The Impact of eBusiness on the City of London Office Market: 2003 Survey

Research report
September 2004

Authors:
Dr Tim Dixon, Director of Research
Andrew Marston, Research Officer

Research Funded by:

RICS Education Trust
and The Harold Samuel Trust
**Executive Summary**

**Overview**
This research is based on major survey of City of London occupiers conducted in late 2003 by The College of Estate Management, Reading. The aim of the research was to follow up the previous 2002 survey and examine how eBusiness was driving process change amongst City office occupiers, and how this might change locational and space requirements in the future.

**Why does the research matter?**
This research shows how important ICT continues to be in driving process change for City office occupiers. However, ICT must be considered alongside forces for dispersal (for example, transport problems) and agglomeration (for example, face-to-face contact), which are creating a potent mix of factors driving businesses in the City. Changes in office densities and floorspace requirements, created by ICT and other drivers, have important implications for future office space projections in the City. Business continuity planning is an important facet of larger companies' strategies for terrorist or disaster planning.

**Main Findings**

- Connectivity for City firms is now ubiquitous: all respondents had an Internet connection, and broadband was used by 87% of companies. The 'digital divide' between the large companies and SMEs in the City has diminished since the previous survey.

- Some 50% of companies believe that eBusiness is at least 'important' to their business, and many companies are using the Internet for online service / product provision, recruitment and project management.

- Although home-working is employed by only 5% of companies, some 50% expected it to become more important over the next 5 years.

- Most occupiers are satisfied with their premises, but 21% felt that densities were too low and they were under-utilising their space.

- Larger organisations use their space more efficiently than smaller organisations. For example, those organisations with over 250 employees occupy an average of 11.5 m² per person, compared to 20.4 m² per person for small companies with 6 to 50 employees.

- Some 30% of respondents believed they would also require less space per person in 5 years’ time, with some 70% suggesting no change, adding weight to the argument that oversupply may yet be a feature in the City over the next 5 years, as ICT (alongside other factors) continues to transform business.

- As in 2002, the majority of City companies in the survey appear ‘London-centric’ in supply chain terms and ‘City-centric’ in client terms.

- The future envisaged by companies is one in which eBusiness will play an increasingly important role. This is particularly noticeable for larger organisations whose large workforce and turnovers will allow continued investment in these technologies.
Background
As in 2002, the overall aim of the research was to examine how the shape and form of the office property market in the City of London may be affected by process change in eBusiness and related technology over the next 5 years and beyond. The key objectives were to:

- Examine the role of technology in the business of City-based business owners/occupiers;
- Investigate access of City businesses to Internet, broadband and related technologies;
- Analyse the impact of new technology on business processes, including recruiting, CRM, shareholder interaction;
- Examine the impact of eBusiness on profits and cost base of companies;
- Examine the role of teleworking in City businesses;
- Assess the potential impact of technology on future space requirements and locational pull in the City.

Key results
Pervasive technology?
The 2002 and current surveys show that connectivity for City firms is ubiquitous. The use of broadband has also widened to include more organisations (87% compared with 73% in 2002). The main take-up of broadband has been within the last three years, although around 30% had invested in high-speed access before 2000. Just as connectivity is ubiquitous, so also is email.

The evidence of 'digital divide' in the City between SMEs and larger companies is not as evident as in 2002, although our survey this year had lower numbers of SME respondent organisations. However, the survey does show that larger organisations have a greater propensity to use eBusiness tools for more processes than their smaller counterparts.

Business process engineering
Although most companies do not feel that eBusiness is necessarily something that leads to new revenue streams or customers, an increasing number of respondents (50%, up from 35% in 2002) do believe eBusiness is at least 'important' to their business. Companies are also increasingly using the Internet for online service / product provision; recruitment, and project management.

Home-working
The approach to home-working falls into to broad camps: those companies for whom it is not an option and those companies who encourage it for some staff. Even so there was general agreement from all types of companies that the face-to-face contact with clients and colleagues remained very important. Hot-desking appeared still to be relatively infrequent but approximately 50% of respondents expected home-working to increase in their organisations over the next 5 years.

Buildings and Infrastructure
Density was considered too high in just 4% of cases, and larger companies tended to be more satisfied with their premises. Most organisations (75%) felt it was about right, with 21% under-utilising their space with low densities. This compares with 71% and 17% respectively in the 2002 survey.

Respondents from larger organisations appear to use space more efficiently than small organisations. For example, those organisations with over 250 employees occupy an average of 11.5 m² per person, compared to 20.4 m² per person for small companies with 6 to 50 employees.
Locational pull of the City

It was clear from the survey and the interviews that as in 2002, the City continues to have a hugely important pull on companies, particularly those that require face-to-face contact with clients. Although technology is leading to process change, transport difficulties and human resource issues were equally as important as ICT in driving such trends as home-working.

Respondents believed that over the next 5 years Internet connection speeds would increase; the tasks carried out online would increase; and people would use email even more. Moreover, nearly 50% of respondents believed that their staff would be doing even more home-working than today. However, business travel would still be an important part of corporate functions.

Some 30% of respondents believed they would also require less space per person in 5 years’ time, with some 70% suggesting no change, adding weight to the argument that oversupply may yet be a feature in the City over the next 5 years as ICT continues to transform business.

As in 2002, the majority of City companies in the survey appear ‘London-centric’ in supply chain terms and ‘City-centric’ in client terms. Similar themes followed through into the continued future of a City of London office location. Financial services companies in particular saw no alternative due to the importance of regular face-to-face contact. View were more mixed in other sectors, in some cases due to the high cost of occupying London office space and concerns about public infrastructure.

Conclusions

It is clear that ICT will continue to play an important role in transforming business carried out in the City of London. Wireless technology is increasing in popularity and occupiers are becoming more demanding with faster connection speeds anticipated and an increasingly large number of tasks carried out online. Connectivity is now ubiquitous, with broadband now adopted by a large majority of companies, although larger companies are placing greater emphasis on its use for wide range of tasks.

The research also highlighted the importance of business continuity planning and management in dealing with disasters in the City and, worryingly, there is evidence of a divide between companies by size. Larger companies tend to be more proactive in this sphere. One multinational company which we interviewed has its own dedicated team at work on BCM who continually ensure that the strategy is constantly under review. This includes a partnership arrangement with a company that can provide up to 250 spare workspaces with no notice in the event of an emergency. However the company had not gone as far as taking additional space which it did not occupy day-to-day – so called ‘dark space’.

What is clear is that the City of London still continues to be a vibrant and robust economic centre. ICT has acted in alliance with other factors such as human resources and transport issues to shape the City’s destiny, and will continue to shape its future. It will be important therefore to continue to monitor changes in office demand and densities due to this combination of forces.

About the research

The research was conducted during late 2003 and comprised a postal survey of City occupiers and follow-up interviews. The postal questionnaire was sent to 980 businesses in the City, comprising a range of sectors and sizes. A 7% response rate was obtained. Eight follow-up interviews were conducted.
Acknowledgements

The research was funded by the RICS Education Trust, British Council for Offices, and The Harold Samuel Trust.

Our thanks are owed to all respondents to the postal survey and to all interviewees.

Our thanks are also due to Bob Thompson, of RETRI and Senior Research Associate at The College, for his helpful comments on the questionnaire.
Contents

Executive Summary............................................................................................................ i

Contents.......................................................................................................................... 1

1 Introduction................................................................................................................... 3
  1.1 Background............................................................................................................... 3
  1.2 Aim and Objectives ................................................................................................. 6
  1.3 Research Methods ................................................................................................. 7
  1.4 Format of Report ................................................................................................. 7

2 Results............................................................................................................................ 8
  2.1 Introduction............................................................................................................... 8
  2.2 Characteristics of respondents............................................................................. 9
  2.3 Nature of businesses............................................................................................ 11
  2.4 Suitability of premises ....................................................................................... 12
  2.5 Technology used by business ............................................................................. 15
  2.6 Process change..................................................................................................... 19
  2.7 Revenue streams............................................................................................... 22
  2.8 Home-working.................................................................................................... 24
  2.9 Doing business in the City of London............................................................... 26
  2.10 The Future........................................................................................................... 28
  2.11 Business continuity management and planning ........................................... 30

3 Conclusions.................................................................................................................... 32
  3.1 Introduction............................................................................................................... 32
  3.2 Emerging themes from the surveys..................................................................... 32
    3.2.1 Pervasive technology?................................................................................... 32
    3.2.2 Business process change............................................................................. 32
    3.2.3 Home-working............................................................................................ 32
    3.2.4 Buildings and infrastructure.................................................................... 33
    3.2.5 Locational pull of the City.......................................................................... 33
  3.3 Key issues................................................................................................................ 34
    3.3.1 Implications for office space demand....................................................... 34
    3.3.2 Business continuity management (BCM)................................................. 35
    3.3.3 The future.................................................................................................. 35
  3.4 Further research..................................................................................................... 37

Figures

Figure 2.1 The City of London and nearby postal districts........................................ 8
Figure 2.2 Respondents by size of office floorspace.............................................. 11
Figure 2.3 Location of clients, suppliers and competitors for City of London businesses ................................................................................................................................. 12
Figure 2.4 Suitability of current premises............................................................... 14
Figure 2.5 Ease of installing cabling for new equipment........................................ 14
Figure 2.6 Perceived occupational density............................................................. 14
Figure 2.7 Satisfaction with broadband supplier.................................................. 16
Figure 2.8 Uptake of broadband services by organisations and within the buildings they occupy ......................................................................................................... 17
Figure 2.9 Internet usage by respondents................................................................. 18
Figure 2.10 Importance of eBusiness tools for organisations, now and over the next twelve months.............................................................................................................. 19
Figure 2.11 Use of the Internet for various business processes (today)............... 21
Figure 2.12 Importance of eBusiness for generating new revenue streams and customers now ........................................................................................................ 23
Figure 2.13 Likely cost savings from eBusiness over the next 1 to 2 years ....... 24
Figure 2.14  Anticipated changes in key variables over the next five years ............... 29
Figure 2.15  Importance of broadband for business processes in the next five years: 30
Figure 3.1  Real estate in the old and new economies (adapted from
PriceWaterhouseCoopers, 2000) ................................................................. 34

Tables
Table 1.1 Centripetal and centrifugal drivers in City of London offices (adapted from
Dixon et al, 2002a) .......................................................................................... 6
Table 2.1  Respondents by business sector .......................................................... 9
Table 2.2  Respondents by firm size .................................................................... 10
Table 2.3  Respondents by London postcode district ......................................... 11
Table 2.4  Respondents by construction date of building ................................... 12
Table 2.5  Occupancy ratios by sector ................................................................. 15
Table 2.6  Use of the Internet for various business processes ............................. 20
Table 2.7  Use of the Internet for various business processes at time of survey, by size
of organisation .............................................................................................. 21
Table 2.8  Importance of broadband for business processes in the next five years, by
size of organisation ......................................................................................... 30
Table 3.1 Messages, Transactions and Location of Standardised and Specialised
Products (adapted from Leamer and Storper, 2001) ........................................... 36
1 Introduction

1.1 Background

London’s continued reputation as a global financial and business services leader has been founded on its status as a ‘World City’. London’s economy is characterised by national and international trading links, and the role of the City is paramount here.

Despite recent signs that the City of London’s dominance as a financial centre was being challenged by cities such as Frankfurt, the City continues to play a vital role in the regional, national and international economies. This continued success is based on a concentration and focus of wealth and business. For example, London’s GDP in 2000 was some £168.6bn, equivalent to some 21% of UK economic activity. Business services account for almost one third of London’s economic activity and one in four jobs: banks and financial institutions account for 11% of London’s GDP, for example, but manufacturing provides less than 11% of London’s income against a national average of just over 20%.

In the Draft London Plan (Mayor of London, 2002), London’s competitive edge in financial and related services has been built around eight key factors:

- The increasing concentration of global financial markets in London, New York and Tokyo, with London enjoying a decisive lead in the European time zone in terms of a large, critical mass of markets and financial services in commercial and investment banking, securities and derivatives, fund management, insurance and commodities.
- Ready availability of financial skills and professional support services in law, accountancy, tax, property and communications.
- Position at forefront of technology, with an effective financial infrastructure.
- Flexible labour markets.
- Low levels of corporate and personal tax.
- Track record in innovation.
- English as language of international finance.
- Financial domination of a time-zone which allows market firms to trade with Asia in the morning and New York in the afternoon.

These structural factors mean that the sector is projected to make the biggest contribution to economic growth in London over the next 15 years with around 440,000 more jobs, which is more than half the total of new jobs.

But because of the rapid growth, this sector is vulnerable to supply side constraints such as lack of office space, lack of skilled workforce, poor transport and environment. All of these factors could increase costs and lower competitiveness.

In this sense the City’s competitiveness is tied closely to the performance of firms and industries directly involved in financial services and markets and the wider quality of the economic and urban environment in which these activities are embedded (i.e. the externalities such as transport problems, human resource issues and skills shortages).
The City’s continued role as a financial centre continues at a time when the corporate world is facing much upheaval through technology-led change. Two huge changes are driving the global economies: technological advance in computing and communications, and the fall in barriers to trade and investment. The growth in technology and related sectors has led many to coin the phrase ‘new economy’. This has been defined as ‘a knowledge and idea-based economy where the keys to job creation and higher standards of living are innovative ideas and technology embedded in services and manufactured products’.

eBusiness is an important part of this process. In this report we adopt the Digital Europe² definition: ‘The eBusiness sector comprises companies which deliver digital technology products and services as a significant part of their core business or use digital technologies as their primary channel to market. eBusiness as a concept refers to transactions using these technologies, such as ework, eCommerce and egovernment.’

As technology evolves and as the new economy develops, further forces for change are occurring. In the City, for example, the following factors have been important in driving business change:

- Screen-based trading in the equity markets and the replacement of ‘open outcry’ trading in LIFFE;
- Bigger floorplate buildings required for some types of business;
- Project and team cultures replacing hierarchical control to enhance flexibility and performance;
- Greater competition in Information and Communications Technology (ICT) service supply;
- Greater demands for power with reliable supply;
- Online exchanges for commodities;
- Electronic documents replacing paper using corporate Intranets;
- PCs on the desks of all staff, with multiple screens on some desks;
- Electronic mail;
- Online share dealing without traditional broker services (‘disintermediation’); and
- Growth of teleworking.

eBusiness and related ICT technologies have the ability to disperse and splinter existing markets. Yet some research points to the fact that ICT actually reinforces existing patterns of economic activity. Recent research has shown that the City has important clusters of activity based around financial services, banking and property/real estate.

A key question is to what extent technology-led change will impact on business processes and hence drive the demand for future space in City offices.

Our previous research in October 2002 (Dixon et al, 2002a and Dixon et al, 2003) showed how important ICT is becoming in driving process change for City of London office occupiers. However, ICT must be considered alongside forces for dispersal (for example, transport problems) and agglomeration (for example, face-to-face contact) which are creating a potent mix of factors driving businesses in the City. Changes in office densities, created by ICT and other drivers, have important implications for future office space projections in the City. The research also showed that caution should be attached to the office projections in the City which were provided in the Lord Mayor’s
London Plan. It is dangerous to over-simplify density changes caused by ICT and other factors, for example.

In particular this research found:

- There were clear signs of a ‘digital divide’ at a company level in the City of London. Our survey showed that larger City organisations tended to use eBusiness technologies more widely in their business than smaller organisations. This was particularly noticeable for customer relations, staff training and recruitment, shareholder relations and videoconferencing.

- Almost three-quarters of those in the City survey (73%) had a broadband connection. There was a greater propensity for larger organisations than smaller companies to use a broadband connection, on a dedicated line provided by a specialist provider.

- Nearly two-thirds of City respondents in the survey allowed staff to work from home, by providing remote access to email and files. But there were mixed views about the benefits and disadvantages of a home-working policy.

- The majority of City respondents in the survey found that their current premises were suitable for their needs, although 11% found cabling new equipment difficult and 11% (frequently smaller companies) found their occupation density too high.

- Some 40% of those in the City survey said they would need less space per person in 5 years’ time. In addition 8% definitively said they anticipated being located outside the City of London and its fringes in five years’ time.

- Despite the impact of ICT on business process and workplace design, the majority of City respondents in the survey appeared ‘London-centric’ in supply chain terms and ‘City-centric’ in client terms.

- The locational pull of the City, particularly in client and face-to-face contact terms, continued to transcend the centrifugal forces of technology, although in some sectors ICT was becoming an increasingly important driver for change.

- The consideration of other forces of dispersion, such as transport and human resource issues, were important to many City businesses.

- Office demand projections for the City should recognise the varying needs and requirements of business sectors in the City, which were being driven by ICT and other factors, including human resources. Bottom line impact on densities by sector and over time should also be incorporated in such models.
We also concluded in 2002 that there are other factors besides ICT which are driving business change in the City of London. We categorised these according to whether they are ‘centripetal’ or ‘centrifugal’ (Table 1.1).

Table 1.1 Centripetal and centrifugal drivers in City of London offices (adapted from Dixon et al, 2002a)

<table>
<thead>
<tr>
<th>Centripetal (agglomeration)</th>
<th>Centrifugal (dispersion)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Face-to-face contact</td>
<td>ICT</td>
</tr>
<tr>
<td>Locational benefits</td>
<td>Transport problems</td>
</tr>
<tr>
<td>Clients demands</td>
<td>Sustainable development</td>
</tr>
<tr>
<td>Clustering</td>
<td>Human resources/needs</td>
</tr>
</tbody>
</table>

In practice, ICT may also partly act as a centripetal force if technology maps itself on to existing economic activity and continues to promote ‘clustering’. If home working and other ICT-based activities grow, then ICT would clearly promote ‘dispersion’. But there is an argument for saying that sustainable development would be promoted by encouraging living and working in the City. The post-11/9 terrorist threat was also a major concern for many, reinforcing dispersion trends.

We also posed key questions for the future of the City: which will win – centripetal forces (driving businesses and markets to continue to cluster in the City) or centrifugal forces (dispersing businesses and markets away from the City)? and how will ICT continue to drive these changes?

Some 18 months on, in November 2003, we therefore carried out a similar survey of City occupiers to determine whether such key issues had changed in any way.

1.2 Aim and Objectives

As in 2002, the overall aim of the research was to examine how the shape and form of the office property market in the City of London may be affected by process change in eBusiness and related technology over the next 5 years and beyond. The key objectives were to:

- Examine the role of technology in the business of City-based business owners/occupiers;
- Investigate access of City businesses to Internet, broadband and related technologies;
- Analyse the impact of new technology on business processes, including recruiting, CRM, shareholder interaction;
- Examine the impact of eBusiness on profits and cost base of companies;
- Examine the role of teleworking in City businesses;
- Assess the potential impact of technology on future space requirements and locational pull in the City.
1.3 Research Methods
The research comprised three main phases:
- General background and literature review;
- Postal survey to some 980 City occupiers (a 7% response rate was obtained);
- Follow-up interviews with 8 companies.
The research was conducted during the spring and summer of 2004.

1.4 Format of Report
The report is arranged as follows:
- Section 2 – Main Results; and
- Section 3 – Conclusions.
2 Results

2.1 Introduction

The first stage of our primary research was to undertake a postal questionnaire survey of office occupiers in the City of London in late 2003. A database of occupiers’ names and addresses, together with appropriate contacts (for example, office manager, facilities manager, company secretary) was constructed from the FOCUS database. This was supplemented by City of London contacts from the British Council of Offices.

Two rounds of surveys were undertaken. The first targeted all companies with 20 or more employees across the four EC postal districts (Figure 2.1). This meant that some questionnaire recipients inevitably fell outside the Corporation of London’s administrative area due to the mismatch of administrative and postal geographies. Only office occupiers were extracted from the FOCUS database, and those with incomplete contact details were omitted from the final survey mailing. A second round of surveys was sent out three weeks after the first round in order to boost the response rate. On this occasion only occupiers with between 10 and 19 employees were selected. These companies had not been included in the first mailing, but would assist in boosting the responses from small and medium-sized enterprises.

Figure 2.1 The City of London and nearby postal districts

A total of 69 replies were received, representing a 7% response rate. The results that follow are based on their responses.

As part of the questionnaire, respondents were asked if they would be prepared to participate in an interview for the second stage of the research. Contact was made with a sample of those that indicated they would be prepared to contribute. A total of eight interviews were undertaken with a range of different companies of varying sizes. The profiles of interviewees were as follows:
Software company – medium sized
- Law firm – large multinational
- Chartered surveying firm – small
- Project management company – large
- Consultant engineering company – large
- Architects – medium sized
- Chartered accountants – small
- Insurance company – large multinational

2.2 Characteristics of respondents

A good response was received from across the sectors. The most dominant single sector was organisations involved in the property industry (including property management companies, chartered surveyors, property investors and some architects) representing 22% of the respondents. Compared to our 2002 survey, the remainder of the respondents were much more evenly spread across other sectors. There were smaller proportions of banks and insurance companies. Table 2.1 summaries the respondents by sector.

Table 2.1 Respondents by business sector

<table>
<thead>
<tr>
<th>Business Sector</th>
<th>Number of responses</th>
<th>Percentage of total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current survey</td>
<td>2002 Survey</td>
</tr>
<tr>
<td><strong>Financial services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insurance</td>
<td>4</td>
<td>11</td>
</tr>
<tr>
<td>Banking</td>
<td>11</td>
<td>9</td>
</tr>
<tr>
<td>Fund management</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td><strong>Financial services subtotal</strong></td>
<td>17</td>
<td>22</td>
</tr>
<tr>
<td><strong>Corporate services</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Property</td>
<td>15</td>
<td>14</td>
</tr>
<tr>
<td>Legal</td>
<td>7</td>
<td>10</td>
</tr>
<tr>
<td>Accountancy</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td><strong>Corporate services subtotal</strong></td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td><strong>Other services</strong></td>
<td>22</td>
<td>47</td>
</tr>
</tbody>
</table>

Overall, one quarter of respondents were financial services organisations and 44% were corporate service providers.
There was a slight shift in the employment size profile of the respondents from the 2002 survey (Table 2.2). The current survey consisted of a larger proportions of the largest occupiers based in the City of London. Some 19% of respondents employed over 250 people in the individual office that was occupied by the individual respondent and 27% have between 51 and 250 people.

Table 2.2 Respondents by firm size

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Number of responses</th>
<th>Percentage of total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Current survey</td>
<td>2002 Survey</td>
</tr>
<tr>
<td>1 to 5</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>6 to 50</td>
<td>35</td>
<td>55</td>
</tr>
<tr>
<td>51 to 250</td>
<td>19</td>
<td>21</td>
</tr>
<tr>
<td>Over 250</td>
<td>13</td>
<td>8</td>
</tr>
</tbody>
</table>

Most of the organisations (75%) that responded are long-established companies having been in existence for over 15 years. A further 17% are between five and fifteen years old and just 7% were formed within the last five years. These are similar proportions to the 2002 survey. In addition the respondents demonstrate that the City of London is a major location for UK-based companies. Some 78% of respondents worked in the headquarters office for their company.

Some 42% of respondents are based in office of between 1,000 and 5,000 square feet (see Figure 2.2). Of these, 93% are small enterprises with 1 to 50 employees. Almost one quarter of respondents occupy office space of between 10,000 and 50,000 square feet and 26% occupy space larger than this. This represents a considerable increase in the larger space occupiers from the 2002 survey, when only 5% occupied office in excess of 50,000 square feet. However, this is to be expected given the higher proportion of large organisations in this current survey.
Table 2.3 shows the location of respondent’s offices by postcode district. The questionnaire itself was sent to City offices and City fringe offices that lie within the four EC postal districts. For the current survey the respondents are reasonably evenly distributed across the four districts, with the highest proportions in the EC2 and EC3 districts. These areas represent an significant part of the core central area of the City.

Table 2.3 Respondents by London postcode district

<table>
<thead>
<tr>
<th>Postcode district</th>
<th>Number of responses</th>
<th>Percentage of total responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>EC1</td>
<td>14</td>
<td>33</td>
</tr>
<tr>
<td>EC2</td>
<td>19</td>
<td>28</td>
</tr>
<tr>
<td>EC3</td>
<td>20</td>
<td>21</td>
</tr>
<tr>
<td>EC4</td>
<td>15</td>
<td>18</td>
</tr>
</tbody>
</table>

2.3 Nature of businesses

Respondents were asked about the current location of their suppliers, clients and competitors. Figure 2.3 shows the mean response across all 69 respondents and demonstrates that the majority of clients, suppliers and competitors are based in London itself. When the view is expanded to include all of the UK almost 90% of suppliers, 84% of competitors and 76% of clients are UK based. This is very close to the pattern seen in the 2002, suggesting that a similar cohort answered both surveys in terms of their geographic spread of business contacts.
Further analysis of these figures shows that only 13% of respondents have more than 50% of their client base located outside the UK. Similarly only 10% have more than half of their suppliers based overseas and 16% have more than half of their competitors based abroad.

### 2.4 Suitability of premises

Changing patterns of ICT adoption have brought about shifts in the types of building that can accommodate cabling and ducting. Many 1960s built buildings for example are becoming obsolete. The 2003 survey showed that nearly 50% of respondents occupied pre-1960s buildings (Table 2.4).

#### Table 2.4 Respondents by construction date of building

<table>
<thead>
<tr>
<th>Construction of building</th>
<th>Number</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre 1960s</td>
<td>33</td>
<td>49.3%</td>
</tr>
<tr>
<td>1960s</td>
<td>10</td>
<td>14.9%</td>
</tr>
<tr>
<td>1970s</td>
<td>5</td>
<td>7.5%</td>
</tr>
<tr>
<td>1980s</td>
<td>10</td>
<td>14.9%</td>
</tr>
<tr>
<td>1990-1995</td>
<td>3</td>
<td>4.5%</td>
</tr>
<tr>
<td>1996-2003</td>
<td>6</td>
<td>9.0%</td>
</tr>
</tbody>
</table>

For one third of respondents their current premises were seen to be ideal for their purposes. Only one respondent declared that their offices were unsuitable, with the remaining 45 (65%) saying they were reasonably suitable (see Figure 2.4).

Generally speaking larger businesses were more satisfied with their current premises. In relation to cabling of new equipment most respondents had no difficulties. Almost
30\% found it to be easy, but 19\% found it to be very difficult (see Figure 2.5) and again larger organisations found cabling easier. These were mainly organisations located in old buildings. Respondents were also asked about the occupational density of the office they worked in (see Figure 2.6). Just 4\% considered it to be too high with too many people occupying the space available.

Most organisations (75\%) felt it was about right, with 21\% under-utilising their space with low densities. This compares with 71\% and 17\% respectively in the 2002 survey.

The issue of occupational density is one that can be explored further by use of the data provided in the questionnaire on the number of staff occupying properties and the total floorspace area of those buildings. Table 2.5 shows the occupancy ratios for a selection of industries derived from data held by a firm of UK architects (Swanke Hayden Connell Architects). These figures are broad averages for the different sectors and make useful comparators to the data from this survey. They are not measures of the workspace area for individuals, but also include space dedicated to meeting room and walkways. The ratios range from management consultants occupying 10.2 m² per person, to industrial, oil and petrochemical companies occupying 23.8 m² per person.
Figure 2.4  Suitability of current premises

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>1-50</th>
<th>51-250</th>
<th>Over 250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unsuitable</td>
<td>2.7%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Reasonable suitable</td>
<td>64.9%</td>
<td>78.9%</td>
<td>46.2%</td>
</tr>
<tr>
<td>Ideal</td>
<td>32.4%</td>
<td>21.1%</td>
<td>53.8%</td>
</tr>
</tbody>
</table>

Figure 2.5  Ease of installing cabling for new equipment

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>1-50</th>
<th>51-250</th>
<th>Over 250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very difficult</td>
<td>27.0%</td>
<td>15.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Average</td>
<td>51.4%</td>
<td>52.6%</td>
<td>53.8%</td>
</tr>
<tr>
<td>Easy</td>
<td>21.6%</td>
<td>31.6%</td>
<td>46.2%</td>
</tr>
</tbody>
</table>

Figure 2.6  Perceived occupational density

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>1-50</th>
<th>51-250</th>
<th>Over 250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Too high</td>
<td>0.0%</td>
<td>15.8%</td>
<td>0.0%</td>
</tr>
<tr>
<td>About right</td>
<td>75.0%</td>
<td>62.3%</td>
<td>92.3%</td>
</tr>
<tr>
<td>Too low</td>
<td>25.0%</td>
<td>21.1%</td>
<td>7.7%</td>
</tr>
</tbody>
</table>
Table 2.5 Occupancy ratios by sector

<table>
<thead>
<tr>
<th>Market sector</th>
<th>Occupancy ratio, net internal area (sq m per person)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Management consultants*</td>
<td>1:10.2</td>
</tr>
<tr>
<td>Financial services (trading and securities)</td>
<td>1:14.7</td>
</tr>
<tr>
<td>Government and public sector</td>
<td>1:15.3</td>
</tr>
<tr>
<td>Consumer products</td>
<td>1:17.7</td>
</tr>
<tr>
<td>Technology and telecommunications</td>
<td>1:18.3</td>
</tr>
<tr>
<td>Insurance</td>
<td>1:19.4</td>
</tr>
<tr>
<td>Media and publishing</td>
<td>1:19.7</td>
</tr>
<tr>
<td>Legal</td>
<td>1:22.7</td>
</tr>
<tr>
<td>Financial services (investment banking)</td>
<td>1:20.9</td>
</tr>
<tr>
<td>Industrial, oil and petrochemical</td>
<td>1:23.8</td>
</tr>
</tbody>
</table>

* This is a dynamic occupancy ratio, as the number of staff is far higher than the number of workspaces provided by these organisations.

Source: Swanke Hayden Connell Architects (SHCA) database January 2000; (Turner, 2001)

The respondents to our survey have a wide range of occupancy ratios, but the average is 17.6 m² per person and fits well with the SHCA data.

Respondents from larger organisations appear to use space more efficiently than small organisations. For example, those organisations with over 250 employees occupy an average of 11.5 m² per person, compared to 20.4 m² per person for small companies with 6 to 50 employees. Those respondents who suggested that their occupational density was too high, occupied 13.5 m² per person on average, compared to 26.6 m² per person for those considering it to be too low.

2.5 Technology used by business

Respondents were initially asked about ICT provision within their business and their attitudes towards the quality of the provision.

All respondents had an Internet connection, but a smaller proportion (87%) were connected through a high bandwidth (broadband) line. This compares with 73% in the 2002 survey. Of those organisations with broadband access, 23% had a connection of less than 2 Mega bits per second (2Mbps) and 70% had a connection faster than this; 7% did not know their connection speed. In the 2002 survey a strong relationship was found to exist between the size of an organisation (measured by the number of employees) and their propensity to have a broadband connection. This is not as clear in the current survey, mainly because the overall proportion of those with high-speed connections is now so much higher than in 2002.

Some 60% of organisations surveyed have ADSL connections and a further 15% have ISDN connections. Cable modems are used by 12% of organisations. This is little changed from 2002. BT were the dominant suppliers of broadband connections amongst respondents. Some 37% of organisations used BT. One-third used another telecoms company such as Cable and Wireless, Colt Telecom or MCI and one-quarter used a specialist provider such as Qudos or HSO. Compared to 2002 this represents a fall in BT customers and a parallel increase in customers of other telecoms companies. The responses show a propensity for smaller organisation to use BT for their connection. Some 42% of companies with less and 50 employees use BT and a further
36% used specialist providers. Just 2% are customers of telecoms companies other than BT. For organisations with more than 30% are BT customers and 48% use other telecoms companies. Just 11% use a specialist provider. This is a similar pattern to the 2002 survey where the relationship, unlike in the current survey, was shown to be statistically significant.

There was a general view amongst broadband subscribers that suppliers offered a good service. Figure 2.7 shows the mean responses on a Likert scale of 1 to 4, where 1 represents ‘very dissatisfied’ and 4 represent ‘very satisfied’. A mean score of over 2.5 indicates some degree of satisfaction. For all aspects of broadband supplier the current set of respondents gave higher mean scores than the 2002 respondents. However, the pattern of scores relative to one another remain the same with customer care being given the lowest mean score overall.

**Figure 2.7 Satisfaction with broadband supplier**

The survey also investigated with respondents the length of time they have had broadband access, firstly within their organisation and secondly within their current building. As larger proportion were able to give details relating to their organisation rather than their building. As can be seen in Figure 2.8 the rate of uptake has continuously increased from the mid-1990s to 2003.
Having established what technology the organisations have available to them, respondents were then asked about the use of the Internet and for various tasks within their business. As would be expected, certain key aspects of network technology are used by relatively large proportions of the respondents, and other technologies are of specialist use only. The overall picture (Figure 2.9) was one where:

- **Email and websites were the most widely used.** All respondents used email and 94% had websites with most of the remainder planning to have a website within the next 12 months.
- **Local area networks (LANs) and Intranets are used by a substantial proportion of respondents:** 77% and 61% respectively.
- **Extranets,** a means by which companies and interact and collaborate with clients, supplies or shareholders online are less popular. Only 38% have a client only extranet and a further 14% plan to launch such a facility over the next 12 months.
- **Wireless networks used by a small, but increasing proportion of respondents.** Some 17% of respondents have wireless networks and a further 19% plan to install one in the next 12 months. This compares with just 10% in 2002.
To gauge the level of importance placed on these different eBusiness tools, and how this might change in the immediate future, respondents were asked to assess the importance of each tool for their organisation. On this occasion a five-point Likert scale was used and the mean responses are shown in Figure 2.10.
As a communication tool, email is regarded as the most valuable tool for the respondents. Indeed 94% felt that it was vital or very important to their business. This compares with 83% in the 2002 survey. Local area networks are also of increasing importance with 82% considering them to be vital or very important, an increase from 79% since the 2002 survey.

### 2.6 Process change

To examine further how ICT is being used by businesses in the City of London the questionnaire went on to ask respondents which particular business tasks were now conducted online and which were being considered for use over the Internet. For all of the business processes presented to respondents in the questionnaire the proportion that said their organisation currently conducted those processes over the Internet increased since 2002. For some processes this increase was more substantial than others.

Although there is an increase on the proportion of organisations using the Internet for these processes there appears to be very little change in the proportions using and planning to use the web in these different ways. The set of respondents to the two surveys are of course different, but the figures do suggest that there is an almost finite proportion for whom the Internet is a suitable tool for any particular task. In some cases this is simply because of the nature of the organisation. Companies that are not quoted on the stock exchange will not be required to publish financial results and therefore will not need an online service to cater for this.

There also remains the trend in the current survey for the ‘simpler’ processes to conduct online be used by larger proportions, with a subsequent decline as processes become more complex. For example in procurement and purchasing functions some 89% research prices online, but falls to 75% for those organisations performing the purchase online as well (Table 2.6 and Figure 2.11). A much smaller proportion, 11%, uses an online aggregator to formalise the purchasing process and improve
efficiencies. Similarly Table 2.7 shows that larger companies generally make greater use of the Internet for business processes than smaller companies⁷.

<table>
<thead>
<tr>
<th>Business process</th>
<th>Current survey</th>
<th>2002 Survey</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Now</td>
<td>Next 12 months</td>
</tr>
<tr>
<td>Online purchasing</td>
<td>75%</td>
<td>6%</td>
</tr>
<tr>
<td>Researching prices online</td>
<td>89%</td>
<td>2%</td>
</tr>
<tr>
<td>Procurement through an online aggregator</td>
<td>11%</td>
<td>9%</td>
</tr>
<tr>
<td>Displaying products/services online</td>
<td>83%</td>
<td>7%</td>
</tr>
<tr>
<td>Allowing customers to buy/order online</td>
<td>31%</td>
<td>11%</td>
</tr>
<tr>
<td>Online CRM</td>
<td>24%</td>
<td>19%</td>
</tr>
<tr>
<td>Recruiting staff online</td>
<td>54%</td>
<td>6%</td>
</tr>
<tr>
<td>Training staff online</td>
<td>37%</td>
<td>16%</td>
</tr>
<tr>
<td>Publishing financial results online</td>
<td>28%</td>
<td>3%</td>
</tr>
<tr>
<td>Publishing key transactions details online</td>
<td>21%</td>
<td>7%</td>
</tr>
<tr>
<td>Facilitating online share trading</td>
<td>7%</td>
<td>5%</td>
</tr>
<tr>
<td>Online project management</td>
<td>35%</td>
<td>9%</td>
</tr>
</tbody>
</table>

Processes that have seen a particularly large increase on the proportion of current users between the two surveys include:

- The display of products and/or services online, most likely through a website.
- Recruitment of staff online, however it is not clear if this is direct recruitment by the organisations themselves or indirectly through recruitment consultants. It could be that 54% is an underestimate of the true level of online recruitment.
- Online project management.
Figure 2.11 Use of the Internet for various business processes (today)

Table 2.7 Use of the Internet for various business processes at time of survey, by size of organisation

<table>
<thead>
<tr>
<th>Business process</th>
<th>Number of employees</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 50</td>
</tr>
<tr>
<td>Online purchasing</td>
<td>75%</td>
</tr>
<tr>
<td>Researching prices online</td>
<td>88%</td>
</tr>
<tr>
<td>Procurement through an online aggregator</td>
<td>14%</td>
</tr>
<tr>
<td>Displaying products/services online</td>
<td>68%</td>
</tr>
<tr>
<td>Allowing customers to buy/order online</td>
<td>15%</td>
</tr>
<tr>
<td>Online CRM</td>
<td>9%</td>
</tr>
<tr>
<td>Recruiting staff online</td>
<td>32%</td>
</tr>
<tr>
<td>Training staff online</td>
<td>27%</td>
</tr>
<tr>
<td>Publishing financial results online</td>
<td>12%</td>
</tr>
<tr>
<td>Publishing key transactions details online</td>
<td>6%</td>
</tr>
<tr>
<td>Facilitating online share trading</td>
<td>0%</td>
</tr>
<tr>
<td>Online project management</td>
<td>22%</td>
</tr>
</tbody>
</table>

Although the bulk of the survey concentrated on technology-led process change, with the emphasis placed on the process as opposed to the technology, there were a number of items of technology that respondents were asked specifically about. These
were videoconferencing, IP (Internet Protocol) telephony and wireless communication. Some 35% of respondents currently used videoconferencing facilities (up from 27% in 2002). A further 15% indicated that they are likely to start using videoconferencing within the next 12 months, potentially bringing the total up to 50%. Videoconferencing is predominantly used by financial services firms (45% of users).

The other two technologies are not as widely used. Some 15% currently use IP telephones. These are telephone systems that are connected to the computer network. They are particularly useful for large organisations to enable them to reduce the cost of voice telephony. Put simply, calls within the same organisations, even to offices elsewhere, can be carried at no cost and external calls (including international calls) can be charged at local rates. There was a larger proportion considering installing IP telephones (24%) over the next twelve months. Wireless devices were being used by 17% of respondents with a further 34% considering their use in the next twelve months. No particular business sector dominates in its use of IP telephony or wireless devices.

2.7 Revenue streams

It is often argued that adoption of eBusiness systems can ultimately impact upon revenue streams by reducing fixed and variable costs of businesses and/or enhancing profits. Respondents were therefore asked about the importance of broadband and their Internet connection for generating new revenue streams and customers.

Figure 2.12 shows the responses and demonstrates that compared with 2002 an increased proportion of respondents (more than 50%) believed that eBusiness was 'important', 'very important' or 'vital' to their business. However, nearly 30% believed that eBusiness was not important in this respect.

For many companies, the cost savings and profit gains often come by being more efficient in the workplace through ICT, in addition to those efficiencies created by eBusiness. This came through in the interviews. For example, the London office manager of one large national company argued that technology had enabled their fee-earning staff to offer a better service to their clients. In the past, their staff would have offered just one solution to a client, based on experience, even though they felt they should have investigated a number of different scenarios.
Figure 2.12 Importance of eBusiness for generating new revenue streams and customers now

The interviews also demonstrated that some companies have become more focused in their staffing requirements, concentrating resources on direct fee-earning employees. This has led to an increase in the ratio between fee-earners and support staff. More routine tasks that can now be done easily online, such as travel bookings and timetable enquiries, are increasingly carried out by individuals themselves, rather than delegating the task to a secretary. Photocopying is also less important than it once was, as many documents now just need to be emailed between people. One company estimated that they had shifted from having one secretary for every six members of staff ten years ago, to having one for every fourteen. However, even here there are cultural tensions of the kind associated with home-working (see next section):

‘… there is always this perceived benefit of having a PA or a secretary. “Get my secretary to …”, that sort of thing and that seems to still prevail the higher up the organisation you go.’

This trend is noticeable for smaller companies, such as this City based firm on quantity surveyors:

‘The office up until 5 or 6 years ago would have had two or three secretaries. We now operate without secretaries. We now operate without a receptionist as well. We operate without a secretary because everything is on templates on the server, every surveyor downloads a standard letter format, downloads a standard valuation format, a standard cost plan format.’

Respondents to the questionnaire were also asked to rate the likely areas of eBusiness enabled costs savings over the next one to two years. Ratings were made on a Likert scale of 1 to 5, where 1 represented ‘very unlikely’ and 5 represented ‘definitely’. Interestingly all the responses are very close together and no particular areas substantially outrank the others. Some of web related areas of cost savings score
higher than the others such as fast access to data and data transfer. These are very obvious areas closely associated with the technology. Other costs are more borderline, such as savings from travel costs or voice telephony (Figure 2.13).

**Figure 2.13 Likely cost savings from eBusiness over the next 1 to 2 years**

![Likely cost savings from eBusiness over the next 1 to 2 years](image)

### 2.8 Home-working

The ability to work efficiently from home has been one of the important aspects of technology-enabled change for office occupiers. Technology now allows office workers to be based at home, should the circumstances require it. However, just because technology enables this style of work does not mean that all companies support it as a concept. For some organisations there remains a requirement for staff to be in the office, due either to the nature of individuals' work, or the culture of the employer. There are also other issues of which companies need to be aware, and have responsibility for, even though an employee is based at home, including compliance with health and safety regulations for the operation of display screen equipment. This can be easily managed and controlled within the office environment, but at employees' homes this control is lost to some degree.

The survey did not find a high degree of 'hot-desking': on average, 98% of employees of responding organisations have their own desk, with only 1% working from home on a full-time basis and 4% on a part-time basis. Also some 50% of respondents expected to see more home-working over the next 5 years (see section 2.10).

The open-answer comments on the questionnaire reveal some of the barriers to home-working for City occupiers. For example:
‘Work is very client facing and team orientated: does not easily lend itself to home workings.’

‘We are a design business. This is an endeavour that requires a team environment not isolated working. Administration staff have opportunity to work from home.’

‘The work must be kept in-house for security reasons.’

However, from some comments, there is an indication of increased pressure on employers from their staff to allow home-working:

‘More people are requesting this capability each month.’

Some companies though are not in a position to offer home-working to staff even if there was a demand for it. This is particularly noticeable amongst small and medium sized professional services companies. For example, one firm of property advisers that we interviewed highlighted the situation in their practice:

‘There is one of our guys with young family and once every two or three months he will work from home. He will not work electronically from home, he will actually take work home, bring it back in … I don’t think we really could [work from home] because half of our work is interacting with client meetings and design meetings … and until everybody is serious to begin conferencing at home I don’t think that work actually work for us.’

For some companies, however, home-working is something they are considering or have in place, subject to caveats:

‘Changes in legislation, availability of technology likely to mean more people will work from home.’

‘As part of corporate policy to improve work/life balance.’

‘New ways of working and new styles of managing ‘remote’ workers all encourage further home-working.’

‘[Home-working allows] more flexibility in working and recruitment.’

‘Book keeper/accounts currently working full time in office – from Jan 04 will work part week from home. Professional staff likely to increase the working from home.’

There is still a large emphasis placed on being able to do business face-to-face, even in some sectors which could be conducted 100% via computers. This is particularly important for corporate service companies, many of whom have clients based in the City.

Typically the model for home-working is that individuals tend to work at home when a particular task is made easier to do from home (e.g. writing and creative work) or when individuals need to be at home for personal reasons. They remain significant barriers to home-working that are both cultural and practical. Despite the fact that many companies have a positive attitude to home-working, there also remains a contradictory attitude about individuals’ genuine motives. As one interview put it, some colleagues still think that ‘if you’re working at home you’re not really working.’

Some organisations have decided not to require staff to work from home due to practical difficulties. These include the need to undertake a health and safety audit of their home workspace, but other factors must also be considered. For some staff their personal circumstances may not be suitable for home working at all. For example:
‘Young graduates probably don’t have the space because they may well be sharing a flat or house … with a number of other people to be actually able to work at home and have all the necessary facilities. … It also certainly applies to anybody with a family and children. I mean the last thing you’d want is a whole house full of pre-school children running round the place while you’re trying to write a report. … It’s the people at the older end of the spectrum that find it easier to work from home. Also by that time … you have enough seniority to sort of say “I shall be working at home tomorrow”.

2.9 Doing business in the City of London

Some of the attitudes towards homeworking are reflective of a deeper degree of anchoring for a City of London office location. The respondents were asked if they expected to still be located within the City of London in five years’ time. Only one respondent said they would not be (compared with 8% in 2002). Of the remainder, 31% anticipated still being located in the City but occupying more space than at present; 54% in the City and occupying the same space; and 15% in the City but occupying less space (compared with 12% in 2002).

The interviews with occupiers highlighted a number of difficulties that some companies face by being located in the City of London. For the office manager of a firm of consulting engineers:

“…the City is out simply because the City is so expensive in terms of office rent that the fee structure that we have for many of our project just does not support being in the City, simple as that … there are other organisations outside London that could quite easily do our work and they have a lower cost base … So the whole thing is a very fine balance between your expertise and your reputation as to why people come to your particular company relative to the fee that you charge. Why do you come to a London solicitor? Because you want the best advice.”

However, for other companies there will always be a pressing need to be in the City due to the ‘clustering’ advantages associated with key sectors such as financial services. This means that an alternative to a City of London location is not an option. This is particularly noticeable for those involved in the insurance industry, such as the software company:

“We would find it difficult to move more than ½ mile from … the Lloyds building. We do spend a lot of time going to see clients; they spend a lot of time coming to see us and there would be a lot of disadvantages to being say in the West End or even a mile east or west of here”.

The same company had been located in four different buildings since it had been established. No previous office was more than 100 yards from their existing location. The same interviewee reflected on the role of technology in this respect:

“Although technology makes life easier in terms of not having to visit them [clients] quite so often, nevertheless the City … is still very much a people, face-to-face, sort of business. … I don’t think that any change in technology that I can see in the next 5 or 10 years is going to mean that people will move out of the City if they are doing client-facing jobs.”

The latter point is an important one. Back office functions, such as routine paperwork is now no longer done in the City, where the cost of supporting such functions is now
prohibitive. For larger companies there has been the trend to occupy large floorplates in 'peripheral' locations. 'Peripheral' will mean different things to different companies, and will be determined by their budgets and the type of activities being relocated. For the large multinational insurance company we interviewed, the term, 'peripheral' included locations across the country, but also a large area of office space in East London.

“Not all out people need to be in The City, so our back office support, our broker support functions, our technical wording writings and writers for insurance policies are all sitting in [East London] and we have more of them sitting elsewhere in the country.”

A good example of this approach to the overall work of a business, that includes an element of outsourcing, is typified by the Mexican Wave system developed by the law firm Lovells for some of its commercial property work (see Box 1)

So, despite technology enabling companies to be footloose, many City based organisations find a City location to be unquestionable. These tend to be the businesses based within the financial services industries who themselves are heavy users of specialist information technologies. These companies still place an emphasis on the importance of face-to-face business dealings. In other industries, there is a more general need to have a London presence, but not necessarily a City of London presence. This is the case for one firm of architects, who also have offices in the north of England and Eastern Europe:

“I always see we will need an office in Central London, but it could be that it become very much more of a place where we employ the best thinkers, the best brains. … You are always going to get the best quality design people in London or New York or Paris – the big centres of population. You tend not to get these highly qualified people in Iowa. If they are good enough they leave Iowa and they go to work in New York or LA.”

---

**BOX 1 Mexican-Wave**

In October 2002, City law firm Lovells introduced a new way of undertaking property-related legal work for Prudential Property Investment Managers. The initiative, called Mexican-Wave, has been made possible by technological advances and address some pressing cost concerns for a City based business. Mexican-Wave allows Lovells to take full responsibility for the most complex aspects of PruPIM's legal work that required dedicated expertise from their lawyer. However, with any client, there are aspect of the work that are more routine and that attract a lower profit margin. These tasks are transferred to two other law firms where they can be undertaken a lower cost. Currently Lovells are using Cripps Harries Hall based in Tunbridge Wells, Kent and Knight & Sons based in Newcastle-under-Lyme in Staffordshire (Joy, 2002).

The whole system is built upon a new information system known as MexNet that connects Prudential with Lovells and the two regional firms. MexNet allows the efficient flow of documents amongst all the firms involved. Joy (2002) quotes Robert Kidby the Head of Property at Lovells:

“The technology allows us to work with a firm of solicitors in Newcastle-under-Lyme or Tunbridge Wells exactly as though they were sitting on the floor above us in Holborn Viaduct”

By introducing Mexican-Wave, Lovells have been able to pass significant cost savings onto Prudential, well beyond the variations in fees available from moving work to
different lawyers. It also introduces a high level of accountability between client and lawyer enabling Prudential to get the most out of the relationship and Lovells can better understand their client. However, despite there being three law firms involved, Lovells remains the single contact for the client (Jansen, 2003).

The system has been introduced at time of increased pressure on the property departments in City law firms with questions raised over the levels of fees, particular for low level work such as the drafting of standard leases. For City firms their cost of occupation are much higher than competitors outside of the capital meaning that the fees they charge have to be higher. For standard work this is seen as unsustainable. In light of Mexican-Wave, many large corporate clients are now demanding more creative schemes from their lawyers in an attempt to cut the overall legal cost by as much as 25-30%, and firms are having to consider such cost control systems in order to stay competitive (Romney, 2003).

Lovells are now in a position, having spent time developing the MexNet system to be able to roll it out to other large corporate clients that require it and it could easily be adapted for work in other areas of the practice.

**2.10 The Future**

Returning to the questionnaire, the final questions to respondents concerned their perception of the future direction of technology and eBusiness use within their organisation. How would particular business process alter and what will be the important eBusiness developments for their organisation?

The results (Figure 2.14) show a continued increase in online activity. Large proportions of respondents anticipate faster connection speeds, more email communications and more tasks done online.

The use of wireless networking also scores strongly here with 65% of respondents suggesting that there will be more use within their organisation. For the other aspects of technology that are listed, most consider they will stay the same. For instance 68% consider that to be no change in the amount of business travelling, and this therefore echoes the earlier finding that this would not be a particular important area for eBusiness cost savings. Some 70% of respondents consider that the floorspace per person will also remain unchanged, with 30% suggesting a reduction in the amount of space per person. This is a slight reduction on the 40% who took this view in the 2002 survey and there is little or no variation in terms of size of firm in the current survey.
The importance of broadband for various business processes in the future were ranked on a Likert scale of 1 to 5. Figure 2.15 shows the mean responses for all respondents. Instant email was considered to be the most important with a mean ranking of just more than 4, representing very important. Data transfers (uploads and downloads) were also important. Home-working also ranked highly, indicating that despite some of the conservative views on this style of work, companies will come under increasing pressure to improve these opportunities for their staff. Videoconferencing, instant transactions and instant notification of orders all ranked the lowest, probably indicating the specialist nature of some of these services and the longer timescale required before they could become commonplace in offices.

The importance placed on broadband appears to vary according to the size of the organisations concerned. The larger responding organisations place greater importance on broadband for online marketing, connecting offices, instant notification of orders, instant transactions and videoconferencing than the small organisations. This can be seen in Table 2.8, where the mean score for these items is substantially higher for larger organisations, representing very important or vital score levels.
Figure 2.15 Importance of broadband for business processes in the next five years

Table 2.8 Importance of broadband for business processes in the next five years, by size of organisation

<table>
<thead>
<tr>
<th>Mean score (on a scale of 1 – 5)</th>
<th>Size of organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 to 50</td>
</tr>
<tr>
<td>Online marketing</td>
<td>2.73</td>
</tr>
<tr>
<td>Connecting offices</td>
<td>2.36</td>
</tr>
<tr>
<td>Instant notification of orders</td>
<td>2.03</td>
</tr>
<tr>
<td>Instant transactions</td>
<td>1.96</td>
</tr>
<tr>
<td>Data upload / download</td>
<td>3.23</td>
</tr>
<tr>
<td>Home working / teleworking</td>
<td>2.87</td>
</tr>
<tr>
<td>Instant email</td>
<td>3.88</td>
</tr>
<tr>
<td>Videoconferencing</td>
<td>1.72</td>
</tr>
</tbody>
</table>

2.11 Business continuity management and planning

As part of the interviews for this research, companies were asked a number of questions regarding any business continuity management (BCM) provisions that they had put in place. Threats to business activity can come from a variety of sources. Indeed as Elliott et al (2002 :1) note:

“Greater reliance on technology and on fellow members of the organizational supply chain has increased the potential for interruptions.”
The potential risks also vary in magnitude from the day-to-day management of viruses on incoming emails, to a major civil contingency or terrorism attack. For the City of London the threats requiring the implementation of BCM have become real since the IRA bombings in the early 1990s in St Mary Axe and Bishopsgate, and the more recent attacks on the World Trade Center in New York in 2001. At a strategic level, systems and plans are in place for major incidents that require the presence of the emergency services. However, there is much that individual occupiers can do be reduce risks and cope with interruptions to their business, whatever the cause or scale.

Business processes have clearly changed radically since 1993, the year of the IRA bombing of Bishopsgate. The use of technology is the most striking example of this, and technology itself could also act as an important tool for companies to respond to particular incidents. The need for contingency plans, in particular for IT systems, has long been recognised, and recovery planning had also been a part the IT management function at the early stages of computerisation of business activities, partly due to systems being unreliable. Despite this, however very little attention was paid to the risk facing other assets, such as buildings and accommodation (Varcoe, 1994).

BCM is described by Elliot et al (2002) as a new and evolving discipline whose roots lie in the ICT industry, and it is through investment in technology that its need has been highlighted the most. As Elliot et al point out, in a network society, businesses ‘increasingly depend upon each other and upon key services and technologies’. The introduction of web-based services means that customers have an expectation that companies will be available at all times.

The interviews with companies explored the provisions they had put in place to overcome any setbacks that may prevent day-to-day activities continuing in their present location. Two of the interviewees had past experience of such setbacks. One company had suffered a recent local power supply failure, while another had previously occupied a property close to the Baltic Exchange and suffered some damage following the IRA bombing in 1992.

There was a strong correlation between preparedness and size of organisation. The two largest companies we interviewed had made detailed plans in the event of an emergency situation. One multinational company interviewed has its own dedicated team at work on BCM who continually ensure that the strategy is constantly under review. This includes a partnership arrangement with a company that can provide up to 250 spare workspaces with no notice in the event of an emergency. However the company had not gone as far as taking additional space which it did not occupy day-to-day – so called ‘dark space’.

Due to the size of the organisation, and the internal cost systems that they operate, each cost centre in the company is charged for BCM provision. This is approximately £2.50 per head. With the BCM systems in place, the company could be back in action a maximum of three days after the event. The cost of a dark space site would increase the levy still further.

The remainder of the companies interviewed had no formal BCM strategy in place, other than that directly relating to IT. This ranged from the basics of data backup to some off-site backup, either to a server farm or to partner’s home PCs. For a number of smaller firms the latter was the main fall back in the event of an emergency that prevented access their building. Medium sized firms would either resort to this option or temporarily transfer work to one of their other offices around the country.
3 Conclusions

3.1 Introduction

The concluding section of this report summarises the key themes emerging from the current survey in comparison with the 2002 survey. The conclusions are presented in terms of:

- Emerging themes;
- Key issues; and
- Further research.

3.2 Emerging themes from the surveys

3.2.1 Pervasive technology?

The 2002 and current surveys show that connectivity for City firms is ubiquitous. The use of broadband has also widened to include more organisations (87% compared with 73% in 2002). The main take-up of broadband has been within the last three years, although around 30% had invested in high-speed access before 2000. Just as connectivity is ubiquitous, so also is email. Company websites, for example, are nearly used by all respondents. Email, LANs and websites are also considered to be the most important eBusiness tools available to companies. Compared to the previous survey in 2002, increased importance is being placed on these services. Videoconferencing use also increased form the 2002 survey, with the greatest extent of use occurring in financial services companies. IP telephone and WiFi technologies are also increasing in use.

A greater proportion of companies are undertaking a greater number of processes through their broadband connection. All process showed increases in online share since the 2002 survey, with the greatest increasing for staff-related processes including staff recruitment and training.

The evidence of ‘digital divide’ in the City between SMEs and larger companies is not as evident as in 2002, although our survey this year had lower numbers of SME respondent organisations. However, the survey does show that larger organisations have a greater propensity to use eBusiness tools for more processes than their smaller counterparts.

3.2.2 Business process change

Although most companies do not feel that eBusiness is necessarily something that leads to new revenue streams or customers an increasing number of respondents (50%, up from 35% in 2002) do believe eBusiness is at least 'important' to their business. Companies are also increasingly using the Internet for online service / product provision; recruitment, and project management.

Human resource issues were also again highlighted as being important, and the interviews revealed that business continuity planning was an increasingly important issue in the wake of increased risks to City-based businesses.

3.2.3 Home-working

The approach the home-working falls into to broad camps: those companies for whom it is not an option and those companies who encourage it for some staff. Even so there was general agreement from all types of companies that the face-to-face contact with
clients and colleagues remained very important. Hot-desking appeared still to be relatively infrequent but some 50% of respondents expected home-working to increase in their organisations over the next 5 years.

3.2.4 Buildings and infrastructure

Although some 50% of respondents occupied pre-1960s buildings, 98% believed their premises were ideal or suitable for their current level of activity. Density was considered too high in just 4% of cases, and larger companies tended to be more satisfied with their premises. Most organisations (75%) felt it was about right, with 21% under-utilising their space with low densities. This compares with 71% and 17% respectively in the 2002 survey.

Respondents from larger organisations appear to use space more efficiently than small organisations. For example, those organisations with over 250 employees occupy an average of 11.5 m² per person, compared to 20.4 m² per person for small companies with 6 to 50 employees. Those respondents who suggested that their occupational density was too high, occupied 13.5 m² per person on average, compared to 26.6 m² per person for those considering it to be too low.

3.2.5 Locational pull of the City

It was clear from the survey and the interviews that as in 2002, the City continues to have a hugely important pull on companies, particularly those that require face-to-face contact with clients. Although technology is leading to process change, transport difficulties and human resource issues were equally as important as ICT in driving such trends as home-working.

Respondents believed that over the next 5 years Internet connection speeds would increase; the tasks carried out online would increase; and people would use email even more. Moreover, nearly 50% of respondents believed that their staff would be doing even more home-working than today. However, business travel would still be an important part of corporate functions.

Some 30% of respondents believed they would also require less space per person in 5 years’ time, with some 70% suggesting no change. This corroborates the findings for density under section 3.2.4 above, adding weight to the argument that oversupply may yet be a feature in the City over the next 5 years as ICT continues to transform business.

As in 2002, the majority of City companies in the survey appear ‘London-centric’ in supply chain terms and ‘City-centric’ in client terms. But, anecdotally, SMEs face particular pressures from rents/rates in the City. For larger organisations and those facing less pressure, the locational pull of the City, particularly in client and face-to-face contact terms, transcends the centripetal forces of technology, although in some sectors ICT is becoming an increasingly important driver for change.

Similar themes followed through into the continued future of a City of London office location. Financial services companies in particular saw no alternative due to the importance of regular face-to-face contact. View were more mixed in other sectors, in some cases due to the high cost of occupying London office space and concerns about public infrastructure.

Therefore the future envisaged by companies is one in which eBusiness will play an increasingly important role. This is particularly noticeable for larger organisations whose large workforce and turnovers will allow continued investment in these technologies.
3.3 Key issues

3.3.1 Implications for office space demand

On the face of it, rising densities and moves to home-working could, by reducing space through improved productivity, spell danger for office space. However, in the same way that ICT will not mean the end of cities, it is premature to talk about the ‘death of real estate’. The trend is likely to be subtler in emphasis therefore, and work by PriceWaterhouseCoopers (2000) has examined the changing nature of real estate in the ‘new economy’ \(^9\). For an eBusiness (as opposed to a ‘conventional’ business) physical capital and working capital may be seen as being less important than customers and company employees (i.e. skills and knowledge) as shown in Figure 3.1.

Figure 3.1 Real estate in the old and new economies (adapted from PriceWaterhouseCoopers, 2000)

![Diagram of real estate in old vs. new economies]

What we are likely to see more of in the City of London and other global cities, is a growing trend towards separation of front and back office operations. Back office operations are extremely cost-driven and with recent call centre outsourcing from the UK to India and China, we may be seeing a downsizing shift in back office operations with consequences for real estate demand in that particular sector. As London Property Research / EGI (2003) point out, Bombay can beat London by a factor of at least five on labour and property costs\(^{10}\).

However, there is also an element of ‘fallacy’\(^{11}\) in so-called productivity arguments (Bean, 2003 and Bootle, 2003) and the way in which they are often posited in terms of real estate impact. Technological advance does not automatically reduce jobs (Dixon et al, 2004 and Dixon et al forthcoming). Although technology may lead to job losses in some firms and some sectors by enabling the same output with less labour, it may not necessarily, because the lower cost of production may allow a firm to lower prices and so boost demand for its product. Whether employment rises or falls therefore depends on how much the demand for the product is affected by price (Landmann (2002)).
means that it is simplistic therefore to extend the logic and argue that improved productivity created by ICT automatically leads to job loss and reduced space demand. For example, although home-working is growing in popularity, it does not necessarily reduce the demand for office space and may increase the demand for residential office space (Greater London Authority (2002)).

In summary, although the emphasis is shifting in office sub-sectors, and although outsourcing of key operations, such as the management and maintenance of real estate may seem to be an inevitable consequence of the shift towards intangible assets, real estate has not, and will not, 'disappear'. Indeed, what we are also seeing is the mapping of new growth and technological infrastructure onto areas of existing economic activity (Local Futures Group, 2001) such as the City of London, and the South East in the UK, because of the benefits of clustering (Trends Business Research, 2001).

3.3.2 Business continuity management (BCM)

The interviews highlighted the growing importance of BCM for businesses in the City. This is driven by increasing risks and the growth of new technology, both of which are leading larger organisations to increase their demand for flexible space to cater for emergencies. A recent London Chamber of Commerce and Industry (LCCI) study (LCCI, 2003) found, however, that 83% of London SMEs had neither a written security policy nor a written contingency plan. Yet the same research found that 43% of companies experiencing disaster never recover. This is particularly worrying when it comes to IT infrastructure and equipment, often involving a number of players and complex systems.

Working on another site may well be a perfectly possible outcome of a disaster and it is important that businesses make provision for this. The best companies are proactive, and plan ahead. This may involve (London First, 2003):

- Making a mutual agreement with another company to use facilities;
- A 'cold site' agreement, where a temporary building can be erected on a suitable site, usually by a business continuity supplier; and,
- A 'hot site' agreement, often provided by a specialist business continuity company who will normally have desks available within 4 hours. This is usually a costly option.

The results of our interviews suggested that the 'gap' between larger and smaller companies in terms of BCM is noticeable, and has implications for space planning and space provision in the event of a variety of risks (terrorism, flood, fire and so on). Although this was not evident from our interviews, we also know anecdotally that some companies have made provision for 'dark space' which they did not occupy day-to-day, but lease in case of emergencies.

3.3.3 The future

It is clear that ICT will continue to play an important role in transforming business carried out in the City of London. Wireless technology is increasing in popularity and occupiers are becoming more demanding with faster connection speeds anticipated and an increasingly large number of tasks carried out online. Connectivity is now ubiquitous, with broadband now adopted by as many as 87% of companies, although larger companies are placing greater emphasis on its use for wide range of tasks.

However, in the future, the impact of eBusiness will continue to be largely influenced by the nature of the product or service under consideration. This theme has also been
explored by Leamer and Storper (2001) in a spatial context. They categorise processes according to the character of the information needed to use them (Table 3.1).

**Table 3.1 Messages, Transactions and Location of Standardised and Specialised Products (adapted from Leamer and Storper, 2001)**

<table>
<thead>
<tr>
<th></th>
<th>Mass-produced, Standardised Products</th>
<th>Specialised, Customised and Innovative Products</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Messages</strong></td>
<td>Codified, transparent</td>
<td>Tacit</td>
</tr>
<tr>
<td><strong>Degree of intermediate transacting</strong></td>
<td>Low (high scope economies)</td>
<td>High (low scope economies, high roundaboutness)</td>
</tr>
<tr>
<td><strong>Degree of agglomeration of supply chain</strong></td>
<td>Remote/low aggregation</td>
<td>Market-centred/agglomerated</td>
</tr>
<tr>
<td><strong>Location of production/distribution in relation to markets</strong></td>
<td>Remote</td>
<td>Indeterminate</td>
</tr>
<tr>
<td><strong>Examples</strong></td>
<td>Dispersal: consumer banking and finance</td>
<td>Agglomeration: Design-driven retail</td>
</tr>
</tbody>
</table>

For example, mass-produced, standardised products can be codified and shipped separately form the product in the form of specifications, blueprints, standards and so on. This therefore allows geographical distance between buyer and seller. However, if the product is non-standardised it cannot be so easily expressed in a codifiable form: the principle way is of verifying the product's qualities is then by touching, feeling or knowing the product. This leads to a much more market-centred focus to the product and thus geographic proximity is important. The Internet has the power to shift these relationships and can lead to both increased 'clustering' and increased 'dispersion' through:

- increases in product variety;
- increases in the fineness of division of labour, or 'roundaboutness', which is the number of intermediate steps to produce a final output); and
- the automation of intermediation/coordination tasks (disintermediation).

Leamer and Storper (2001) suggest that the ways in which a new ICT, such as the Internet, interacts with production and its geography will be many and varied, and there will be no single business model that is created, but rather that complex feedbacks to specialisation and divisions of labour in different sectors will occur. The exact geographies of new mass variety sectors such as designer retail, consumer-driven manufacturing and parts, new consumer services (customised take-out food, Internet-ordered home repair) and knowledge inputs to production will be determined by whether the input-output relations are 'conversations' or 'handshakes'. Sectorally, we would therefore expect to see greater changes in businesses associated with the greatest level of ICT adoption, in terms of business/process change, or in terms of the type of product sold (for example, travel, financial services, the ICT sector itself and some retail trades (books, CDs).
3.4 Further research

At the 'real estate level', some argue (see, for example, Lizieri, 2003) that the impact of business reorganisation and new working practices on corporate office real estate is less dramatic than often supposed, because of the importance of 'institutional' barriers. However, the current research in the City (and see also Dixon and Marston, 2002b and Dixon et al, 2002c), has found a growing impact of ICT in both the retail and office sectors. Moreover, the issue is not one of lack of impact of ICT, rather part of the problem with much of the research in this field is that it is cross-sectional in nature, preferring to take snapshots in time rather than tracking trends longitudinally. The current survey has shown that tracking change is possible but that survey cohorts need to be as close in comparison as possible.

This view also suggests we may therefore sometimes be missing changes caused by ICT, because in organisational management and business process, the changes are much harder to map. It is inherently more difficult to identify 'step changes' in process if you have only recently become part of the 'revolution' in technology, and part of the issue may also be connected with who is surveyed in these studies, what their role is in the organisation, and how they see technological change as altering their business models. Focusing too narrowly on the institutional barriers to ICT could therefore compound the problems we must resolve in order to measure and identify the precise nature and impact of technological change. New frameworks are therefore needed.

Future research on the impact on ICT is more likely to achieve tangible and measurable results if longitudinal studies such as the current study are developed to identify temporal and spatial change, and if ICT is placed in context within a 'socio-technical framework' that acknowledge the importance of ICT alongside other factors. To adopt a deterministic slant risks propagating myths. Although research on the impact of office design/layout on worker productivity appears well-developed in FM (see, for example, Price (2002) and Mawson (2001)), in our view, continued research is needed to address the linkage between the impact of ICT and productivity on space demand and supply in the office sector and sub-markets, using a longitudinal approach, based on benchmark surveys and case studies. This would then potentially enable change to be mapped more accurately.

What is clear is that the City of London still continues to be a vibrant and robust economic centre. ICT has acted in alliance with other factors such as human resources and transport issues to shape the City's destiny, and will continue to shape its future. It will be important therefore to continue to monitor changes in office demand and densities due to this combination of forces.
References


ContactBabel (2003) *UK Contact Centres in 2003: Executive Summary*


3 This is a fairly 'open-ended' definition of home-working. In the 2003 survey, a more precise definition of home-working was used to determine the proportion of time spent on home-working.

4 Although this is a relatively low response rate it is one that is to be expected in a location such as the City of London or any other large business centre. A good comparison is a survey
conducted by Tien Foo (2002) in Singapore that targeted 500 companies in the core of the Singapore Central Business District. Only a 9% response rate was achieved in that survey.

A low number of sq meters per person indicates a high occupational density. A high number of Sq m per person indicates a low occupational density.

1 = not important; 2 = quite important; 3 = important; 4 = very important; 5 = vital

The procurement through an online aggregator was the exception to this rule.

The procedures for emergencies in the City of London are laid out in (LESLP, 2003).

In this research we adopt the following definition (Progressive Policy Institute, 1998:8): ‘a knowledge and idea-based economy where the key to job creation and higher standards of living are innovative ideas and technology embedded in services and manufactured products’.

More than 2.8% of the British workforce is a call centre operator and currently is the fastest growing employment sector. The UK has 4,300 call centres (ContactBabel, 2003), and when jobs disappear overseas, it may be difficult to replace them.

This is often referred to as the 'lump of labour fallacy' by economists. For example, in France in 2001 the Government courted controversy by introducing a 35 hour week, not only to promote a better work-life balance, but to effectively share work, because the argument went, if people did not work so long there would be more work to go around. However, this assumes a fixed 'lump' of work, which is not the case, because the level of jobs is dependent on aggregate demand: if one person gets a job it does not necessarily means another loses one.