Space, but not as we know it

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From office space to meeting space

More and more office buildings are being transformed. They are evolving from static office environments with some ancillary meeting space, into dynamic meeting places with some static ancillary office space. While perhaps simplifying and overstating the case to make the point, the essence of this statement is true. There is a fundamental change taking place to the way in which office space is used and managed, a change driven by organisational transformations, and enabled by technology solutions. More and more office occupiers are introducing flexible working styles to improve efficiency and effectiveness, allowing staff to become highly mobile and to make work-life choices.

One consequence of these trends is that expensive and valuable property is being used far more efficiently than in the past, and new standards for best practice in space management are emerging: the Holy Grail of spaceless growth has arrived. A small but very important consequence of these trends has yet to be widely recognised: our traditional understanding of occupancy densities requires updating. The occupancy density metric with which we are all familiar is not actually about "square metres per person": rather it reflects "square metres per desk". This was fine in an era when everyone "owned" a desk, but the key difference with "dynamic meeting places with some ancillary office space" is that they are not only occupied more intensively, but they are also *utilised* more intensively. More people share desks, and so greater numbers of people are supported by a given building, at a given time. In short we need to complement the *desk density* metric (which will remain integral to building regulations) with a *building utilisation* metric to reflect flexible working styles, thereby allowing more accurate demand planning.

Existing occupancy benchmarks

Before looking at the evidence in favour of a new metric, it is worth reminding ourselves of the current guidelines on occupancy densities. There are a number of sources which can be used for benchmarking data, and these are shown in Figure One. The data are not very consistent, ranging between around 12 sq m and 20 sq m per person. However, based on knowledge of the various studies and their sampling, it is reasonable to suggest that a range of 14-16 sq m is most representative.

As noted earlier, one of the problems with traditional density benchmarks is that they generally refer to workstation density, not people density. Until quite recently these were synonymous, but recent changes to work styles, enabled by developments in ICT, have begun to change this simple picture.

There are two principle ways of achieving higher occupancy densities. First, space allocations per person are reduced, in a process sometimes referred to by space planners as *"max-packing"*. For employees in open plan, there is simply less space around their workstations; while for others there is less enclosed space and more open plan, allowing higher densities; and space is generally planned with greater efficiency. Increased efficiency through higher densities can have an immediate impact, and is a simple measure with which to communicate more prudent use of resources to the CFO. It does, of course, have limitations imposed by building regulations relating to fire escapes, WC provision, and so on.

Figure one
Key occupancy density benchmarking reports

Source	Density benchmark	Comments
Stanhope [1]	City, 12 sq m Out-of-town, 16 sq m	Small sample of 18 case studies
Roger Tym & Partners [2]	17.9 sq m	Based on study of the South East
Gerald Eve [3]	16.3 sq m Range: 10.6 sq m to 19.7 sq m	National survey, cross-sector, with large sample
Arup Economics & Planning [4]	City, 20 sq m Business parks, 16 sq m General offices, 19 sq m	Arup presented their figures in gross rather than lettable
TOCS [5]	14 sq m	Up to 12.5 sq m in the IT sector
DTZ [6]	20 sq m	Study of the SE, excluding London
BCO [7]	14 sq m Range: 12 sq m to 17 sq m	National guidance based on understanding of best practice
Roger Tym & Partners et al [8]	16.2 sq m Range: 14.4 sq m to 20.6 sq m	London study, large sample
IPD [9]	14.5 sq m	375 building sample of the Government estate

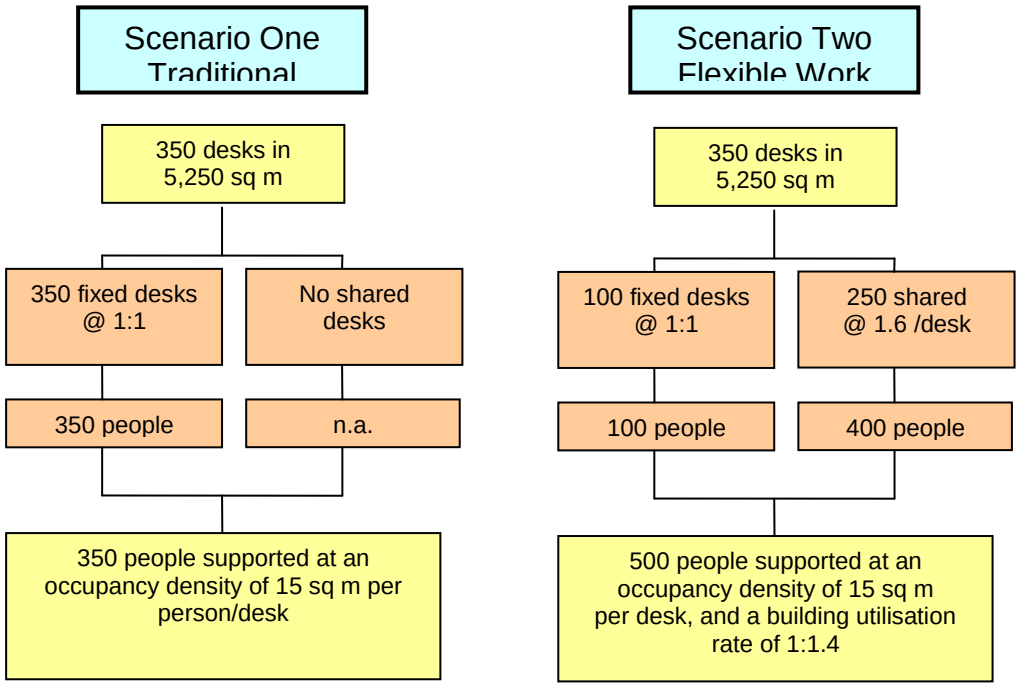
The second step is to manage the work environment more dynamically. It is well known that traditional office layouts are, typically, half empty for most of the time due to people being out of the office, and many organisations have introduced hot desking, desk sharing and flexible work styles in order to improve utilisation.[10] Such initiatives allow a building to support more people in the same amount of space. Their impact on overall densities can be dramatic, often reducing an organisation's appetite for space by around 20%-30%. This phenomenon is now widely referred to as *"spaceless growth"*, and there is increasing anecdotal evidence that the trend is permanent rather than simply a response to economic pressures.

What is the impact of higher utilisation?

Figure Two shows the difference between a traditional, fixed workstation environment and one where flexible work styles are introduced. In scenario one everyone has their own desk, and the building is filled to the legal limit. In scenario two, 100 people retain owned desks, while the remaining desks support 1.6 workers per desk (those retaining owned desks are typically administrative staff; and those requiring greater security). The result is a 43% increase in headcount supported.

The occupancy density remains the same – building regulations cannot be exceeded. But whereas in the first scenario the desks are actually occupied at a typical 50-60% (due to absenteeism, working away from the office, training, etc), in the latter, desk utilisation is pushed higher. In this example the building utilisation rate is 1:1.4 (i.e., 1 desk per 1.4 people).

Figure two
The impact of flexible working on building utilisation



Where is the evidence?

Before a *building utilisation* metric can be accepted alongside the more traditional *desk density* metric, the case has to be proven that flexible working is a genuine option for a wide range of occupiers. The evidence is patchy, but is growing rapidly as the list of organisations that are known to have implemented at least some degree of flexible working lengthens. Figure Three shows a sample of organisations whose programmes have been reported in trade and national press.

Figure three
A sample of organisations adopting flexible working styles

Sector	Organisation
Financial	Abbey National, ABN Amro, Capital One, Prudential
Technology	BT, Cisco, DEC, Fujitsu, Hewlett Packard, IBM, ICL, Motorola, Nokia, Sun Microsystems
Local Government	Hertfordshire CC, LB Ealing, LB Islington, Suffolk CC, Surrey CC
Central Government	Child Benefit Agency, DEFRA, DTI, GCHQ
Business Services	Deloitte, E&Y, KPMG, PricewaterhouseCoopers
Other	BA, BAA, BP, Centrica, Marks & Spencer

What is clear from this sample is the diversity of the organisations implementing flexible working: it is no longer the preserve of technology companies promoting their products.

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Published articles about flexible working styles are usually more descriptive than quantitative, and so hard evidence of their impact is difficult to find. One study that did provide some numbers was produced by the National Audit Office in 2006.[11] This report cited a number of case studies, which are shown in Figure Four. The overall utilisation achieved is 1:1.3, with 5,376 people sharing desks.

Figure four
Flexible working desk ratios

Organisation	People	Desks	People: Desk
Adult Learning Inspectorate	282	151	1.9
BAA	540	459	1.2
BP	4,445	3,799	1.2
DTI	2,590	2,070	1.2
Ernst & Young	4,200	3,164	1.3
GCHQ	4,900	4,149	1.2
Hertfordshire County Council	1,000	770	1.3
IBM	1,473	765	1.9
Norfolk County Council	163	145	1.1
PricewaterhouseCoopers	1,750	670	2.6
Suffolk County Council	1,150	975	1.2
Total	**22,493**	**17,117**	**1.3**

Source: adapted from NAO, 2006

Conclusion

It is clear that growing numbers of organisations are dramatically changing the way in which they occupy their office buildings. Expanses of largely sterile (and largely under-occupied), production line-style office space are yielding to more dynamic work environments in which team work, collaboration and meeting space occupy far greater proportions of space. Part of the drive is economic as organisations respond to competitive pressures. Part of the drive is organisational as they transform their work processes to respond to fluid business environments. Technology is acting as a key enabler, and the environmental/sustainability agenda is also playing a role.

There are major implications arising from these changes for those involved in the planning and provision of office space. Not the least of these is the growing importance of workplace planning, in which the disciplines of property, technology and people work in concert to provide a much more dynamic workplace proposition. And as the workplace becomes more dynamic, so must our approach to measuring utilisation.

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