

# Association of Accounting Technicians (AAT) response to BEIS Select Committee inquiry into automation and the future of work

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## 1. Introduction

- 1.1. The Association of Accounting Technicians (AAT) is pleased to have the opportunity to respond to the inquiry on automation and the future of work, published on 24 May 2018.
- 1.2. AAT is submitting this response on behalf of our membership and for the wider public benefit of achieving sound and effective administration of taxes.
- 1.3. The comments particularly reflect the potential impact that the proposed changes would have on SMEs and micro-entities, many of which employ AAT members or would be represented by AAT's 4,250 licensed accountants.

## 2. Executive summary

- 2.1. **There is an indisputable link between automation and productivity.**  
A wealth of research provides evidence of the impact that automation, AI and digitisation can have and it should therefore be encouraged.
- 2.2. **The accountancy sector is likely to be particularly impacted by automation.**  
Far from being a cause for concern, the myriad opportunities this presents must be embraced.
- 2.3. **Sufficient independent advice and support for businesses to automate is currently lacking.**  
Government, professional bodies and accountants (as the most trusted source of business information) could all do more to provide advice in this area.
- 2.4. **There is much, much more that Government could do to assist employees reskill and upskill to meet the needs of the digital age.**  
Numerous international examples show what more could be done (3.29 & 3.30).
- 2.5. **AAT, representing a sector which is very susceptible to automation and AI, believes that taxing robots would be entirely self-defeating and completely unacceptable.**  
A robot tax would undermine investment, damage employee's skills and income and risks relegating British business and the British economy to second or third tier status (3.31-3.34).

### 3. AAT response to the inquiry

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

- 3.1. There is clear evidence that automation, AI and the increasing use of robots is having an impact on productivity.
- 3.2. In 2015, the Centre for Economic Performance at the London School of Economics concluded that GDP and labour productivity between 1993 and 2007 increased by about 0.36 and 0.37% respectively across the 17 countries that they studied. This equates to 10% of total GDP growth in the countries studied over this period<sup>1</sup>.
- 3.3. A Centre for Economics and Business Research (CEBR) study published last year was solely concerned with the impacts on GDP per capita and labour productivity and found that robots were responsible for 10% of GDP growth across the 23 OECD countries between 1993 and 2015.<sup>2</sup>

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

- 3.4. AAT does not believe reindustrialisation is a likely outcome of automation.
- 3.5. French economist Jean-Luc Biacabe, writing for economic think tank the Institut-Friedland, best summarised this when he stated;
- 3.6. *"The industry of the future will not allow for the reindustrialisation of our economies. Making factories more productive, more efficient and closer to their customers will not reverse the natural trend toward more services."*<sup>3</sup>

#### **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?**

- 3.7. AAT's Digital Advisory Panel, consisting of representatives from the insurance, banking and accountancy professions as well as the software industry, regulators and academia, has consistently highlighted that repetitive, mundane, rules based tasks are ripe for automation.
- 3.8. There are numerous areas that are highly likely to be affected, from telemarketing and shop cashiers to credit analysts and insurance underwriting.
- 3.9. For obvious reasons, AAT is most interested in the impact automation is likely to have on the accountancy profession.
- 3.10. H&R Block, probably the largest tax preparation provider in the US, uses IBM's Watson to great effect. Their web site succinctly describes the service;  
  
*"Imagine being able to understand all 74,000 pages of the U.S. tax code along with thousands of yearly tax law changes and other information. Plus, Block's deep insights built from over 600 million data points. Yes, 600 million. That's the future we're building with Watson. By combining the power of our Tax Pros with Watson's technology, we'll uncover every deduction and credit available to you. So that you get every last cent you deserve."*
- 3.11. Closer to home, AAT is seeing rapid increases in the use of technology by accountancy firms large and small but its adoption varies widely and much is driven by Government led changes such as Making Tax Digital (MTD).
- 3.12. Jobs least likely to be automated include the main trades - there will long be a need for plasterers, plumbers and electricians.

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<sup>1</sup> Centre for Economic Performance, 2015:

<http://eprints.lse.ac.uk/61155/>

<sup>2</sup> CEBR, 2017:

[https://cebr.com/wp/wp-content/uploads/2017/03/Impact\\_of\\_automation\\_report\\_23\\_01\\_2017\\_FINAL.pdf](https://cebr.com/wp/wp-content/uploads/2017/03/Impact_of_automation_report_23_01_2017_FINAL.pdf)

<sup>3</sup> Institut-Friedland, June 2016:

<https://www.institut-friedland.org/sites/default/files/atoms/files/focus-industrie4.0-jlb-va-1610.pdf>

- 3.13. There is a common misconception that jobs with high degrees of creativity are inappropriate for automation. Indeed, a 2015 Nesta study concluded as much<sup>4</sup>. Considering the work of Google's AMI (Artists and Machine Intelligence)<sup>5</sup>, such certainty appears misplaced.

**Is there enough advice and support available for businesses who want to automate?**

- 3.14. Businesses appear to be largely dependent on the tech companies that create relevant products to make them aware of the benefits that can be derived from automation, AI and digitisation.
- 3.15. Professional bodies such as AAT, FSB and the CBI could also play a role here by encouraging adoption of tried and tested methods of automation, highlighting benefits via case studies and warning of any potential downsides.
- 3.16. There is also strong evidence that accountants are the most trusted and used source of business support amongst SMEs in the UK. The Federation of Small Businesses produced a report in May 2017<sup>6</sup> that indicated accountants were a more favoured source of business advice than LEPs, local authorities and growth hubs. In fact, there was no one more favoured.
- 3.17. This appears to be widely recognised and understood by policymakers given a joint study by AAT and ACCA published earlier this year<sup>7</sup> indicated that over two thirds of MPs (69%) believe that professional accountants play a vital role in supporting small businesses and helping them to grow. Only 1% disagreed.
- 3.18. This could prove to be a vital part of accountants own upskilling and reskilling – advising clients of the many digital, automation and AI opportunities available to them, potential sources of funding and so on.

**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?**

- 3.19. The accountancy sector provides a good example of British tech businesses taking advantage of Government driven automation.
- 3.20. The Government's £1.3bn invest programme to make HMRC the most digitally advanced tax administration in the world, via their MTD programme, has led to the likes of Xero, Intuit, QuickBooks and Sage developing more consumer-friendly software packages for large and small businesses and their agents. Whilst much of this may have occurred organically, there can be little doubt that Government imposed deadlines have ensured faster development, increased understanding and wider take-up.
- 3.21. This example suggests that Government can play an effective role in increasing the adoption of automation and the development of tech products by setting relevant frameworks and imposing realistic deadlines for change.

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

- 3.22. Whilst some jobs will be lost because of automation, it is likely that many more will be created.
- 3.23. The Government has already acknowledged that for the UK to be a world leading digital economy that works for all, it is crucial that everyone has the digital skills they need to fully participate in society<sup>8</sup>.

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<sup>4</sup> Nesta, 2015:

[http://www.thecreativeindustries.co.uk/media/292766/creativity\\_vs\\_robots\\_wv.pdf](http://www.thecreativeindustries.co.uk/media/292766/creativity_vs_robots_wv.pdf)

<sup>5</sup> AMI:

<https://ami.withgoogle.com>

<sup>6</sup> FSB Report, May 2017: <https://www.fsb.org.uk/docs/default-source/fsb-org-uk/reformed-business-funding.pdf>

<sup>7</sup> AAT Survey of MPs published 2018: <https://www.aat.org.uk/aat-news/mps-smes-not-prepared-for-brexit>

<sup>8</sup> Digital Skills Partnership Board, November 2017:

<https://www.gov.uk/government/publications/the-digital-skills-partnership/the-digital-skills-partnership-board-board-members-and-terms-of-reference>

- 3.24. In relation to young people, given all jobs in the future are likely to require some form of basic digital skills understanding, a requirement for all students to have basic digital skills at GCSE grade 4 (grade C) or above in the same way that most employers currently require for GCSE Maths and English, would be a welcome statement of Government intent and of ensuring young people, parents and employers appreciate the rapidly increasing importance of digital skills.
- 3.25. With regard to older workers, some believe that they are less likely to adapt well to change and/or to reskill and upskill and whilst there may be some evidence to support this, there is also much evidence to the contrary. For example, over 3,000 of AAT's 90,000 students are aged over 50 and this age group has been rising steadily year-on-year for several years. It would therefore be foolish to make assumptions based purely on age.
- 3.26. It is also worth highlighting gender issues in relation to digital skills. Women are underrepresented in both the uptake of digital qualifications and in digital roles with just 17% of people who work in the tech sector and only 10% of students taking computer science at A level being female.
- 3.27. There are a range of steps being taken by industry to combat this problem e.g. Future Tech Girls<sup>9</sup> and Facebook's She Means Business<sup>10</sup> programme but more could be done by Government to disseminate information about available programmes and an emphasis on this area in the Careers Strategy published a few months ago would have been helpful.

**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?**

- 3.28. In Singapore the Future Skills Credit, a \$500 credit -paid directly to the training provider, is available to any Singapore Citizen over the age of 25 for retraining purposes.<sup>11</sup> In South Korea, the unemployed are entitled to almost \$2,000 for vocational education and training.
- 3.29. In the UK by contrast, HM Treasury and HMRC are still dithering about whether to join the two thirds of OECD nations who already allow self-funded work-related training to be deducted from taxable income. AAT responded to the 2018 consultation on the subject, suggesting reform was long overdue and that Government proposals did not go far enough<sup>12</sup>.

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

- 3.30. AAT, representing a sector most likely to be affected by automation and AI, believes that taxing robots would be entirely self-defeating and completely unacceptable.
- 3.31. To purposefully undermine investment in technology that is proven to increase productivity, make companies - and in turn the UK - more competitive, would consign British business to a second or third-rate existence in the global economy.
- 3.32. Furthermore, given automation leads to the necessary reskilling and upskilling of workers, taxing robots would help to ensure workers lacked the necessary skills not only to compete but to remain in meaningful employment. It will additionally prevent the salary increases that almost inevitably come with increased skills and training.
- 3.33. It is perhaps understandable that structural change brings a degree of nervousness amongst policymakers but taking a 19<sup>th</sup> century approach to the subject would undoubtedly prove ruinous.

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<sup>9</sup> TechFuture Girls:

[www.techfuturegirls.com](http://www.techfuturegirls.com)

<sup>10</sup> She Means Business:

<https://shemeansbusiness.fb.com/uk/>

<sup>11</sup> Singapore, Future Skills Credit:

<http://www.skillsfuture.sg>

<sup>12</sup> Taxation of self-funded work-related training:

<https://www.aat.org.uk/prod/s3fs-public/assets/Taxation-of-self-funded-work-related-training.pdf>

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

- 3.34. Increased speed, reliability, cost and security appear to be the main benefits of automation for consumers.
- 3.35. Take for example the H&R Block example highlighted at 3.9 & 3.10.
- 3.36. The use of huge amounts of data is likely to increase reliability, consistency and the speed with which accounts are prepared. It is also likely to reduce costs for the consumer. The move to an entirely online approach may be deemed by some to also increase security given there will be no need to rely on the postal system or for reams of paperwork to be stored in offices.
- 3.37. For others, it may have the opposite effect as cyber security increasingly worries many consumers and likewise the idea of relying on an automated process may rightly or wrongly provide less confidence than seeing their tax agent and discussing issues with him/her in person.

### **4. About AAT**

- 4.1. AAT is a professional accountancy body with approximately 50,000 full and fellow members and over 90,000 student and affiliate members worldwide. Of the full and fellow members, there are more than 4,250 licensed accountants who provide accountancy and taxation services to over 400,000 British businesses.
- 4.2. AAT is a registered charity whose objectives are to advance public education and promote the study of the practice, theory and techniques of accountancy and the prevention of crime and promotion of the sound administration of the law.

### **5. Further information**

If you have any queries, require any further information or would like to discuss any of the above points in more detail, please contact Phil Hall, AAT Head of Public Affairs & Public Policy at:

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