felt that manufacturing is about the process you use, not the product you make, so support for the appropriate technology would make more sense. Appropriate technology could be automation or robotics or whatever, but this could also be classed as advanced manufacturing.

The panel then moved on to whether supporting increased adoption in automation is all about funding? Or are there other elements that would make a difference?

Just as important as funding is a cultural change that needs to take place, as many people still have a misunderstanding about automation. They think that automation/robotics take jobs which therefore has a negative effect on a workforce, rather than the actual outcome which is in developing skills of a workforce to help secure jobs into the future.

The Government could really help to get this message across – that new technology improves productivity to secure a factory's future and there is nothing to fear.

Another key issue is educating the population about what an engineering job in 2024 looks like. We have to communicate that the use of automation and robotics means more training and skills for an existing workforce as well as for new, younger recruits. Upskilling workers therefore increases job satisfaction and secures jobs, while not making people redundant.

It was felt that publishing statistics that supports one argument or another would be a good way forward in this area as there are not many stats available on the implications of adopting automation and robotics. It is generally felt that more automated factories are actually employing more people, across all kinds of roles which are often more fulfilling and well paid. But there are no stats to back this up. Government could certainly help in this area.

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111
e info@ukautomationforum.com
w ukautomationforum.com



What's not reported is as important as what is reported which is that more types of jobs and roles that weren't available ten years ago, are all being created by automation and robotics...and it is also replacing boring jobs/dangerous jobs with more interesting jobs. Also, trade associations should accept that they have struggled to cut through with the message that manufacturing jobs are great jobs, especially at local level. It was accepted that making a better case locally, would make a difference to an area, including to the local MP.

However, one panellist felt that adopting automation is not a choice, and that businesses can either hold the tide back or embrace it. And that suppliers of automation's collective jobs are to make the process of adoption as easy as possible to see their success. Finally, we are seeing some accelerated adoption, but we are still slipping down the robot deployment leagues and as we know, robots are just a subset of automation. We have to get everyone aligned that this is not a choice, but it is a huge opportunity.

Meanwhile, Make UK's research into perceptions into manufacturing/robotics, revealed an urgent need to reform how schools view manufacturing as well as parents of children in the current education system. Educators need to be educated into realising that today's manufacturing industry does some really cool things; and parents have to be encouraged to learn this, too.

This is certainly something that the MTA, organisers of the MACH exhibition, takes very seriously during the event. This year, it created an education and development area, and assisted schools in bringing 3,500 students into the show. Young people need to know what an amazing time it is to come into manufacturing at the moment as technology is accelerating choices.

Talking of young people, the panel was asked what the Government could do to encourage future generations to consider STEM careers to narrow the current skills and labour gaps.

Encouraging more people within engineering to become a STEM ambassador would be a great start. This status allows school visits to reach out and showcase what an engineering role today involves. Key to this is to visit primary schools so these young children go through school knowing what a STEM subject could lead to. Also, we need to ensure young people don't ignore manufacturing because they (and their teachers) don't know much about it.

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111
e info@ukautomationforum.com
w ukautomationforum.com



A joined-up Government, where more departments could come together to co-ordinate their policies, would also make a difference. For instance, by providing clear pathways from schools into manufacturing. However, the panel did admit that manufacturing businesses were not always the best at engaging with schools in their local area, even though those that do, often reap rewards.

Another area that the panel felt that the Government could help manufacturing businesses would be in terms of apprenticeship support. It was felt that the current apprenticeship levy is broken and that it is not just about going to university, there should be more information available to kids that could take up apprenticeships across industries. There is too much emphasis on education and a lack of clear pathways for kids to do other things.

Make UK's Annual Innovation report shows that the UK has one of the highest numbers of STEM graduates, but that the majority don't go into manufacturing. Many of them stay in academia as this is seen as more prestigious but this lack of conversion from STEM degrees needs addressing; but sadly, apprenticeships are still seen as second rate. The panel felt that we don't want to lock out people that don't have any STEM education if they are attracted to manufacturing and who could be good at working with their hands in a production environment.

The panel was then asked why the Government should be looking to support automation & robot deployment rather than current investments in AI and other digital technologies? Interestingly, the keynote speaker at MACH talked about including manufacturing within in the whole AI/digital technology area, making sure that the investment was spread, accordingly. Some on the panel felt it was all about perception; what will automation bring to this country and to local areas, for instance. AI is important to manufacturing, but it will be further down the track while automation and robotics are here today and therefore should not be ignored.

Always frustrates me that AI is seen as this new thing whereas engineers have been working with machine learning for years, said another panellist. Stop using it as a buzz word, like Industry 4, which just scared people and instead, explain that AI helps machines to learn from their mistakes. AI is only as good as the information it has – so we do also need to concentrate on the technology that feeds AI.

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111

e info@ukautomationforum.com

w ukautomationforum.com



Government should focus on creating a more realistic approach to AI and show it as a tool, rather than a brand-new technology. It comes back to people – there's not enough workers to deploy the technology that already exists, so we need to develop digitalisation skills and let us all evolve.

UK AUTOMATION FORUM

New Progress House
34 Stafford Road
Wallington, Surrey
SM6 9AA UK

t +44 (0)20 8773 8111
e info@ukautomationforum.com
w ukautomationforum.com