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Commons Select Committee Inquiry: Automation and the Future of Work

Call for Evidence - BIFM response, August 2018

1. The British Institute of Facilities Management (BIFM) welcomes this opportunity to provide feedback to the Committee's inquiry on Automation and the Future of Work.

About BIFM

2. BIFM is the professional body for Facilities Management (FM). Founded in 1993, it promotes excellence in FM for the benefit of practitioners, the economy and society.

3. BIFM represents and supports over 17,000 members around the world, both individual FM professionals and organisations. We do this through a suite of membership, qualifications, training and networking services designed to support FM practitioners in performing to the best of their ability.

4. Based in the UK, BIFM's global reach has been formalised during the last few years by establishing regional operations in Ireland, the United Arab Emirates and Nigeria. BIFM is represented in over 80 countries around the world.

5. As the professional body for the FM industry, BIFM is engaged in ongoing debates around key issues which affect our members and, by extension, society in general, including the application of technology in the workplace. For example, with the expert advice and collaboration of the BIFM AI Technology Working Group - all of who are FM professionals working with AI in smart buildings and intelligent management systems - we submitted written evidence to the House of Lords Select Committee on Artificial Intelligence. Our submission can be found here.

6. We also provide guidance and support research that will help increase workplace productivity and ultimately contribute to raising standards, a happy workforce and a healthy economy, as well as offering a platform for meaningful and evidenced debate on issues of importance.

7. This submission was prepared with input from our Technology Working Groups. BIFM has long recognised the potential that technology has to transform our industry and how advancements such as the Internet of Things (IoT), building information modelling (BIM) and robotics are already contributing to improving business performance.

8. In collaboration with the 3edges consultancy we recently published a report *Embracing technology to move FM forward* which examines the role technology will play in the future of our industry. The report found that whilst technology is moving at an exponential pace, more needs to be done to explore specific technologies as awareness and understanding of them was relatively low. Our research clearly showed that the implementation of automation has the potential to disrupt the way the FM sector delivers, but embraced correctly by skilled and knowledgeable professionals, it presents a huge opportunity to our profession. The full report can be found here.

9. In June 2018 our IoT Technology Working Group produced a *Guidance Note on the Internet of Things for FM*. Their research highlighted the diverse potential benefits of the implementation of IoT in overall business performance including cost reductions, improved wellbeing, enhanced organisational profile, reduction of risk and enhanced compliance. The Guidance Note can be found here.

About FM

10. "Facilities management is the organisational function which integrates people, place and process within the built environment with the purpose of improving the quality of life of people and the productivity of the core business".[1]

11. Encompassing multi-disciplinary activities within the built environment, FM contributes to the everyday functioning of hospitals, airports, universities, down to ordinary businesses. By making the workplace as

[1] International Standards Organisation ratified definition

efficient as possible, the Facilities Manager has a major role to play in making the UK a more productive place[2]. At the same time, without FM support the economy would grind to a halt.

12. The health of the wider FM industry, which accounts for around 7% of GDP[3], has a major impact on the overall UK economy and plays a positive role in supporting the Government's Industrial Strategy and societal programmes such as modern slavery.

13. Key facts about the UK FM industry:

- FM accounts for around 7% of the UK's GDP[4]
- The value of the FM sector is put at up to £120 billion[5]
- FM employs almost 10% of the UK's workforce[6]
- An effective workplace can improve productivity by up to 3.5%, potentially delivering a £20 billion uplift to the UK economy[7]

Please find below responses to the specific questions posed by the inquiry:

Businesses

- **What impact has automation had on business productivity to date?**

14. The FM sector already embraces a range of automated technologies and processes as a means of improving business productivity and adding value in areas such as condition-based monitoring, resource utilisation and predictive maintenance.

15. Whilst the services sector lags behind manufacturing in the widespread adoption of automation, digitisation is driving change and having an increasing impact across different services disciplines.

- **Could automation lead to reindustrialisation as processes and products become cheaper?**

16. Partial reindustrialisation is already under way and automation has brought benefits in areas such as worker efficiency and risk management, making some processes and products cheaper.

17. When robots and other technologies become more able to interact with humans and take on basic service roles this will lead to further de-skilling and reindustrialisation. However, in the service sector people will continue to be required for some time for a wide range of interactions which are currently too complex for robots to perform.

18. Indeed, this was highlighted in our recent report *Embracing technology to move FM forward* (see item 8 above) which found that robotics are already leading to a new wave of automation and contributing positively to business performance.

- **Which sectors are most likely to be affected by a growth in automation? What sort of tasks are most and least likely to be replaced by automation?**

19. With the rapid pace of developments in technology, any sector with definable rules-based or repetitive time-consuming processes where a 'human touch' is less important and roles which involve operating some form of equipment, plant or machinery are likely to be heavily impacted by automation. This will encompass retail, transportation, logistics, administration, HR, contact centres, finance and, in particular, manufacturing.

20. The impact of this in risk management will be significant: instead of 'point-in-time' compliance, automation will allow for continuously monitored and evidenced compliance, dramatically reducing health and environmental risks and, ultimately, productivity.

21. Our report *Embracing technology to move FM forward* analysed this question directly from an FM perspective. It found that of 14 FM professional management disciplines, those most likely to be affected by

[2] The Stoddart Review – The Workplace Advantage, (December 2016), 42p
[3,4] FM Business Confidence Monitor, (May 2015), 12p.
[5] Value Judgement, Facilitate, FM World, May 2017, p. 49
[6] Has Brexit hit home yet?, Insights into facilities management, Issue 17, p. 17-18
[7] The Stoddart Review – The Workplace Advantage, (December 2016), 42p

automation are finance/administration, compliance and procurement; least likely are strategic planning, people/stakeholder management, project management and corporate social responsibility.

22. The report also looked at how automation will impact the facilities services industry and the broader world of work that the FM profession supports. It concluded that the majority of FM services have a moderate-to-high potential for automation because they involve high levels of predictability, low levels of complexity and in many cases the human touch isn't that important. Tasks most likely to be automated are cleaning, maintenance, utilities management and logistics; customer-facing and hospitality roles are deemed to be less at risk, but may not be completely immune from automation.

23. The challenge for the FM sector will be to focus on delivering added value and providing a quality service, supporting automated business critical processes and augmenting the work that people do. In settings where the human touch will continue to remain important, FM has a unique opportunity to enhance the customer experience and promote service excellence.

24. Future waves of automation may affect more knowledge and skills-based sectors such as healthcare, education and professional services where tasks can be augmented or even replaced by newer technologies underpinned by AI and machine learning.

- **Is there enough advice and support available for businesses who want to automate? Does the Government's Industrial Strategy offer the right support to businesses for automation**?

25. BIFM members have expressed the view that there is a general lack of education and investment in adopting automation or other IoT/AI technologies which could go a long way to improving and maximising UK productivity.

26. The pace of technological change makes it very difficult for individual organisations, especially SMEs - which together account for 60% of all private sector employment in the UK - to know where to find up-to-date and relevant advice, support and understanding on how automation could be applied to their own business. This is a clear barrier to the early adoption of automation and the benefits that it can bring to organisations.

27. Professional bodies have a role to play in supporting the drive to upskilling the workforce by providing informed tailored advice. For example, BIFM's *Guidance Note on the Internet of Things for FM* (see item 9 above) explores the impact of the IoT in transforming the FM function, demystifies the technology and gives practical examples of the implementation of IoT currently in the FM sector.

- **What opportunities are there for British tech businesses from a rise in automation? How can these opportunities best be exploited for the benefit of British industry?**

28. Increased productivity and reduced costs brought about by automation would enable the UK economy to compete more strongly with lower cost-based economies, particularly those in developing countries where technological and skills levels match our own.

29. Although the UK is already a leader in the digital sector and creating significant opportunities for British tech businesses, the landscape is largely unregulated. A national platform to channel these initiatives to businesses and organisations, from grassroots to corporate big players, would offer even greater benefits.

30. The Government's Industrial Strategy aims to create the world's most innovative economy, putting technological change at the heart of its vision for boosting productivity, maintaining business competitiveness and providing economic wealth for the UK's population. Whilst this would create a strong domestic market for technology-based services and products, the UK would be at a distinct competitive disadvantage against other global technology leaders such as China and the USA if it is not aligned with the legislation and standards of the European Single Market or other large trading blocs.

31. Bringing greater levels of automation into the running of public sector bodies, making them more effective, more energy efficient and better value for taxpayers' money is seen as a key opportunity. This approach could be based on a pilot scheme approach to mitigate cost and risk, and - where successful - introduce innovative products and services to the wider UK economy and global markets.

32. In the FM and wider services sector employees at all levels can potentially benefit from better information and the lower risks brought by automation, making them more efficient for commercial and social benefit. There is an opportunity to look not just at existing tasks and roles which can be automated, but also at new

ways of working, new markets and new developments that could be made possible by technological innovation.

33. The uncertainty surrounding Brexit in terms of access to the EU market, regulatory frameworks and shared knowledge could limit the UK's ability to take advantage of these new opportunities.

Workers

- **Are there specific demographic groups most at risk? How far can these be mitigated by new roles in these industries?**

34. Low-skilled and semi-skilled workers in manual, repetitive jobs are most at risk as these roles are the easiest to automate.

35. Higher-skilled roles that involve repetitive activity or processing large amounts of information/data could also be automated, either in full or in part with automation as a supplement rather than a replacement.

36. BIFM members are generally optimistic that automation, as was the case in previous industrial revolutions, will create more opportunities than job losses. If automation reduces operational costs, it is to be hoped that workers will be redeployed to drive service quality and innovation elsewhere within organisations. Innovation and the adoption of automation, alongside the delivery of quality service, will become a key differentiator between organisations, providing opportunities for growth and development.

- **What are businesses doing to offer training to staff, either as a result of or in support of automation? Should Government have a role in retraining workers affected by automation?**

37. Training has been undervalued for many years, both by Government and business. In general, businesses are not retraining staff affected by automation sufficiently well as their focus is on the bottom line. This runs the risk of damaging our national productivity and competitive edge if we are not part of the early adopters of these innovating efficiencies.

38. To achieve the Government's aim of creating a mobile, dynamic and flexible workforce significant funding will be needed. An ongoing, national strategy is required to support businesses and individuals as 'old' jobs become obsolete and to provide education, lifelong learning and training to ensure people have the skills required for the 'new' jobs of the future. Only Government, both at local and national level, are able to fulfil this requirement.

39. BIFM is working to ensure that our training and qualifications programmes meet the requirements to deliver these much-needed lifetime skills and knowledge for our members and the FM profession.

- **What other actions should the Government be taking to support those affected by automation, such as a 'robot tax'?**

40. Technological progress is inevitable and the fourth industrial revolution I s already well underway. BIFM members are looking for Government to emphasise and reinforce the potential benefits of automation and not to attempt to manage or mitigate any negative aspects: this is seen as counter-productive and risks holding back innovation and jeopardising Britain's role at the forefront of the technological revolution.

41. The pace of these innovations is such that jobs are already being affected by automation and if Government is to act it needs to urgently devise a proactive long-term strategy which recognises the bottom line drivers of business. Indeed, some commentators are of the view that it may already be too late to devise an approach which can provide a national solution.

42. BIFM welcomed the Government's £420m Construction Sector Deal published in July 2018 and its aim of transforming the sector's productivity through innovative technologies and a more highly skilled workforce. Greater investment in new technology and the skills to exploit its potential will create new jobs, reduce construction and operational costs, improve the efficiency of buildings and benefit the wider economy.

Consumers

- **What are the potential benefits and disadvantages for consumers of businesses increasing automation?**

43. Consumers can expect to benefit from automation through quicker response times as the speed of production increases, lower prices, better customer service and reduced risk.

44. Automation will bring greater accessibility, affordability, flexibility and transparency - a consistent theme in both private and public sectors. New technologies will offer even faster speeds of transaction/ communication and more tailored bespoke solutions, empowering consumers to take control of how and when they interact with businesses and service providers.

45. Potential disadvantages include a reduction in human-to-human interaction leading to a lack of personal knowledge, a sense of companies becoming more soulless and an increase in social isolation.

Conclusions

46. As our report *Embracing technology to move FM forward* concludes, FM - like many other sectors - is approaching a technological tipping point.

47. To maximise the potential benefits of advances in technology and automation, FM professionals need to take a proactive approach and understand what those technologies can do for FM and the businesses it supports. Automation will bring an even greater focus on added value and quality service, challenging FM providers to enhance workplace productivity and provide a seamless customer service if they are to come out on top.

48. BIFM has a role to play by providing members with more guidance and information on emerging technologies, thereby improving the profession's readiness for technological change.

49. It is clear that some sectors of the economy will be increasingly automated, while in others the role of people with the specialist skills and talents required to harness developments in automation, analytics and artificial intelligence will become increasingly important.

Further Information

Additional information and clarification can be obtained from Sofie Hooper, BIFM Senior Policy Advisor, email: Sofie.Hooper@BIFM.org.uk