RESEARCH INSIGHT

OFFICE WORK FUTURES THE IMPACT OF MOBILE AND FLEXIBLE WORKING

Key points

- Recent trends in offices and work include: more flexible, agile and mobile work; greater informality; more open, diverse and densely occupied office spaces; ubiquitous mobile and wireless technologies; the office as home, coffee shop, train or hotel.
- The scale of such changes appears piecemeal and uncertain, and is focused on specific groups and sectors.
- There is a need to better map and anticipate the likely futures of office work and technology, including their implications for office space and energy demand.

Introduction

This research explored the existence, extent, and potential of trends in office work and office space. This included investigating combinations of shifts in work practices, use of technologies, and servicing of the built environment, some of which may offer opportunities to reduce non-domestic energy demand.

The themes were refined through interview data analysis and a literature review encompassing consultancy reports and other 'grey' literature. Workshops were held with academics and with staff from the Greater London Authority, to draw out conclusions, research questions and plans for future research.

Questions

- How have offices changed as workspaces and how might they change again in terms of lay-outs, fit-out, and furnishing?
- How does flexible and mobile working affect how offices are utilised as workspaces how influential are open-plan formats and hot-desking?
- Beyond the standard 'vanilla' corporate office, what new models of office workspace are taking hold: third-spaces, coffee-shops, hotels, the home, the train/bus, the club/gym?
- To what extent is mobile/flexible working a reality, rather than a vision of consultants, and who does it affect?
- What implications could observed patterns of change have for energy demand?





Findings

Flexible working is offered by 60%¹ to 96%² of UK companies, but uptake is uneven: only 64% of people work at the same desk all the time, 49% sometimes work at home, 20% on a commute, and 11% at a library or café.¹ Only 62% of UK workers commuted to an office every day in 2012,³ possibly a symptom of increased part-time work. Studies claiming that mobile work has arrived tend to focus on managers' experiences.⁴

We found consensus across the literature that office workspaces are increasingly diverse, colourful, home-like and equipped with various amenities and services. They respond to perceived 'consumer' demand from employees,^{5,6} and management desires to retain staff and capitalise on their productivity through improved well-being.⁷

Diverse non-desk work-settings and flexible/agile work practices were seen as being facilitated through technology: mobile/smart phones, laptop/tablets, flat-screens and LED lighting. These all make the office potentially more energy efficient (through lower device wattages) and office work more mobile: any space with wi-fi can be an 'office workspace'.

Beyond the regular leased office building, multiple workspaces are now used by the employees of organisations, with 10% of London office space being rented out by serviced office providers in 2013.³

The Technology, Media and Telecommunications sectors are seen as driving these and other trends, with offices in these sectors being more densely occupied and in higher rent properties – an attractive prospect for the property market.³

Despite claims to the contrary, empirical data shows that such offices are often relatively empty, with desks occupied on average less than 50% of the time, meeting rooms at 19%, and hot-desks at 16%.⁸ Some studies suggest workers may resist

open-plan and hot-desk working and that 'sweating buildings' through increasing worker-per-desk ratios while introducing flexible working might prove to be an unrealistic hope.

There is further uncertainty about the overall energy implications of these trends. Servicing multiple workspaces and empty desks may undo energy savings achieved through reduced commuting.^{9, 10} Home and café-working may actually increase overall energy demand.

Significance

The growth in serviced office spaces, café-office hybrids, and third-space working suggests that a transformation of office work is under way. However, these arrangements are unlikely to substitute for 'traditional' office workspace beyond a certain limit – and it is not yet clear where that limit might lie. A survey of how, when and where office work is done (beyond the office) would help establish the extent of likely change and temper predictions.

A second insight is that people who do office work in nonoffice spaces including homes, trains, third-spaces etc. adapt to highly un-standardised working conditions. The flexibility and active engagement with comfort displayed in such diverse environments¹¹ might be used to inspire the design of lower energy office buildings, for example with subdued and task lighting, and more variable patterns of heating and cooling.¹²

Increased workplace densities and real estate rationalisation may be outcomes of simple cost-cutting exercises. Whilst some workers might value more mobile, more flexible forms of work, various studies warn against compelling flexible work or hot-desking. Either way increasing emphasis on the link between well-being, working environment and productivity argues for more and better understanding of how the places and practices of office work interact.

Planning and other policy on land-use relies on predictions about the need for office space that may overstate the potential for 'spaceless growth'. Conversely, the apparent demand for 'non-office' workspaces could be exploited to reduce commuting and re-purpose urban 'sub-centres', countering the centralisation of work in city centres. Research is required to show how changes in the nature of office work impact on urban land-use and to reveal shifts in the locations and forms of office-workspaces.

The envisaged changes to workstyles and workplaces appear linked to particular sectors, and also to major urban centres: anticipated trends may not apply to smaller organisations or to all types of office work. This calls for more research into the diversity of office work, beyond capital cities and city centres.

Implications

The findings are significant because they caution against simply accepting what is becoming the consensus view that the effects of new mobile technologies and flexible working will be liberating for workers, and that more intense use of office buildings will enable the 'spaceless' or 'green' growth of office work in cities. While hot-desking helps make better use of under-occupied and energy-demanding buildings, it may not be good for focusing on work and may even increase absenteeism. Moving office work out of the office may displace or replicate energy demand in other spaces, increasing expectations of services and facilities that are 'always on and everywhere'. In addition, the promise of the 'networked office' or 'green growth' may be as partial as visions of 'the paperless office'.

The research highlighted that there is little grounded empirical work at the micro-sociological scale into what people do in offices (beyond their occupation of desks) or whether the rationales given for flexible working (e.g. reducing the use of office space by organisations) are based on concrete facts. Are real estate portfolios shrinking or simply diversifying? Does mobile work demand more or less energy of urban spaces?

References

- ¹ CIPD (2014) HR: Getting smart about agile working Research Report November 2014, CIPD and Agile Future Forum: https://www.cipd.co.uk/ binaries/hr-getting-smart-agile-working_2014.pdf
- ² Mitie (2013) Making Agile working work for you: Strategy Guide: https://www.mitie.com/documents/mitie-debates/making-agile-workingwork.pdf
- ³ Jones Lang Lacelles (2016). *Disruptive Demand Tech and media in London*, JLL: http://www.jll.co.uk/united-kingdom/en-gb/Research/JLL-Tech-Media-London-2016.pdf?24ecde79-603c-4da6-8872-85d8efb289e2
- ⁴ Garner, C., Sheldon, H. and Forbes, P. (2016) Working Anywhere A Winning Formula for Good Work?, Work Foundation: http://www.theworkfoundation. com/Reports/398/Working-Anywhere
- ⁵ McNestrie, A. (2013) 'British Telecom moves one step beyond Flexible Working — to Agile Working', *FM World*, http://fmlink.com/articles/britishtelecom-moves-one-step-beyond-flexible-working-to-agile-working-2/
- ⁶ Magnolfi, J. (2015) "...conversation about the future of the workspace": http://pi.co/jennifer-magnolfi-work-office-spaces/
- ⁷ Ramidus (2015) Small Offices and Mixed Use in CAZ, Ramidus: http://www.london.gov.uk/file/24189
- ⁸ AWA (2015) Changing the World ... of Work: Utilisation of Office Report: http://www.advanced-workplace.com/wp-content/uploads/2015/04/ Utilisation-of-the-Office-2015-version.pdf
- ⁹ Carbon Trust (2014). Homeworking: helping businesses cut costs and reduce their carbon footprint, Carbon Trust: https://www.carbontrust.com/media/ 507270/ctc830-homeworking.pdf
- ¹⁰ Laitner, J. A., Partridge, B., and Vittore, J. (2012). "Measuring the energy reduction impact of selected broadband-enabled activities within households." *Informacios Tarsadalom* 12(4)
- ¹¹ Hampton, S. (2016) The practice of working from home and the place of energy, paper prepared for DEMAND Centre Conference, Lancaster, 13-15 April 2016,Workshop 2: Professions and Energy Demand: http://www.demand.ac.uk/wp-content/uploads/2016/03/DEMAND2016_ Full_paper_33-Hampton.pdf
- ¹² De Decker, K. (2014) The revenge of the circulating fan. http://www.lowtechmagazine.com/2014/09/ circulating-fans-air-conditioning.html#more



DEMAND is one of six Centres funded by the Research Councils UK to address 'End Use Energy Demand Reduction'. DEMAND also has funding from ECLEER (EDF R&D), Transport for London and the International Energy Agency.

DEMAND research insight #10 OFFICE WORK FUTURES Further reading: http://www.demand.ac.uk/situations-sites-sectors/#offices Contact the researchers: Noel Cass (n.cass1@lancaster.ac.uk)

www.demand.ac.uk