

Christopher Pissarides: 'I'd like to see a UK equivalent of Germany's Work 4.0 white paper'



In late 2016, the German government published the white paper 'Work 4.0', the result of 18 months of discussion with academia, trade unions, employer organisations and the public. The paper was a blueprint for how society should face the technological disruption taking place in the world of work and business. This is what **Sir Christopher Pissarides** thinks the UK should do if it wants to create "new and preferably better jobs to take on labour that is displaced by technological advances". Sir Christopher was awarded the 2010 Nobel Prize in Economics, jointly with Dale Mortensen of Northwestern University and Peter Diamond of MIT, for his work in the economics of unemployment and other policy-relevant outcomes in markets with frictions. He is Regius Professor of Economics at LSE and co-chair of the Institute for the Future of Work (IFOW). "I'd like to see a White Paper on the Future of Work within a couple of years – a UK equivalent of the German 'Work 4.0'. He spoke with **Anna Thomas**, founding director of [IFOW](#).

Q: What's your personal interest in the Future of Work?

From my late teens – well before 'good work' became the fashionable concept that it is today – I knew the route to happiness was a good job. Work is where most of us spend most of our waking time and it is at the heart of family life. It's also the driving force behind our local and national economies. Work connects the experiences and living standards of individuals to the economic and social health of the country. Knowing this has driven my own working life. I've researched employment, unemployment and job creation for over 40 years now, concentrating on the social and economic conditions needed to create good and long-lasting work.

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Q: Drawing on this research, what do you think are the biggest challenges we face in creating good work in the UK today?

The biggest challenge we face is the creation of new and preferably better jobs to take on labour that is displaced by technological advances. History tells us that displacement takes place continually and it may be characterised by waves. Old jobs may close down or change before productivity gains can be re-invested to create new industries and new jobs. This means the ride may be bumpy. We're entering a wave of economic transition – I call it 'structural transformation.'

There's been remarkably little in-depth work on the composition and timelines for transition. We need a better understanding of risk areas and where new jobs are most likely to be created. We should learn from the data and methods of the private sector, which is ahead in understanding the nature and extent of disruption. Combining academic and private sector expertise with local and national government material will give us a more accurate picture of what's coming to inform the steps needed to ease transition.

Another challenge is making sure we invest much more in technology and human capital across the country. Britain is still one of the top 10 countries for living but we've dropped down on the percentage of GDP invested in technology-related R&D, productivity growth, 21st-century skills and active labour market policies. If you take an 'ecosystem' view of the Future of Work, this is worrying. There's a very real risk that Brexit makes these trends more pronounced.

We've seen some positive signs over the last few months – the National Retraining Partnership between the CBI, TUC and Treasury and the new cross-department AI Office for example – but I think the Future of Work needs more attention, funding, and a strategy. I'd like to see a White Paper on the Future of Work within a couple of years – a UK equivalent of the German 'Work 4.0.' This set up a framework for a public dialogue about what society wants from the Future of Work; the outcome of which was a pretty comprehensive assessment of trends, challenges and policy proposals – essentially a 'vision' to shape the Future of Work. That's what we're missing in the UK.

A related challenge is that technology isn't developed and applied uniformly across the country. Reflecting this, the risk of displacement isn't spread evenly across sectors and population groups. Technology underpins productivity growth, which in turn underpins the creation of better jobs. So we must embrace the new age of automation.

But this must go hand in hand with the development of policies to make sure that the resulting structural transformation doesn't exacerbate existing inequalities. As autonomous cars develop, we'll need to help taxi drivers retrain to work in hospitality and as the use of the internet spreads we'll need to help call centre staff train in-home care. We'll need to make society appreciate those jobs more, make them more rewarding to hold and improve the quality of service. I think this is important to emphasise as new technology enters the workplace.

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On a more cheerful note, productivity and wage growth will free up a lot of time and a challenge we face is how to use this time. Some of the gains from the introduction of new technology are likely to be taken as increased leisure time. I hope this will give us the time and space to value human qualities and activities differently – for example caring for people or being more creative in designing games and social activities.

This is already happening in some countries – for example, the industrial sector deals in Germany which reduced the working time for the purpose of caring for family members. Precedents from other countries should make us think of alternatives, even though they can't be transplanted lock, stock and barrel.

Q: Sticking with that cheerful note, which industries are most likely to grow in the UK over the next decade?

Broadly speaking, jobs that operate in non-predictable environments involving high levels of human contract and the most fundamental human attributes – especially creativity and social intelligence – are most likely to grow.

Social and health care are already growth areas. This trend will become more pronounced, noting our aging population. The creative economy and leisure industries are other good examples. As these sectors grow, our perception of caring and creative jobs will need to change. We'll need to value caring for the old and young, nursing, teaching and the arts more highly. This is necessary from an economic perspective, to make them better-paying jobs and reduce wage inequalities, as well as a social one.

The UK isn't doing badly in aspects of innovation. We've seen a lot of AI, data analytics, fintech, immersive technologies and biotech start-ups recently, although UK companies tend not to expand at home.

Q: Do you think government can do more to support these sectors?

Yes. Government and the private sector – indeed society – could be more proactive and strategic in shaping growth industries and create others. Within reason, we should be able to create the Future of Work we want.

Q: Why do you want to establish an institute dedicated to the Future of Work?

I think a standing, dedicated, cross-disciplinary institute should serve an important function to help equip government, business and individuals with what's to come. There's some great work going on now in this space – most recently at the Royal Society – but it is disparate and often adjunct to other programmes.

IFOW should help us understand and shape the Future of Work at this critical juncture: the point of structural transformation that we inhabit. We will interpret our mission broadly. Our real interest is in building practical solutions for modern industrial society.

IFOW's output won't be just books and reports, although we have a few of those. It will be blueprints and pilots created with a unique range of partners – pilots that work and can be scaled. Academic work and thinking should be translated into action. This is just what we need.

"Ultimately, it is our policy response, rather than technological capabilities per se, that will determine the nature, speed and outcome of this structural transformation"

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Q: I'd like to ask you a bit more about this 'critical juncture.' Does it mean that the 'technological' revolution is different this time?

No, not necessarily. There is no hard evidence that the transformation we are experiencing is different in terms of scope and pace. In fact, history suggests that more job restructuring was caused by our first and second industrial revolutions – so far.

I'm sure though that the current phase of technological disruption will still have a profound impact on the people living in the UK. We know that recent advances make it possible to automate a broader range of tasks than most people would have anticipated a decade ago. It's also right that the fusion of new technologies – in particular, machine learning combined with the data explosion – may speed up aspects of the transition.

But ultimately, it is our policy response, rather than technological capabilities per se, that will determine the nature, speed and outcome of this structural transformation.

Q: You are advising governments all over the world, including China and some in Europe. Would you be involved in IFOW commissions for the UK government yourself?

Yes. I would welcome this opportunity. My children are growing up in this country – it's their future.

Q: What IFOW work programme are you most excited about?

I've begun to map a programme to develop a disruption index with you, which I'll lead with Michael A Osborne, Associate Professor of Machine Learning at Oxford University and John Evans, formerly General Secretary of OECD TUAC, both IFOW advisors. It's at an early stage but has lots of potential.

Measurements for job quality are important but we need to go further and look at the relationships between job quality, work change, how technology is being introduced, productivity and other key indicators of disruption. Having an index will mean that we can anticipate and respond to disruption better and more locally focused.

I'm looking forward to putting some of my research and ideas into practice – and combining it with others'.

You may also like this post on Germany's Work 4.0 white paper:

[Work 4.0: How Germany is shaping the future of work](#)



Notes:

- This interview was originally published on the [site](#) of the Institute for the Future of Work.
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Anna Thomas is founding director of the Institute for the Future of Work. She was formerly a barrister from Devereux Chambers, specialising in employment law and appointed Counsel to the Equality and Human Rights Commission. Anna was head of future of work policy for the Future of Work Commission and is a fellow of IPR and RSA.