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Accelerating UK Manufacturing Growth

National Manufacturing Debate
Cranfield University 25th May 2016
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The Big Picture

While manufacturers believe the previous Government did a 'good job', many think the new Government needs to focus on several areas.

- Training and education to address future skills requirements
- Encourage closer links between the industrial and academic worlds
- Concentrate on driving the uptake of new technologies to improve competitiveness

A strong consensus of **73% of organisations stated that training and educating the next generation of manufacturing workforce was the most important measure** they would like to see the new Government address. This is a clear indication that securing future skills remains a critical challenge for the majority of manufacturers.

This is further emphasised by a call for **improved support to enable greater collaboration between education and business.**

Other notable mentions included better support for SMEs, improvements to the transport infrastructure and a reduction in energy costs.

Asked how the new Government could enhance its industrial strategy, manufacturers said the **primary focus should be on driving the uptake of technologies of the future such as digitisation and automation** to aid global competitive aspirations. This call far outweighed others, such as the need for regional manufacturing growth.

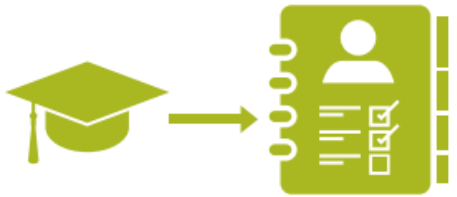
The Skills Debate

Manufacturers are urging Government to prioritise STEM education from an early age and make the process of taking on apprentices easier. The skills debate is a critical issue for manufacturers, and their responses to our consultation focussed on three areas for action:

An overwhelming majority **(86%) said Government needs a greater focus on STEM education** at both primary and secondary school levels.

There is a desire for **improved funding of and process for employing apprentices.**

A **greater industry-led development of education programmes** to produce the skills required is also needed.



This sentiment only reinforces the widespread belief that by addressing the skills challenge, Britain will go a long way to securing a future competitive manufacturing base. It will be a future where industrial digital skills will be ready to embrace the opportunity presented by Industry 4.0, the fourth industrial revolution.

R&D, Investment & Business Support

Government needs to focus on infrastructure investment, help manufacturers access funding to invest in R&D, establish tax credits and focus on critical areas of business support. The UK's infrastructure is a critical component in supporting the manufacturing sector, so the Government's role in this area is key.

Overwhelmingly, manufacturers fed back that there should be **targeted investment at strategically important infrastructure improvement projects** including the road network.

They would also like to see **investment in the nation's energy infrastructure.**

78% wanted greater access to funding to invest in R&D and other innovative manufacturing techniques and processes.

Interestingly, **more than half (57%) called for a commitment to an Industry 4.0 strategy to be embedded in any future Government, as is the case in Germany.**

Nearly half (40%) asked for the **permanent establishment of R&D tax credits** and many called for a **reform to business rates** to encourage greater investment in plant and equipment.

To provide further support for businesses, there were **equal calls for a reduction in industrial energy bills, the expansion of enhanced capital allowances for productivity and enhancing technologies such as automation.**

Technologies of the Future

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While there are already exciting technologies in use, the feedback showed that manufacturers are planning further investment to help address obsolescence and improve productivity.

With new technologies at the heart of any gains in productivity and global competitiveness for manufactured goods, the **significant majority (91%) of manufacturers are already deploying automation and control systems** to help optimise operational efficiencies.

Industrial communications, controls and PCs are also widely utilised.

Looking at the short-to-medium term, **the vast majority (83%) stated a desire to continue to invest in automation and control systems.**

Plans to invest in other technology solutions such as sensor systems, integrated drive systems and operator control and monitoring systems carried a fairly equal standing, although these were not as high priorities.

Cornerstones of the Digital Enterprise – The Innovation Challenge

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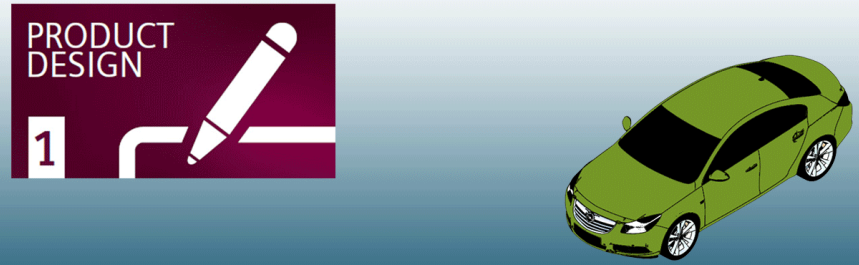
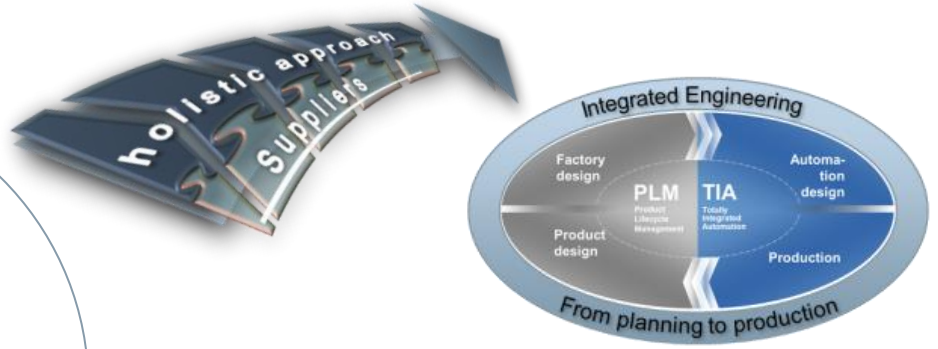
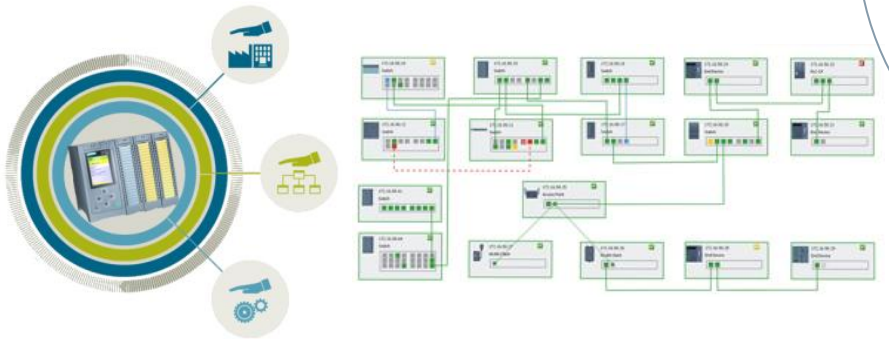
Use of intelligent models

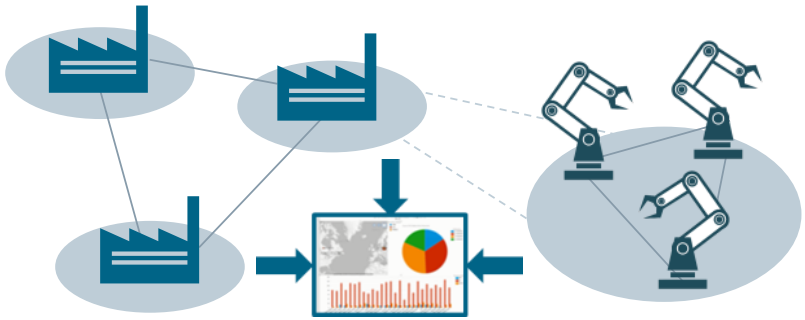


Integrated value chain with seamless engineering





Modular, networked, secure automation



Transparent factories, internally and externally networked

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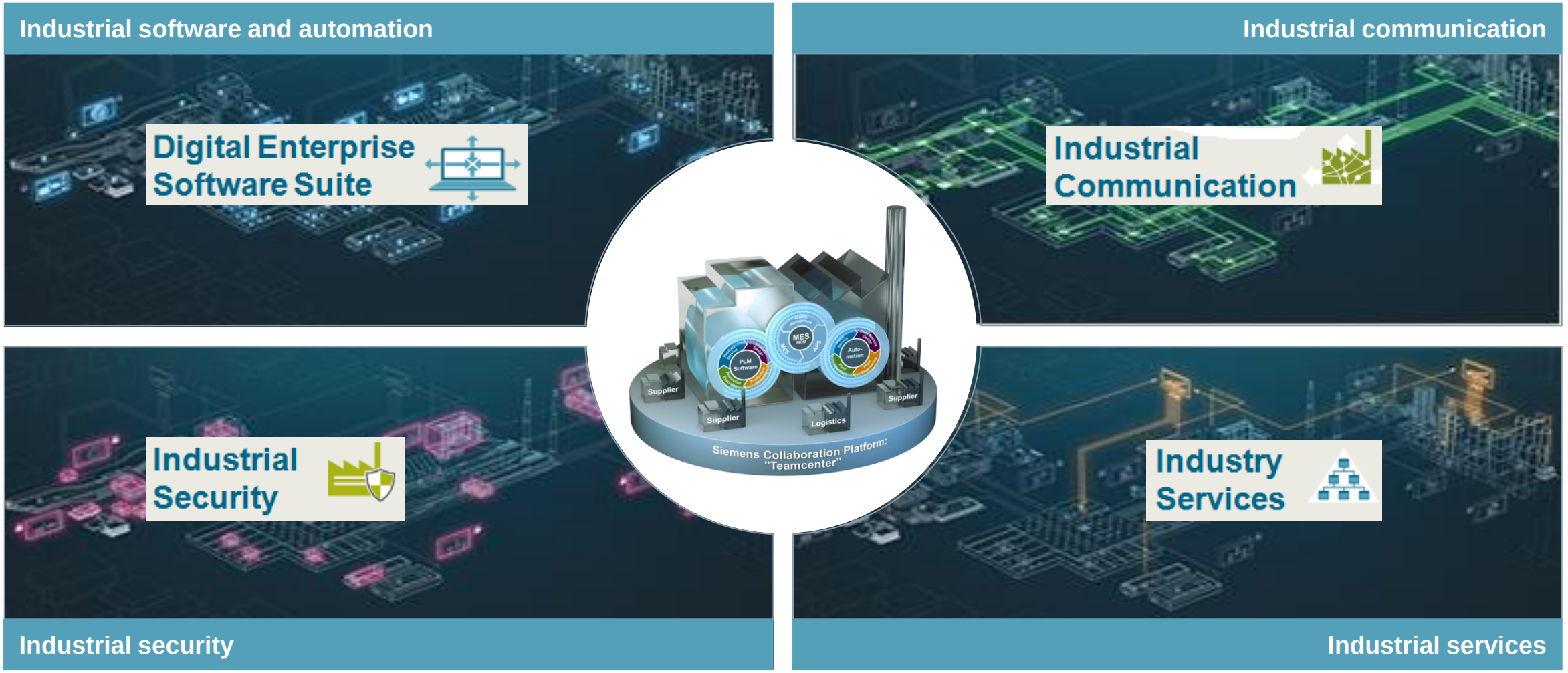

Factory of the Future video

Thank you - #mfgdebate