

## The Challenge and Opportunities of the Digital Age

*"In 1982 ... I said that "a single career change may not be enough in an age of fundamental structural evolution". ... Today we can see the spread of **annually updated** professional and technician "certificates to practice" from medical consultants [and] aerospace engineers to other areas where proof of current competence is essential. Meanwhile digital marketing or security practitioners can become seriously out of date **within months** unless they spend time **each week** keeping up to date."* (Philip Virgo, Chairman of the Conservative Technology Forum, 31 May 2018)<sup>i</sup>

The transforming power of technology is once again, changing our world. Seizing this new technology can be the basis of our nation's success after Brexit, for the rest of the 21st century. For cutting edge technology, coupled with creative and artistic genius, is the fulcrum upon which our country will be built.

Faster than ever before, the world we live in is being changed. How we earn our way around the world and how we build jobs and prosperity here at home. And we now have the chance to build on what we have done over the past decade and truly capitalise on this opportunity.

Investment in the tech sector doubled in the last year, and is growing at three times the pace of the rest of the economy. We have created more jobs than ever before and employment rates are at record highs. But there are understandable concerns that these technologies will undermine jobs and prosperity.

Yet, the risk is not that we adopt new technologies that will change jobs. The risk is that we don't adopt new technologies and that we fail to create the jobs of the future.

That means that we have this difficult balance between the need to support the disrupters who are creating new technologies, creating the new jobs and ultimately generating productivity growth; and at the same time supporting those who are disrupted. For, it's no good having a job in the long term if you don't have one in the short term.

So we need to make sure that we support those who are disrupted as well as supporting the disruption itself. We want to see redeployment not unemployment, by creating the jobs of the future and making sure people have the skills and capabilities to excel to accept them and generate them.

As we noted in an earlier policy discussion, on jobs and skills, automation has historically increased productivity, which in turn has led to a net increase in employment and higher salaries. Nevertheless, increased investment in lifelong vocational education and training will be required to help people adapt to increased automation.

One group noted in their response to that paper, "A much more serious problem is the challenge posed by artificial intelligence to the status of academic values and knowledge-based professions."

Britain is already an authority in AI. We have the world's best AI company, Deepmind, and we are recognised by the OECD for leading in the use of AI in Government. But we need to keep looking forward. And we can only say that we've truly succeeded if we use this exciting technology to tackle the long-term issues that are shaping our world today.

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<sup>i</sup> A UK Strategy for the 4th Industrial Revolution?, Computer Weekly, 31 May 2018: [link](#)