

THE IMPLICATIONS OF A CHANGE IN BUSINESS TRAVEL POLICY ON THE WIDER ORGANISATION AND PUBLIC POLICY

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Abstract

Business travel, although only accounting in the UK in 2008 for 3% of trips and 9% of the UK's domestic distance travelled (Department for Transport, 2009, pp28), form a higher proportion in major cities (15% of mileage in London), where transport networks are most congested. Additionally, business journeys can be time consuming and tiring for the business traveller, affecting work/life balance and productivity, and also costly for businesses and the economy. The carbon emissions from business travel are an important factor due to longer distances travelled and the high proportion of journeys undertaken by air. In some cases business travel can be as much as two thirds of an organisations total carbon emissions.

This paper reports the findings of a study designed to understand the motivations and attitudes of key actors in private sector organisations towards business travel. These motivations include:

- The increasing importance of business travel on business costs and productivity due to the recession
- Reductions in carbon emissions and the links to corporate responsibility
- The demands of customers to reduce carbon emissions through the procurement process
- The extent to which advancements in virtual communication technologies reduce the need to travel
- A greater awareness of the vulnerability of travellers and to business continuity highlighted by the volcanic ash cloud.

The insights into these causal factors and an understanding of the business practices that support, and barriers that hinder a reduction in business travel, are important in forecasting and developing public policy to produce a more holistic approach to managing personal travel, for both business travel and the commute. This paper will report some of these insights and discuss how a change in business travel policy can have extensive repercussions within an organisation, resulting in major impacts on business travel behaviour.

1 Introduction

This paper is drawn from the results of a project commissioned by Transport for London (TfL) in conjunction with TRL. The work explored the motivations and barriers that private sector organisations encountered in attempting to reduce the amount of business travel and the carbon emissions that it generates. The aim of the project was to develop guidance for TfL on ways to engage with private organisations in managing their business travel in more sustainable ways, and then to explore the possibilities of including the commute within this management process.

Business travel is fundamental in supporting the operations of business, as these journeys are generated by the need to meet or to visit a specific site. Business meetings are held in order to inform, discuss, present, collaborate, sell, strategise etc, but overall the purpose of a meeting is to communicate and to be co-present with people or objects (Arnfolk and Kogg, 2002, pp 17, Lyons et al., 2008). Personal meetings have long been supposed to be the most effective way of doing business, seeking out new markets, exchanging ideas and communicating to colleagues and customers alike. They are perceived to have the capacity

to transmit equivocal information, to produce immediate feedback, and to build a personal atmosphere when meeting someone face-to-face (Arnfolk and Kogg, 2002). However, new video conferencing technologies can now fulfil many of these requirements. By substituting a physical meeting a company can reduce the volume of business travel, save money, improve efficiency and at the same time reduce the impact on the environment. Yet, considering the volumes of business travel and the improvements in virtual meeting technology, business travel is a poorly researched area. The concentration of research for business transportation has been on the commute and freight flows. This could be largely because the business journey only affects a small proportion of workers compared to other forms of business related travel (Aguilera, 2007). Nevertheless, the business trip can have important social implications. It can be time consuming and tiring for the business traveller, affecting the work/life balance and costly for business and the economy (Aguilera, 2007).

It is an interesting time for business travel, as communication within business and between businesses is changing as the structure of organisations change, which has implications for the transport network. It is suggested that more organisations work from a number of sites, that the hierarchy is flattening and employee independence is increasing. All of these changes are likely to increase the need for communication (Aguilera, 2007). This change in organisational structure is accompanied by a change in the way organisations work, so that there is a greater use of project or innovation teams. These teams can be geographically dispersed generating an increased need for communication, which could be either achieved through physical or virtual means (Hildrum, 2007).

With this change in the structure and working practices of organisations it would be expected to see an increase in the number of business trips within the National Travel Survey (NTS) (Department for Transport, 2009). (It should be noted that the business trip data contained in both the NTS and the London Travel Demand Survey (LTDS) (Transport for London, 2009) do not distinguish between travel for business meetings or other travel carried out during the course of work). But instead within London, the percentage of business trips for an average weekday has remained fairly constant between 1991 and 2007/08, fluctuating between 6% and 7%, but rising to 8% in 2007/08 (Transport for London, 2009, table 9.3, pp 137), notably higher than the national average of 3% (Department for Transport, 2009, chart 4.1a, pp28). The average distance travelled is also higher in London accounting for 15% of the distances travelled (Transport for London, 2009, table 9.7, pp 148), compared with 9% as a UK average (Department for Transport, 2009, chart 4.1b, pp 28). However, as this data does not include international trips, it is only part of the picture and could help to explain why the overall number of trips has not increased, as would be expected from the changes in business communication and structure.

Business travel as well as supporting the operations of organisations, it is also a large expense to business and the economy. Figures drawn from the Global Expense data of over 150,000 UK-based employees, when extrapolated produce an estimated total annual cost to the economy of £3.5 billion, of which travel in the UK is broken down as follows;

- Business mileage £5.8 million
- Business train journeys UK £11 million
- UK taxi fares £7.9 million
- Business air journeys UK £5.81 million
- Nights in hotels UK £ 10 million (GlobalExpense, 2009)

But there are other costs from business travel, such as the social, health and environmental costs, which are largely not accounted for. However, the carbon emissions from business travel are an externality that is beginning to be counted. In 2006, the transport sector accounted for 24% of UK domestic carbon emissions, with road traffic forming 92% of these emissions. Commuting and business travel were the largest emitters of carbon for all modes of passenger transport between 2002/2006, with commuting accounting for 24% and business travel 13% (Department for Transport, 2008, pages 3-6). The LTDS data does not give this detail of carbon emissions for London, but the Mayor's Transport Strategy shows that 22% or 10 million tonnes per year of all carbon emissions within London come from transport. Estimates from expense data show that UK business travel, including hotels stays, generates 3.5 million tonnes of carbon per year, Table 1, and as will be discussed in the next

section; environmental accountability is emerging as an important driver for organisations to reduce their business travel.

	Total carbon tonnes	%
Car	1,941,857	56%
Train	277,923	8%
Taxi	20,382	1%
Hotel	409,180	12%
Flights	830,437	24%
Total	3.5 million	100%

Table 1: Carbon emissions from UK employees business travel in 2008 (GlobalExpense, 2009, pp 26).

2 Business Drivers

As the figures in the previous section illustrate, business travel contributes substantially to traffic volumes on the UK transport network, carbon emissions, and can be a large cost to both business and the economy. It is therefore not surprising that businesses with large volumes of business travel are looking to manage it in order to reduce costs and carbon emissions. But these are not the only drivers. They can also include customers, productivity and other less direct drivers such as technological advancements, how these affect the perception of working practices, and their links to recruitment and retention. Also specific incidents such as the volcanic ash cloud in 2010 can have impacts on policy and behaviour.

To identify these business drivers, a series of in-depth face-to-face interviews were conducted with business travel managers or corporate responsibility/environment managers in eight businesses based in or with large offices in London. The businesses were selected for being innovators in the area of sustainable business policy and identified with the help of stakeholder organisations, particularly the National Business Travel Network (NBTN), WWF and Carplus. The case study organisations were, Accenture, Beachcroft, Build Team, BT, BTCV, Capgemini, KPMG, and PriceWaterhouseCoopers. A range of stakeholder organisations in the business travel field were also interviewed. These were, Carplus, the Institute of Travel and Meetings (ITM), the Legal Sector Alliance (LSA) and WWF. The aim of these interviews was to develop a picture of the business travel sector, how it was developing and changing, and what the motivations and barriers were behind this change.

This paper will now go on to outline the main motivations behind the changes in corporate business travel policy.

2.1 Cost savings

The role of the business travel manager is fundamentally a procurement role that supports the business in the need to meet and communicate both internally and externally with customers. Not surprisingly cost savings were a major motivation to manage business travel. However, cost is not considered in isolation, but is often linked with corporate responsibility (CR) issues, staff wellbeing and working time regulation and reputation.

The main approach to cost reductions

The main approach that businesses with a substantial proportion of air travel took to cut travel costs, was to reduce the class of air travel from business to economy. For one organisation this decreased their travel spend in the first year by half. This is an approach that was introduced largely in response to the recession and was not aimed at encouraging people to travel more sustainably or less. However, it can have the effect of making flying a 'less comfortable experience', encouraging people to seek alternatives such as rail or substituting a flight with a video conference. Another organisation with an annual travel spend of £68 million was encouraging their staff to replace 'one more face-to-face meeting' with a virtual meeting. This was estimated to save the company £10 million a year (a 15% travel cost reduction).

The reporting of cost savings

The breakdown and reporting of cost savings from business travel is a complicated area. Most organisations in this study only considered the bottom line savings, due to the complexity of identifying the origin of the savings. A number of contributory factors for the cost savings were highlighted including the recession, (which may result in reduced business activity), change in class of air travel, change in location of clients, the ash cloud and re-negotiation of contracts with travel and meeting suppliers.

Interestingly, potential improved productivity from train travel is not something that is factored into the costs. One organisation was working with Trainline to try to identify the productivity gains of travelling by rail instead of air or car, but only planned to use this information as a way of encouraging staff to use the train. In the legal sector the reporting of productivity from train journeys is perhaps simpler. Here client work is often billed in small time units, emphasising the financial advantages of working during the journey. Notably, reducing car usage in preference to public transport was not seen to be a cost saving, but felt to be cost neutral. It was suggested by one of the participants that travelling by car is often the cheapest option.

2.2 Productivity

Improving productivity, particularly in the recession was an important driver for businesses; the concept of 'doing more for less'. There are two aspects to increasing productivity. The first is to reduce the need to travel which saves on time, money, carbon emissions, helps to reduce stress levels, and reduces the time out of the office or away from home. The second is when a journey has to be made, to make that journey more productive, perhaps by encouraging rail use so that it is possible to work on the journey. However, in some cases it was accepted that flying was the best or only option. In this case, the productivity decision made is whether flying business class is more productive, as it enabled the traveller to land rested and able to work on arrival. These productivity decisions all contribute to a greater agility of a business and faster decision making so that there is an increased speed of delivery of new products to market.

Meeting management

An important side effect of the use of video conferencing on productivity has been an improvement in meeting management. Video conferencing draws people together from disparate places for a limited period of time, for example one or two hours. This is in contrast to people travelling to a meeting who may be there for half a day or more. To ensure that a video conference achieves its objectives within this limited time span, it is important to manage the meeting effectively. One organisation outlined this meeting management process of setting a realistic agenda that outlined the purpose of the meeting and what the objectives were. Each attendee was then asked to describe what they were bringing to the meeting and why they were there. This was thought to bring focus to the meeting. As further people experience a more formal meeting management, the more widely spread it becomes and the better meeting management in general should become, resulting in improved meeting efficiency.

2.3 Carbon emissions

However, not all businesses are driven purely by the desire to reduce costs and increase productivity. Another important driver for business in this study was to reduce carbon emissions, but this was not seen in isolation either. It was as part of a wider CR strategy that is driven by cost savings, but also linked into other areas such as health and wellbeing, productivity, recruitment and retention. The balance between the importance of cost savings and the environment changed as a result of the recession. Before the recession the emphasis was on developing a sustainable business travel policy, but during the recession this focus switched to that of cost cutting. The feeling now is that the sustainability is becoming more important again.

For the professional service providers, carbon emissions from business travel were between one third and two thirds of their total carbon emissions. In this study, businesses addressed

their carbon emissions from business travel, partly because they realised it was a big element of their carbon emissions, and as other operational carbon emissions were reduced, had the potential to become a larger proportion. Other factors included pressure from their staff, customers, and reputational issues. Another driver is that companies are now possibly subject to a range of new carbon reporting frameworks. However, unlike electricity or gas usage, business travel is not covered in these regulatory frameworks, such as in the carbon trading scheme as part of the Carbon Reduction Commitment (CRC) (The Carbon Trust, 2010), and for vehicles not owned by the organisation, only as a voluntary reporting element under Scope 3 within the Greenhouse Gas Protocol (World Business Council for Sustainable Development and World Resources Institute, 2004). But with the prospect that this reporting will become compulsory, the businesses were looking to take the initiative.

Nonetheless, it should be noted that many of the businesses in the study were in a position of wanting to lead by example, as they sold services to encourage sustainable business practices or products that enabled virtual meetings. Also the process of recruiting companies for this research, will have selected those that are more likely to be concerned about carbon emissions than the average business. However, the increase in internal concern about the reporting of carbon emissions does appear to reflect a wider growth in interest in the business communities in which they operate.

2.4 Customers

This wider interest is evident through customers increasingly putting pressure on their suppliers to reduce carbon emissions. This has been occurring through disclosure requirements as part of the procurement process, particularly from the public sector, and in the private sector, through the supply chain or the Carbon Disclosure Project (CDP). Businesses are increasingly being asked to report through the supplier module of the CDP by their customers. For example in 2009, one organisation had only three of four requests from customers to complete the supplier module, but in the first quarter of 2010 they had already had a dozen requests. All the large businesses gave similar responses.

What was less evident, but beginning to happen, is for customers to also question the amount of money budgeted into a project for business travel.

2.5 Public accountability

The public accountability of a business can be important in determining their attitude to developing and managing a sustainable business travel policy, and therefore a driver for change. Large organisations may be 'Publicly Limited Companies' (PLCs) responsible to their shareholders, so legally required to produce annual CR and financial reports. This level of accountability can encourage sustainable business travel practices as part of the public image that businesses wish to portray.

'Limited Liability Partnerships' (LLPs) do not have shareholders and consequently are not required to produce the same reports, and so do not have the equivalent external pressures to reduce costs and carbon emissions. Although in this study, the larger LLPs were choosing to publicly disclose this information, partly due to pressure from customers, the CDP, and in the case of bigger LLPs, the CRC. Having made the decision to disclose this type of information it becomes an important driver to manage carbon emissions including those from business travel.

Not for profit organisations are perhaps the most interesting, as they are not responsible to shareholders and are not required to make a profit, as their title would suggest. One of the organisations in the study was a conservation charity and therefore worked hard to keep their carbon emissions down, but other people in the study who had either worked for, or had dealings with not for profit organisations, were surprised how unconcerned these organisations were about managing business travel, either to reduce costs or carbon emissions. This would tend to suggest that the requirement to be held accountable publicly or to customers can be major a motivator to develop sustainable business travel policies.

2.6 Technology

One of the big changes to the business travel area in the last five to ten years has been the developments in virtual meeting technologies. There have been improvements in both the

quality and performance of video conferencing and telepresence suites, in desktop and mobile technologies such as 3G phones, Web 2.0, teleconferencing and social networking sites such as Facebook and Twitter. All of these have increased the ease and flexibility of communication. The big challenge for business is how to use these technologies to improve communication and productivity, and to harness the potential of social networking meeting media to build and sustain relationships in similar ways to those used by 'Generation Y' in their personal lives. A repeated comment from all the participants of this research was that as more people come into the workforce who are familiar with these communication technologies, the more businesses are being pushed to use them in their day to day communications, as the question is asked 'why do I need to travel when I can communicate virtually'? This is supported by a growing awareness that the perception of work is changing to one where the relationship between work and place is disappearing, although this is only true of the sectors where home/remote working is a viable option.

However, there is a potential downside. Concerns have been raised that the greater use of video conferencing instead of travelling to a meeting could result in more people travelling to the office to use the facilities, possibly in peak times, and so causing greater congestion. This was a point put to the participants of this study. They all felt that this was not the case. This was mainly because organisations that were embracing the use of virtual technologies, were also embracing these technologies to facilitate home working. The effect was that people were planning their work time more carefully to ensure that any meetings which required either meeting face-to-face in an office, or the use of video conferencing equipment, were done on their 'office' days. The result is that people were planning their work time more efficiently. This is likely to be a factor that contributes to the 31% increase in productivity from home working quoted by BT (BT Global Services, 2010).

2.7 Recruitment and retention

Recruitment and retention can be an important driver to change business travel policy. The motivations are similar to those you would see for a commute management programme. This is not surprising as the management of the commute and business travel can have similar objectives, such as reducing the need to travel and the time spent away from home, which improves work life balance. This can be of particular importance for an aging workforce who are less willing to travel, or women returning to work after maternity leave, who are unwilling to spend time away from the family. A business travel policy that shows the organisation cares about their staff and the environment can help to attract the best talent to the organisation. A frequent comment was that the younger generation coming into work from university, were looking for organisations that had good environmental and staff policies. One organisation that encouraged cycling to their customer sites felt that this policy showed that 'they cared' and helped to attract the 'right sort' of staff to the organisation.

2.8 Volcanic ash cloud

Specific events such as the volcanic ash cloud, which in May 2010 grounded all flights into and out of UK airports for approximately two weeks, can be a motivator for change. The closure of air space caused disruptions to business travellers and business operations, highlighting the vulnerability to business continuity. However, for the business travel manager there were advantages. People who had previously not used video conferencing (VC) began to look at this as an option. Regus, who hire out VC and telepresence suites, saw their business increase by 236% during the flight disruption. Towards the end of May this had dropped back by 50% (Polycom and Regus, 2010). The businesses interviewed in June 2010 had found that people were less willing to fly and were looking for alternatives, for instance ground transport or not travelling at all by using virtual meeting technologies.

The challenge, as with the reductions in business travel due to the recession, was how to embed this behaviour change in the long term as demand for travel begins to increase again. At the time of the study it was too early to tell the extent the ash cloud had changed behaviour permanently.

3 The barriers to embedding a change in business travel policy

Although the businesses in the study were actively developing and implementing sustainable business travel policies, they encountered a number of barriers that hindered the process of embedding.

These barriers fell into three main categories;

- i. Individual behaviour
- ii. Customers
- iii. Internal culture

3.1 Individual behaviour

One of the biggest barriers to sustained behaviour change was that of individual behaviour. In order to implement and embed this individual change, most of the businesses in this study had a mixture of hard mandatory policies and softer policies to encourage behaviour change.

Habitual behaviour

The businesses realised that habit played a large part in preventing behaviour change. People are used to meeting face-to-face, so they need continual reminding, motivation and controls to break this habit. This is likely to be more true of the older members of the workforce, who as well as having formed habits, may be more unwilling to use virtual meeting technologies either through a dislike, fear or unfamiliarity of them. This fear or unfamiliarity can also be true when encouraging a modal shift away from air or car. A point raised in this study was that air and car travel are often perceived as more convenient, reliable and quicker than rail, and as part of habitual behaviour, can feel more comfortable. An example of this given in the study was where employees had reverted back to familiar working and travel habits during the recession. This may have been a fear for job security from working out of sight at home, or for lost business, engendered by not meeting clients face-to-face.

Status Symbols and Perks

Another aspect of individual behaviour raised in this study, was that business travel itself can be considered by some as a status symbol or perk, particularly business class flights, taxi use, the company car, or travelling to interesting places. In certain sectors, it has been hard to remove these perks, which has led to industrial relations issues. These sorts of perks can be seen as a way a person is defined, giving them status in their role. However, these issues are not unique to business travel and can be seen in other behaviour change programmes, such as travel plans that remove directors allocated car parking spaces, or 'smarter working practices' that involve virtual teams, where managers no longer have a team sat around them or the 'big office'.

3.2 Customers

In the last section on drivers, customers were mentioned as a driver for change in business travel policy, but equally they can be a barrier. It was suggested that customers can feel they are paying for 'face time' and therefore expect to see their consultant or supplier. Not all customers have VC equipment, particularly if they are a smaller company, or are possibly unwilling to use it for supplier meetings. According to Regus there are currently 900,000 VC suites within companies around the world, but there are only 3,000 publicly available, making it hard for smaller companies to gain access to the facilities, although the number of publicly available suites is increasing, especially in the US (Polycom and Regus, 2010).

Changing the attitude of clients to reduce the time spent by consultants on site is a particular challenge in areas where sensitive or confidential material is involved, for example in the MOD or HMRC. In these instances clients require their suppliers to work at the site to ensure data security, for projects such as computer development or audits. This increases the level of business travel, more of which may be done by car, due to the risk of computers being left on trains or the possibility of sensitive data being overheard or viewed by other passengers on public transport. The other problem is that in some cases customers are asking their

suppliers to undertake the journeys they used to make themselves, pushing the carbon emissions and costs down the supply chain.

The important first step is to manage the internal meetings either by modal shift or substitution, in the process develop a competence and culture of reduced travel, and then begin to work with customers to reduce the external business travel.

3.3 Organisational culture

As with customers, the culture of an organisation can be both a barrier and a driver. An interesting example is where project teams are responsible for their own travel budget. Long running projects may have been set up with a substantial travel budget. As the money is already there they see little need to change behaviour. There can also be a culture of travel within the project that is unchallenged or encouraged by the project lead. In some cases an attitude may exist that because the project is bringing in money, there is little need to reduce costs. These attitudes are symptoms of controlling business travel purely by cost; if the money is there and someone else is paying for it then why not travel. In these instances a carbon budget or target would be useful to support behaviour change.

3.4 Barriers to the use of video conferencing

The barriers outlined above are based on the views of the study organisations. But it is equally important to understand what individuals perceive as the barriers to alternatives such as video conferencing. In order to explore the individual perspective, a survey of business travellers who made journeys into London was undertaken.

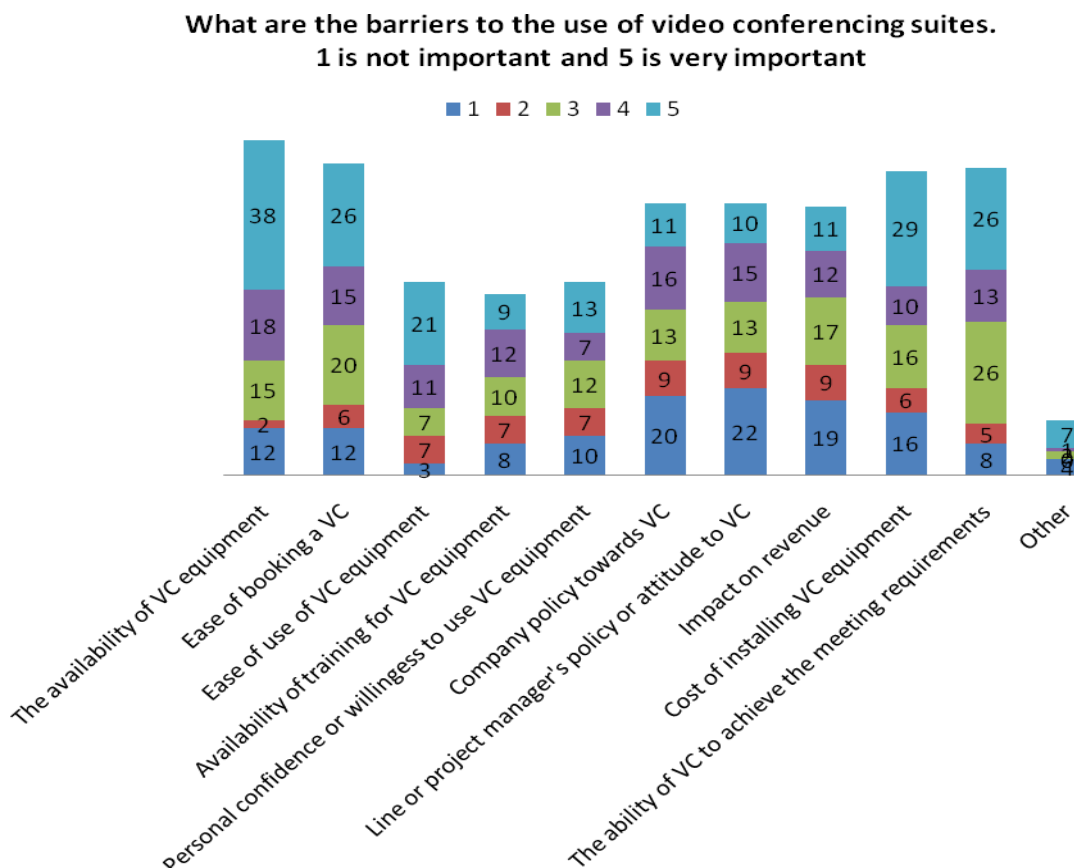


Figure 1: Barriers to the use of video conferencing

The survey population was drawn from members of the NBTN, staff and students at the Open University and clients of TfL, totalling 150 completed online surveys. One of the aims

of the survey was to understand what were seen as the barriers to greater use of virtual meeting technologies such as VC and teleconferencing.

Even with the technological developments in visual meeting technologies, they are still criticised and disliked by some, particularly video conferencing suites. One of the main criticisms is that they can be hard to use without support. Results of the survey for this study showed that 65% of respondents rated as very important (5) or important (4), that ease of use of video conferencing equipment was a barrier, Figure 1. Although the newer top end telepresence suites are easier to use and so have improved this situation.

The lack of flexibility can also be a problem. Both VC and telepresence suites take up valuable office space, which unless utilisation is high can be wasted space. The other issue is that where other communication media, such as WiFi and mobile technologies have promoted person to person communications, the use of fixed room visual meeting technologies restricts this flexibility and mobility, making meetings place to place. Yet, despite all the investment in these suites, they are still seen by some to be fringe and a 'bit posh', particularly telepresence. This is borne out by the survey which showed that VC suites were available for 18% of respondents and telepresence only 2%, and that 66% of respondents rated the lack of availability as 4 or 5 as a barrier to use.

3.5 Barriers to teleconferencing

In contrast in the same survey of individuals, teleconferencing was shown to have a higher availability, 35% of respondents stating it was available and that it was used for 33% of meetings. Of these, 82% of the meetings were held at least once a week. Teleconferencing has advantages over VC or telepresence suites in offering greater flexibility, cheap to install and easy to use. However, in the same survey, 55% of respondents rated as 4 or 5 that a barrier to its use was the ability of a teleconference to achieve meeting objectives. The problem is that teleconference calls are often poorly managed, with too many people participating, resulting in the meetings often failing to achieve their objectives. One of the major criticisms of teleconferencing to emerge from the interviews was that 'you know that people switch off during the call and it is not possible to tell who is still engaged. People start to look at their emails or do other work instead of participating in the meeting'. This can be partly due to the poor management of the meeting, where time limits caused by the booking system can be less critical than for a telepresence meeting.

A common remark in this study was that people would prefer to hold a meeting through a video conference than a teleconference, even if it was a lower quality desktop technology, so that you were better able to visually read people's responses. The lack of visual cues could be responsible for meetings over running and the objectives not being achieved, as people are less able to respond to the reactions of other participants. This was borne out in the survey which showed that desktop technologies such as instant messaging, voice over internet services, such as *Skype*, and desktop video conferencing, although only accounting for 37% of availability, their utilisation rate is much higher at 52% of virtual meetings, of which 91% of this usage is on a daily basis.

This would suggest that a teleconference is not necessarily the most productive meeting medium and careful consideration needs to be given to the purpose and aims of a meeting when choosing a meeting medium.

4 Commuting

Part of the aim of this study was to understand the extent to which commuting and business travel are linked, and whether first working with a business to manage their business travel opened up opportunities to engage with businesses in also managing the commute.

The organisations were asked about their policies to manage the commute. The general feeling was that the commute was 'low on the radar' of business.

Motivations for managing the commute

However, some of the larger businesses in the study were now beginning to manage the commute on a voluntary basis. The main reason given for this was that it was the 'next obvious step after managing business travel'. There were several reasons for this:

- Most of the large businesses interviewed had either moved to new offices or were in the process of consolidating their office space, so considered it necessary to help their staff to access the new or different locations.
- Businesses using virtual meeting technology for business meetings, saw that telecommuting was an obvious extension of this, hence the management of the commute, particularly with a blurring of the edges between commuting and business travel when an employee's place of work was their home.
- Businesses that were actively working to reduce their carbon emissions, were beginning to accept that carbon emissions from the commute were also their responsibility, and linking them to their carbon reduction targets. This may be prompted by the impending change in the reporting of Scope 3 emissions.

Where the management of the commute was occurring on a voluntary basis, it was most likely to be led by the Sustainability or CR team rather than Facilities Management, as is the case with planning-driven travel plans. In this instance the programme is situated at a higher level of the organisation and links strongly into strategic policies such as managing carbon. Typically the commute programme was not under the remit of the Business Travel Manager, although they were aware of it and working on it with the CR team. The willingness of organisations to manage the commute on a voluntary basis was very dependent on the culture of the organisation. One organisation purposefully did not manage the commute as they felt that it was too much of an invasion into the personal life of their staff, and were concerned about the tax implications of benefit in kind in supporting a commuter management programme. Also it was felt that other issues were a higher priority at the moment.

One point that was agreed on by all the Central London businesses was that they accepted they did not have car parking spaces and therefore people would not drive to their offices. This is supported by the good transport system and the congestion charge, which made the concept of driving into London 'ridiculous'.

Links to working practices and business travel

There was however recognition that many of the behaviour change techniques and initiatives used to support a change in business travel policy were also applicable to commuting. What is becoming evident is that working practices, business travel and commuting are beginning to be linked together. This is not surprising when there are overlaps in the initiatives used such as car pooling or sharing, Bike to Work schemes, travel information and telecommuting. What appears to be emerging is an inverse relationship between the commute and business travel. Organisations that have high levels of business travel for meetings, and are therefore used to people working away from the office, for example professional service providers, are more likely to introduce telecommuting. Therefore, as a proportion of employees, have lower levels of commuting. In contrast, a business that has low levels of business travel, for example a retailer, may have much higher levels of commuting as their jobs cannot be done remotely, and policies to promote modal shift are more likely to be of relevance. Although location is an important factor in the mode of commuting, the combined levels of business travel and commuting are likely to be more dependent on the type of business rather than the location. When working with organisations to manage the commute, therefore, it is important to understand the 'type' of business they are as well as the location.

5 Discussion

This paper has shown that costs and carbon reductions, and increases in productivity were major drivers for a change in an organisations business travel policy. However, there are a number of ways in which a business can reduce their costs and carbon emissions from business travel. Depending on the option or combination of options the benefits will vary. Table 1 shows some of the methods open to a business and the impacts these options have on cost, productivity and carbon emissions.

The first two options are most likely to bring about positive improvements in cost, productivity and carbon emissions. However, they are also the options that could potentially be the hardest to implement as they require an organisation to change the way it works, requiring top level support and willingness for strategic change.

Policy	Impact on		
	Cost savings	Productivity	Carbon reductions
Reduce travel through local resourcing	+	+	+
Reduce travel by substituting with a virtual meeting	+	+	+
Reduce class of travel	+	-/=	=/+
Shift to more sustainable mode of travel	=	=/+	+
Carbon offsetting	-	=	+
Business as usual	-	-	-

Table 2: Impact of business travel policies on cost, productivity and carbon emissions

The easier options to implement are less likely to bring about as much overall benefit. For example, if the organisation has a large volume of business trips by air and their objective is to reduce costs, the quickest and simplest approach is to reduce the class of travel. However, this could negatively impact productivity, particularly on long haul flights, where business travellers are less able to sleep, adversely affecting their ability to work on arrival. The policies or combination of policies will vary depending on the culture, aims and objectives of a business

6 Conclusions

What this paper has shown is that the main motivations to bring a change in business travel policy are cost reductions, increased productivity and carbon reductions. These have been driven by improvements in virtual meeting technology, customer demand and specific incidents such as the volcanic ash cloud. However, as Table 2 shows, reducing cost does not necessarily offer other benefits, although measures such as reducing the class of travel may be the simplest to implement and feel safer. This approach tends to be a top down policy, maintaining existing operating practices and requiring little behaviour change, thus overcoming one of the biggest barriers to change.

Substituting a physical journey with a virtual meeting has the potential to deliver the benefits of improved productivity and reduced costs and carbon emissions, but can require substantial capital expenditure in the case of telepresence suites, thus requiring a demonstrable return on investment. The results of the survey of individuals would suggest there is an opportunity to invest in cheaper and more flexible desktop alternatives, which could offer many of the same benefits at a much lower capital investment. Policy to support this type of approach is important as businesses have found that by reducing their Scope 1, direct emissions, business travel and commuting have become a larger proportion of their overall carbon emissions.

This paper has shown, not surprisingly, that individual behaviour and habits can be a major barrier to more sustainable or thrifty travel behaviour. The types of policies that have been used in business to encourage behaviour change have been in some cases, an innovative mixture of 'carrots and sticks' supported by training. In developing policy at a national level there is the opportunity to learn from these innovative practices and from other behaviour change fields such as social marketing.

In developing policy to engage with business to manage transport in more sustainable ways, this study has shown there are opportunities to work with them on a voluntary basis, and not just on the commute. The businesses in this study were looking for different ways to engage

from those traditionally seen in travel planning, especially those developed through the planning process. They were seeking to reduce their carbon emissions and costs, so looking for tools to support this process. Also they were looking for tools to support their existing practices, such as journey planning information that also gave the carbon emissions for each option, or guidance on the availability and procurement of corporate Oyster Cards. What this study found was that the businesses were not necessarily interested in the package of measures that a travel plan is described as being, but a series of individual initiatives to support their needs and objectives and so moving away from a purely transport planning approach.

This paper has shown that business travel can be a large cost and carbon emitter to business and the country, as well as a cause of congestion. However, the ability to communicate internally and externally within business is fundamental to the operations of a business and the growth of the economy. Yet, business travel and communication is an area where there is little direct Government policy. There are therefore opportunities to work more closely with business to develop policy to help reduce business miles and support the use of virtual meeting technologies.

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