Commission on Travel Demand

Future of Work

Tuesday 13th June 2017

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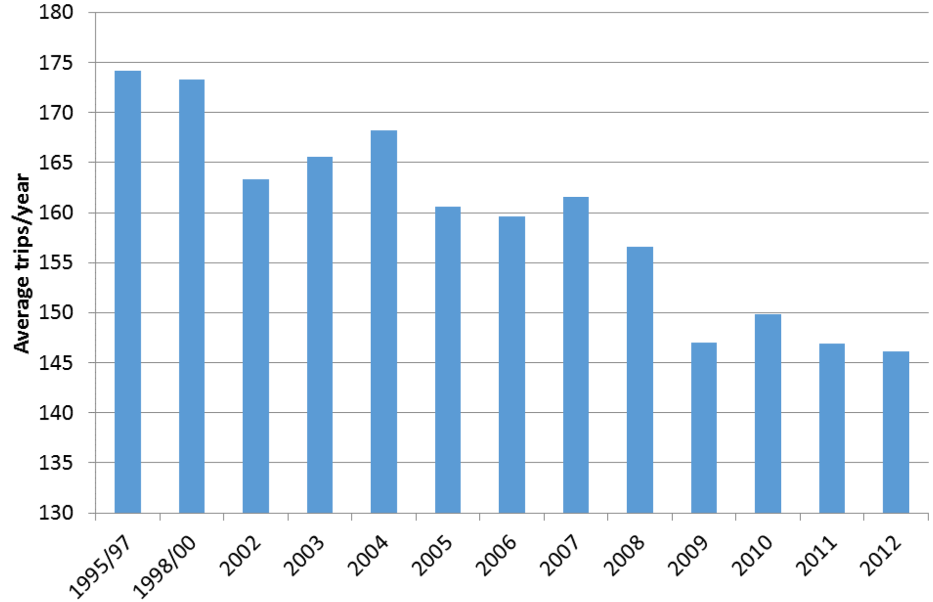
DYNAMICS OF ENERGY, MOBILITY AND DEMAND

Work and Travel

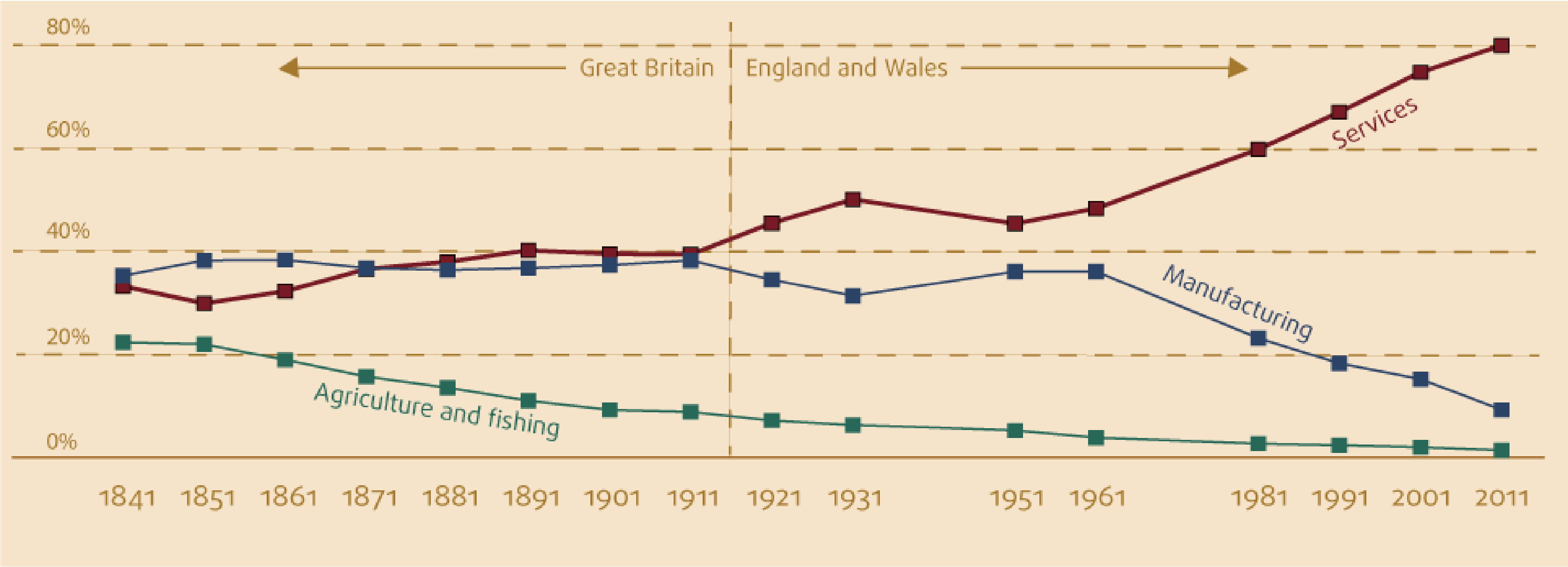


- Commute
  - 16% of all trips
  - 20% of all distance
- Average number of commute trips per person per week down 20% since 1998/92
- Average distance per commute trip up by 10%
- The average working day is longer
  - Part-time increase (16.3)
  - Full-time stagnant (37.5)
- Fewer people commute on 6 or more days.

Shift to services

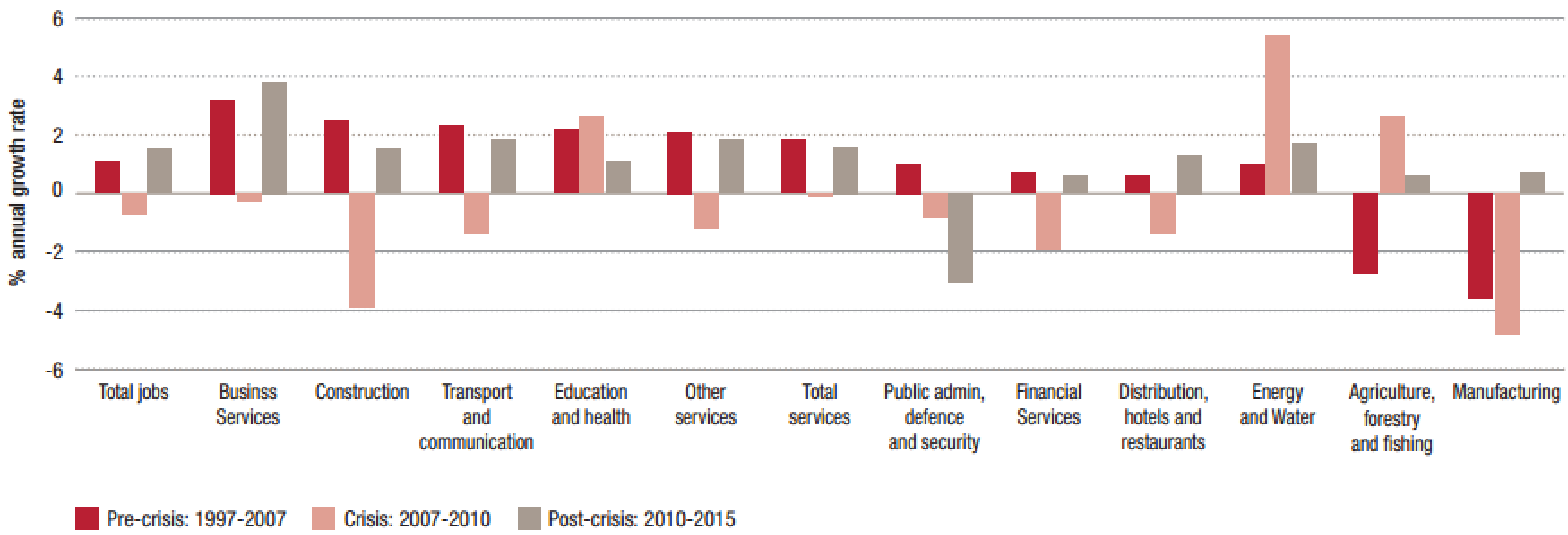
In 1841, most people worked in manufacturing and services…

In 2011 over 80% of workers were in the service industry



Changing Sectoral Composition

Figure 4.3 – Annual job growth rates by sector since 1997



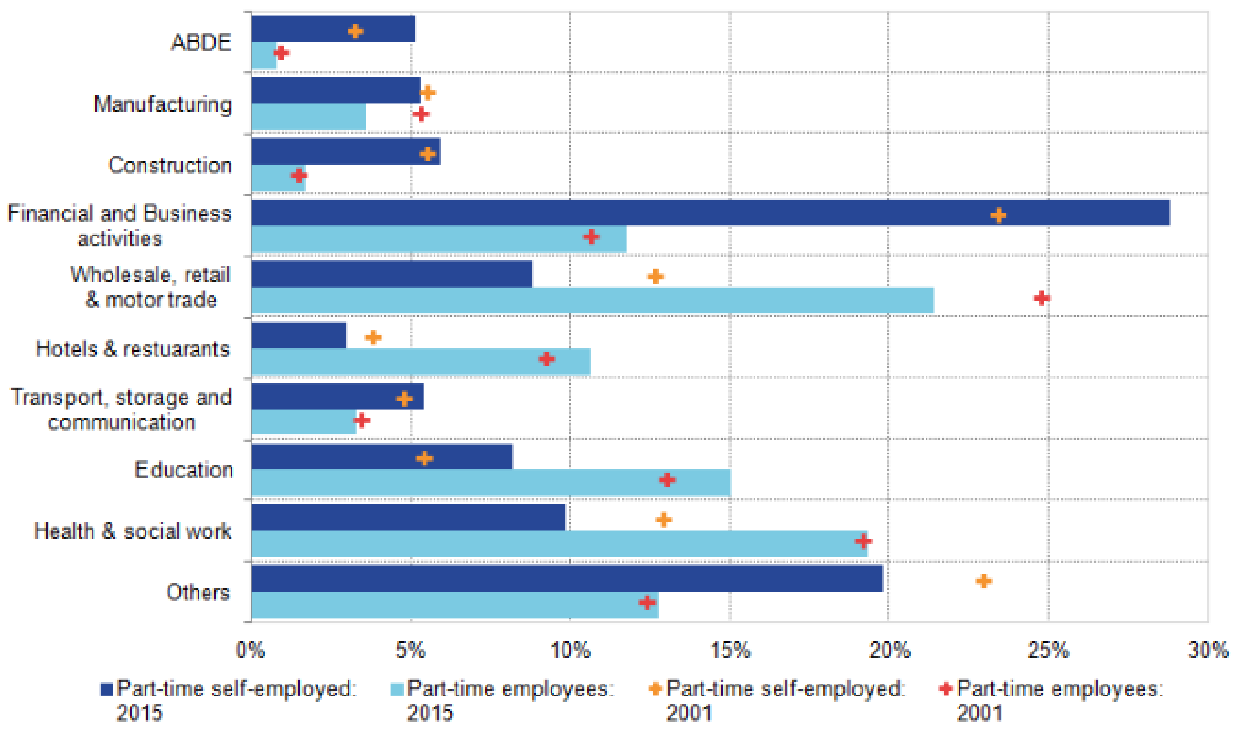
Source: PwC analysis of ONS data

https://www.pwc.co.uk/assets/pdf/ukeo/ukeo-sectoral-employment-march-2016.pdf

Trend to rising part-time

Figure 13: Share of the part-time self-employed and part-time employees by industry

Percentage, 2001 and 2015



Source: Office for National Statistics, Labour Force Survey, cross sectional datasets, author's calculations

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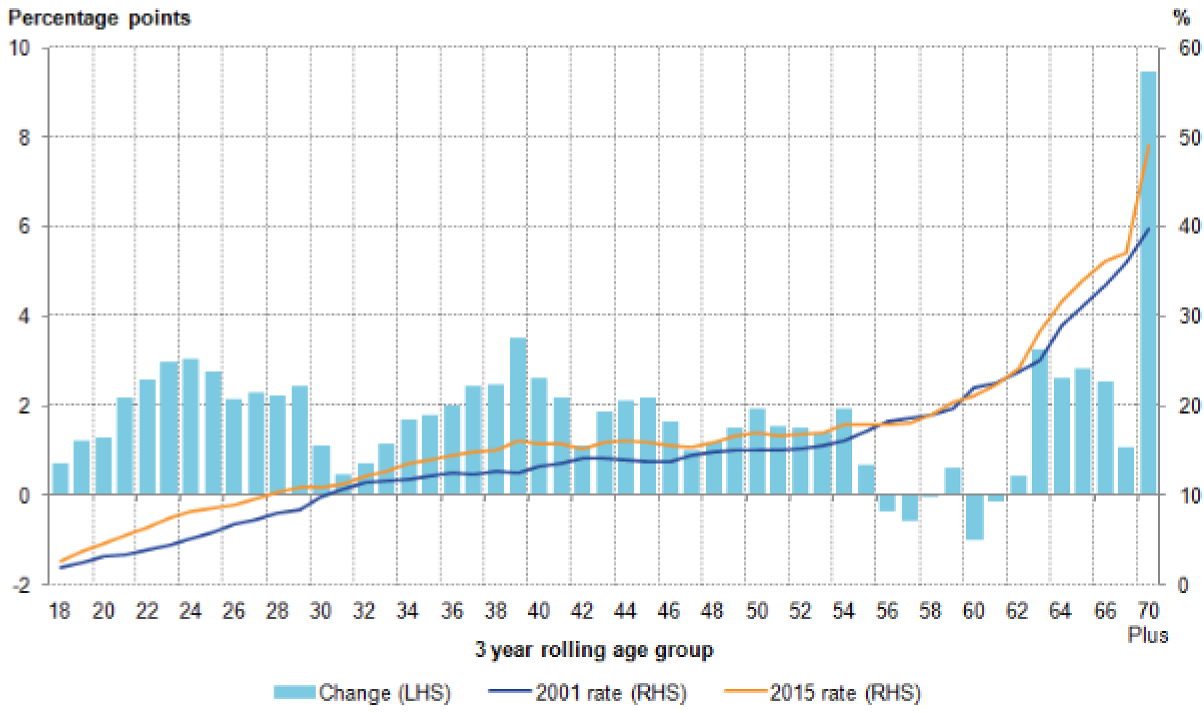
Research Councils UK Energy For a Low Carbon Future

Trend to rising self-employed

Figure 5: Self-employment as a proportion of total employment, by age group

Percentage and percentage points, 2001 and 2015 (lines) and change between 2001 and 2015 (bars)



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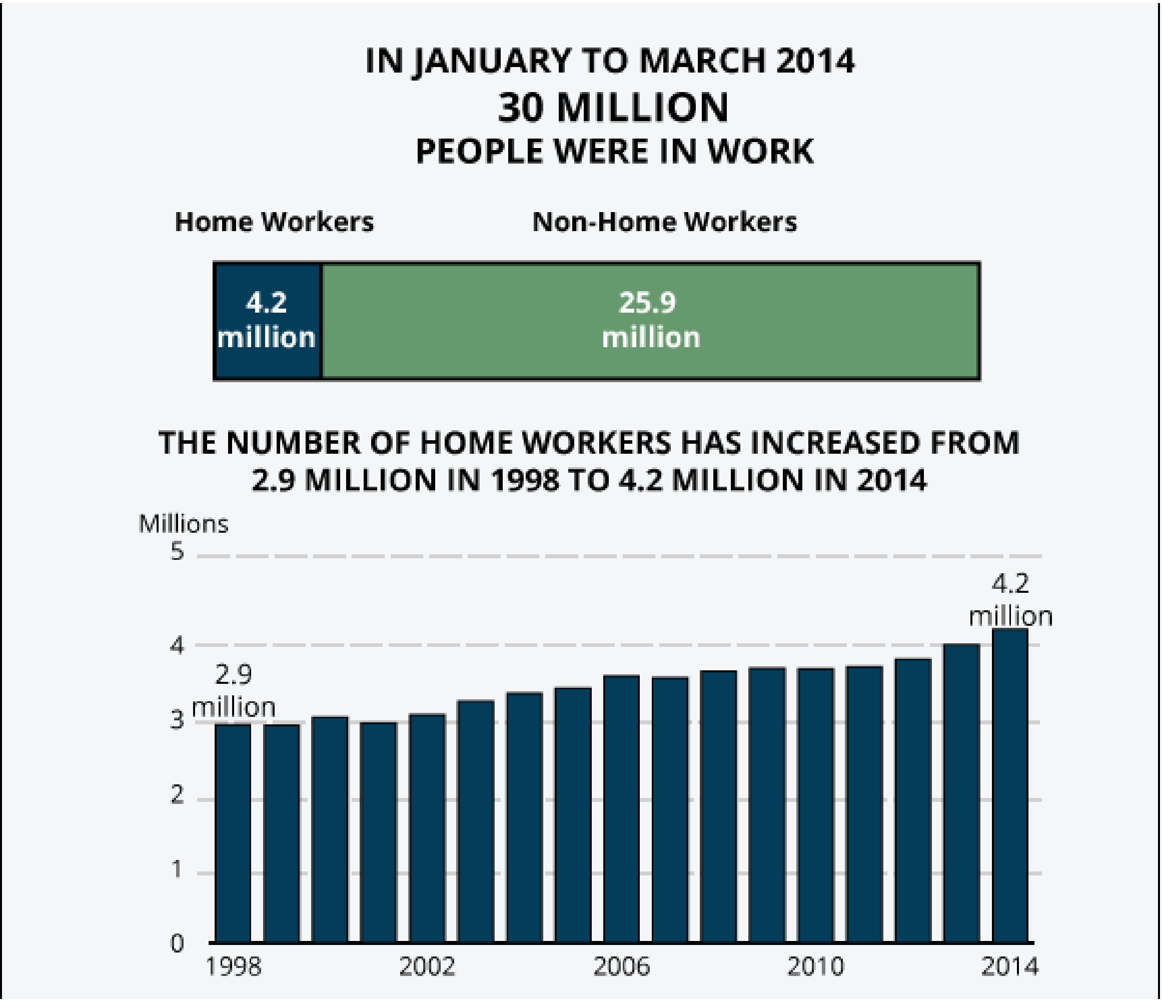
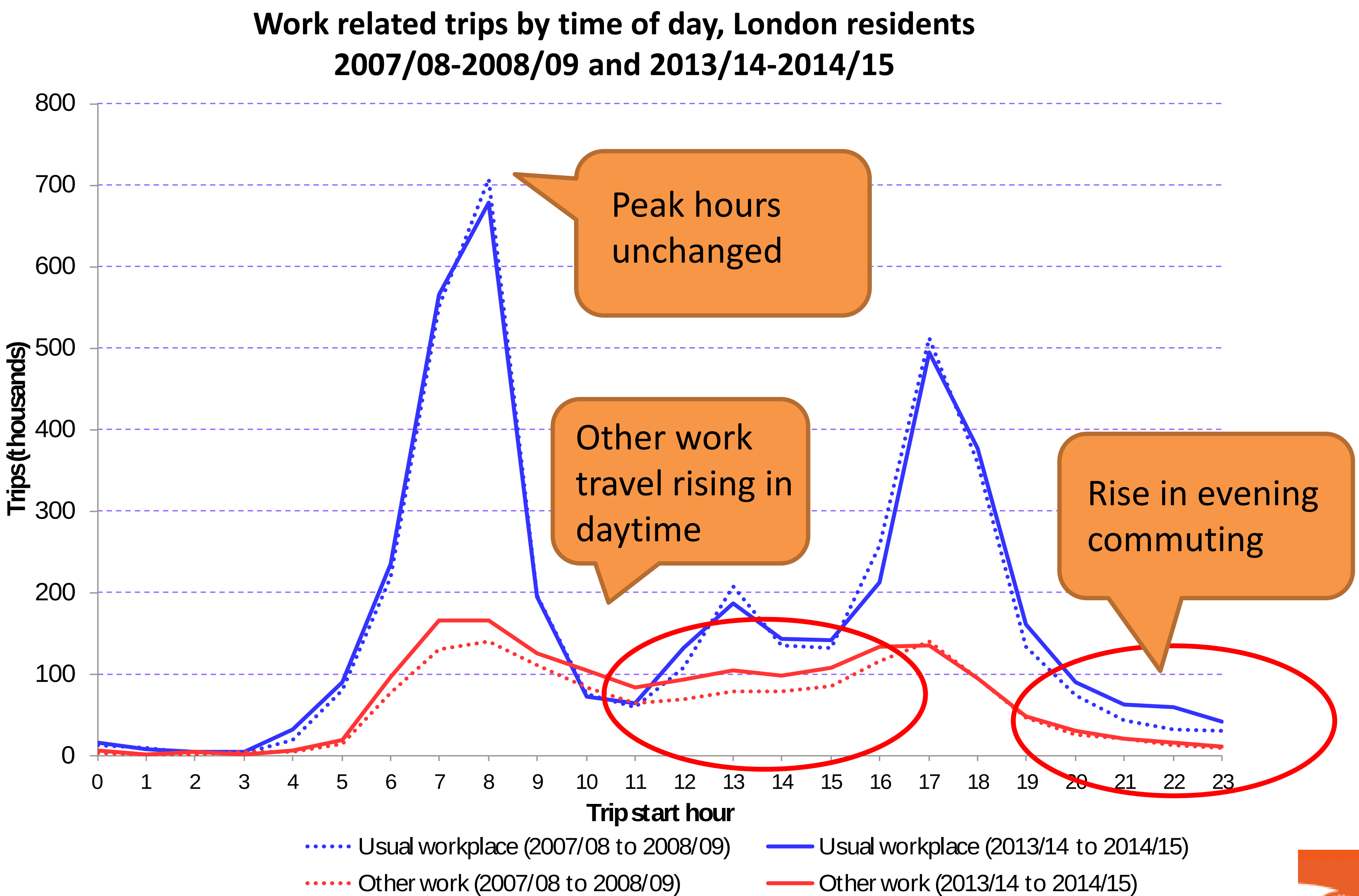
Source: Office for National Statistics, Labour Force Survey, cross sectional datasets, author's calculations

Energy

Trend to rise in home workers



Resilient pattern of peaking however…



Where do people work?

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('Office' space at AirB&B HQ, exactly replicating the founders' first flat-share!)

Where do people work?

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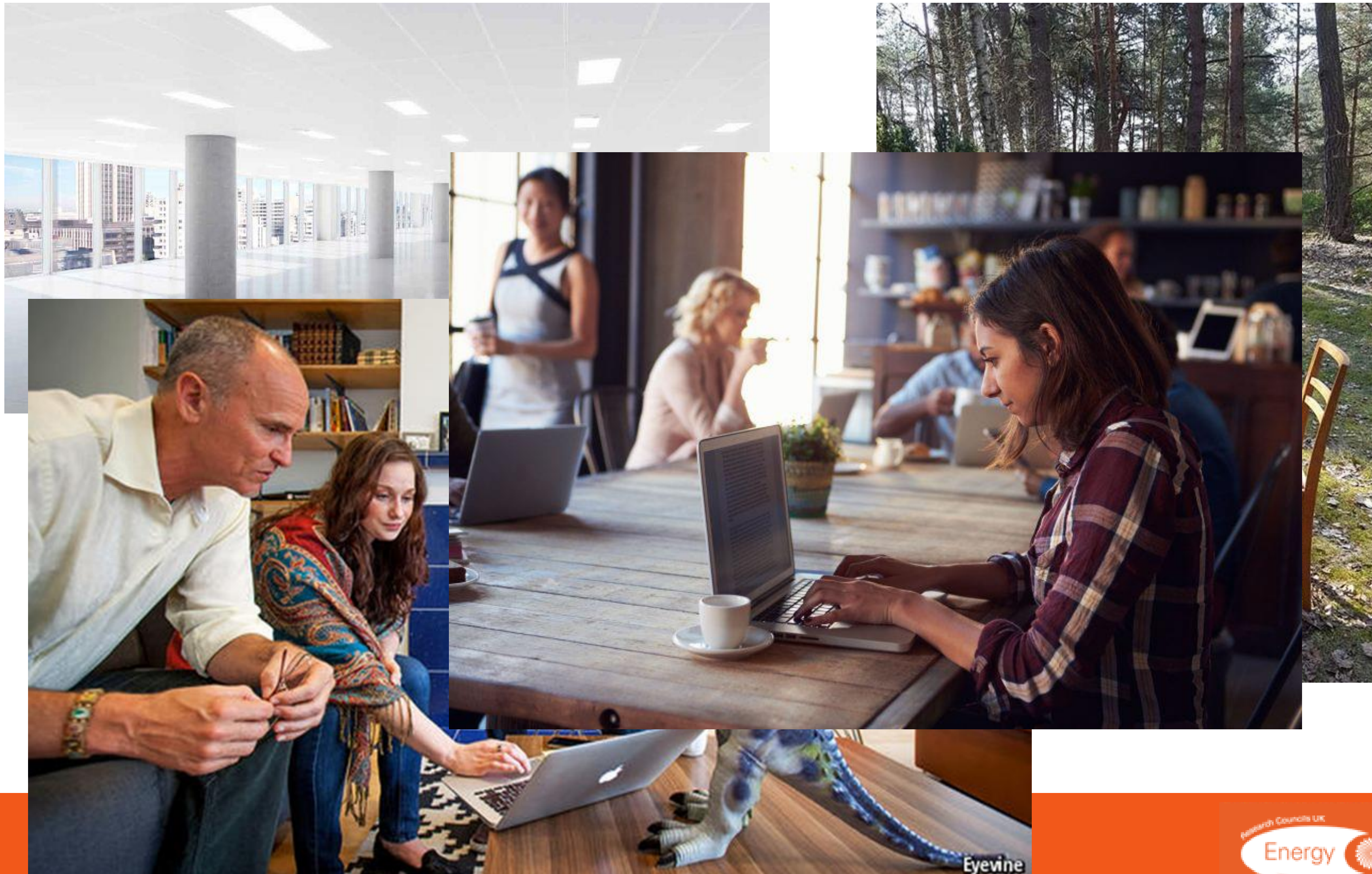
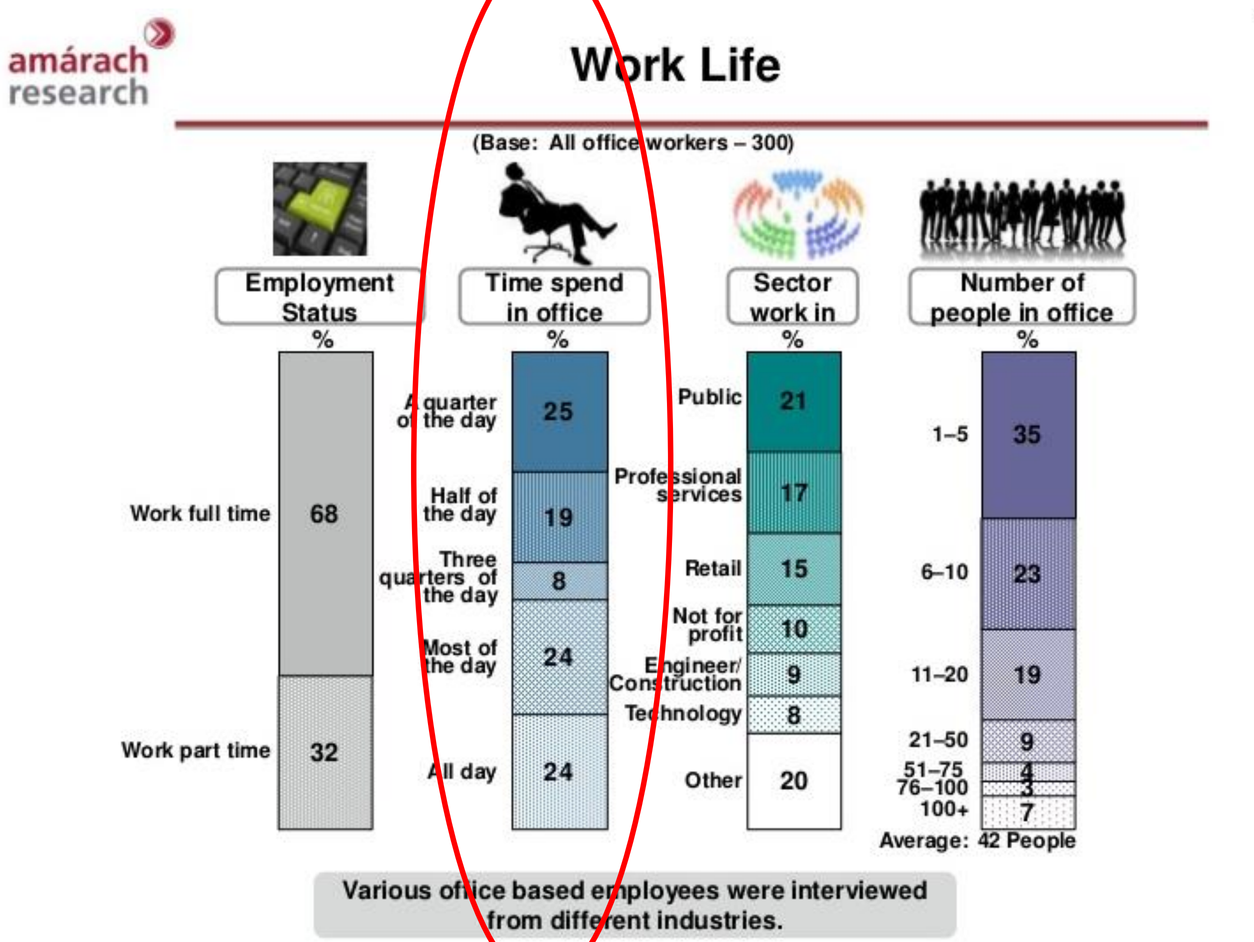


How much time do people spend in the office?



Amarach Research 2012, slide 4 Work Life Work Wherever Wednesday - office worker research for Microsoft Ireland May 2012

Low utilisation levels across all sectors

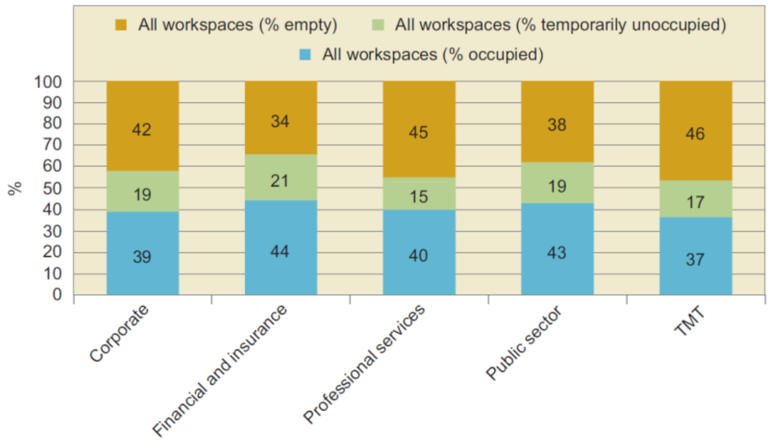


***Figure 20** –*
Occupancy leve
by sector
Source: AECOI

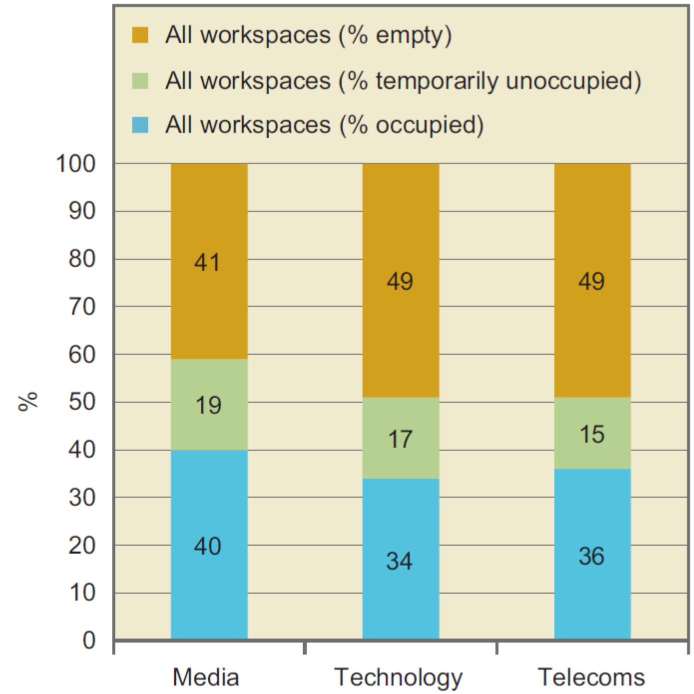


Figure 24 – *Utilisation by sector*
Source: AECOM

BCO 2014 TMT pp43-46 Utilisation levels by sector AECOM

‘Spaceless growth’

Hypothesis: Increased numbers of staff can be fitted into ‘headspace’ – the under-occupation or utilisation of current office space…

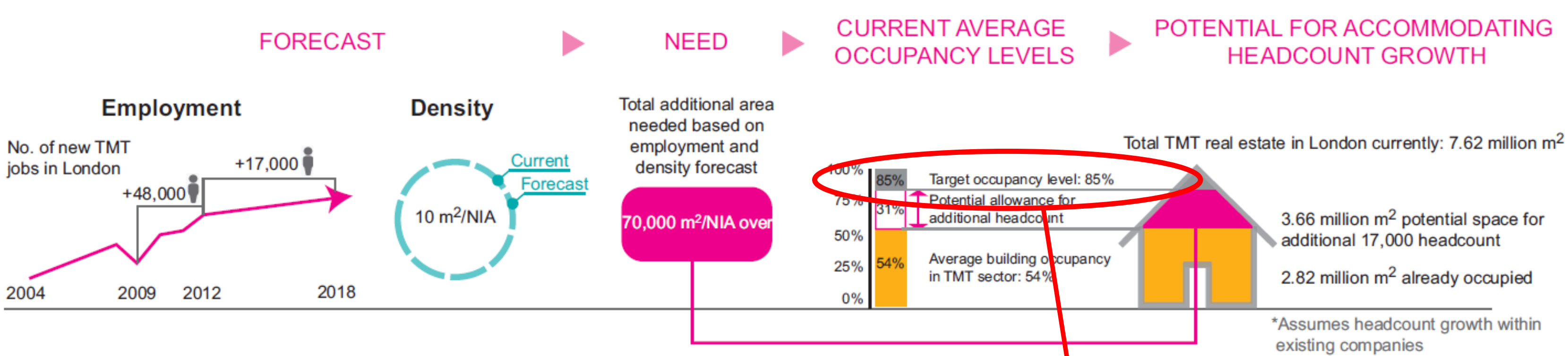


Figure 10 *– Potential to accommodate headcount growth without additional uptake of real estate*

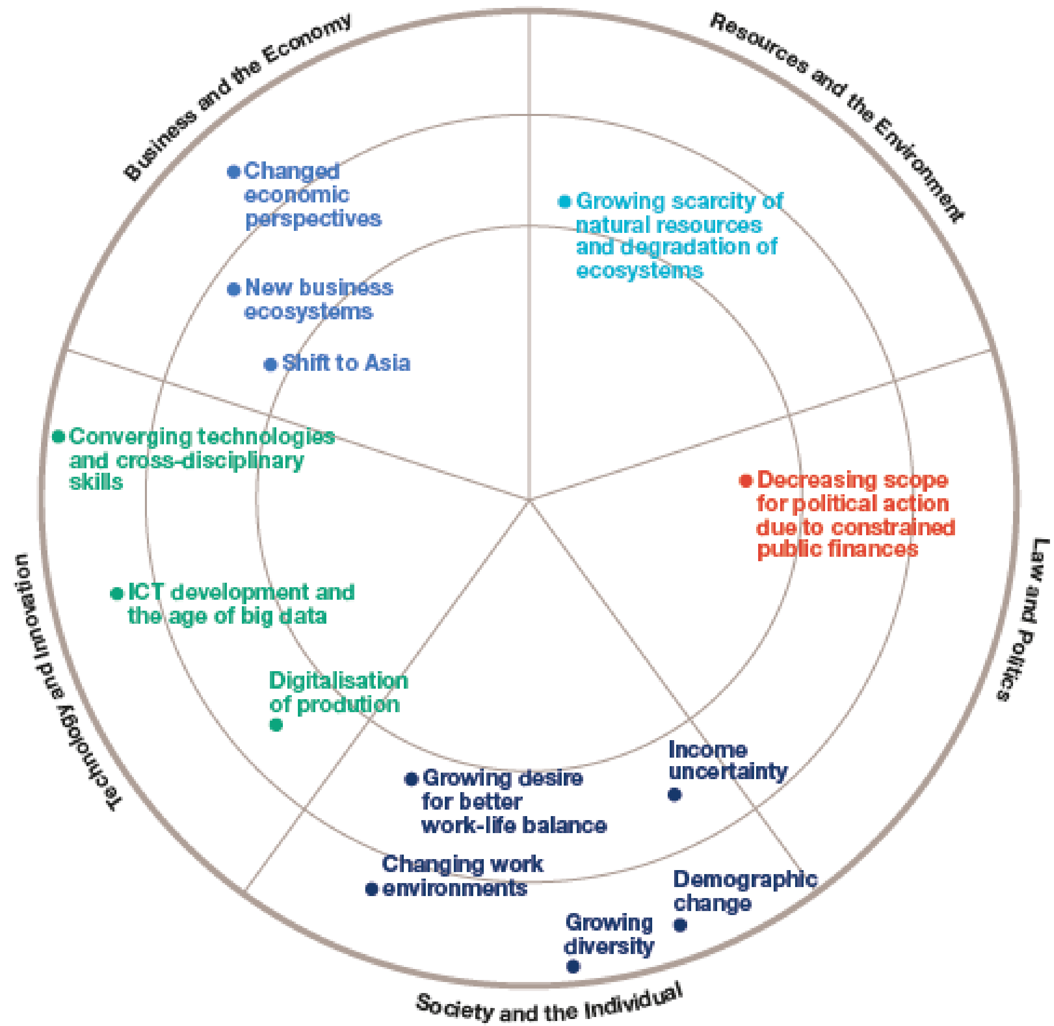
BCO 2014 TMT p25 Potential for spaceless growth

Target occupancy level: 85%

The Future of Work
Jobs and Skills in 2030

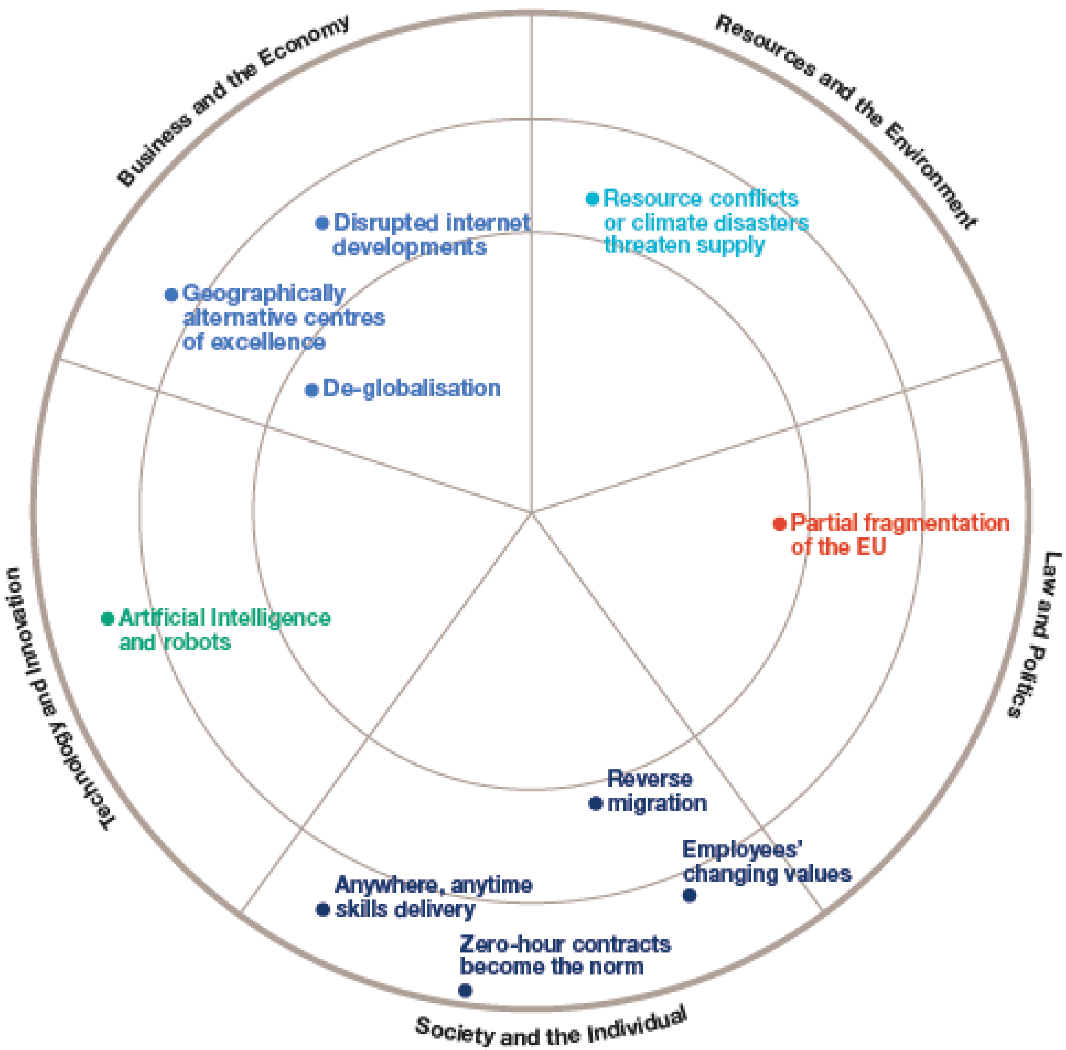
https://www.gov.uk/government/collections/the-future-of-jobs-and-skills

Trends shaping the future of UK jobs and skills up to 2030



DYNAMICS OF ENERGY, MOBILITY AND DEMAND

Disruptions that could radically change the future of work



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A Scenarios Approach

	Scenario One: **Forced Flexibility**	Scenario Two: **The Great Divide**	Scenario Three: **Skills Activism**	Scenario Four: **Innovation Adaptation**
Economic conditions	Moderate economic growth in the context of a volatile world economy	Sturdy UK recovery fuelled by high-tech and innovative business	Slow recovery following prolonged crisis	Stagnant economy within a turbulent international environment
Social conditions	Widening income gap, low-skilled workers are the most vulnerable	Two-tiered society with deep division between the economic 'haves' and 'have-nots'	Automation of professional work has hit medium to upper income groups hard	Decrease in income inequality as financial sector struggles to compete internationally
Labour market context	Hourglass-shaped – ferocious competition for low-skilled positions and a hollowing out of the middle of the workforce	Competitive and attractive marketplace for high-skilled jobs, poor opportunities for the low-skilled	Significant disruption to medium and highly skilled work. Jobs are mainly project-based with high turnover	Growing virtual workforces as a strategy for productivity in a low growth environment. Increased work intensity
Policy context	Easing of employment regulation and focus on job quantity rather than quality. Reduced public funding available for training and skills due to fiscal constraints	Liberal immigration policies and labour regulation create a supportive environment for business. Minimal public funding available for training and skills	Extensive government-driven skills programme and investment to facilitate re-skilling, supportive employment regulation strengthens employee position	Commitment to skills development despite deficit reduction, government drive to re-engineer training and skills content and delivery to best fit need
Uptake of innovation	Focus on incremental innovation in UK businesses, across almost all UK sectors	Radical Innovation in life and material sciences driving economic growth	Disruptive IT automation restructures professional tasks	Wide integration of cost-efficient ICT technologies to enable business survival
Education and training context	Greater commercial focus and responsiveness to employer needs, although fees are higher	Highly competitive and efficient, but also expensive which reduces access	Reform of system and expansion of access to all socio-economic backgrounds	Significant increase in online provision as a cost-effective option

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What might diverge?

- Widening gap between highly skilled and low skilled
- Longer periods of unemployment and more project based portfolio careers
- Increased casualisation of work and zero hours contracts
- Artificial intelligence removes some of need for current high end service jobs in accounting, insurance…
- Continuous education with shift to greater on-line or company supported provision

Questions

- What understanding of employment do we have in thinking about travel?
- Which of the dimensions of change do we represent?
- How important might changing employment futures be to travel demand futures?