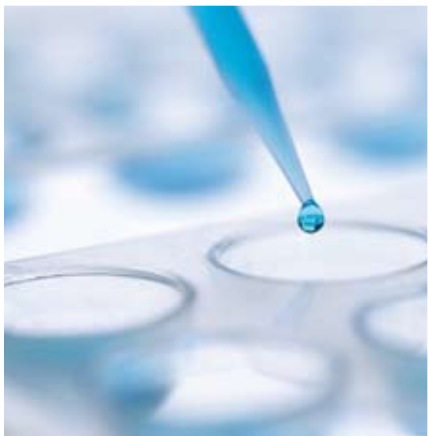


AUSTRALIAN INDUSTRY GROUP AND DELOITTE
NATIONAL CEO SURVEY



High Speed to Broadband:

Measuring industry demand for a world class service

October 2008

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High Speed to Broadband:

Measuring industry demand for a world class service

October 2008



Key Messages



Key Messages

High speed broadband is set to transform our economy...



Welcome to the third report in the new series of the Australian Industry Group/Deloitte surveys exploring the views of Australian business leaders on major economic policy issues.

Denise Caruso, a well known digital commerce commentator, once said, “the Internet has evolved into a force strong enough to reflect the greatest hopes and fears of those who use it”. She was right; and there can be no denying the increasingly powerful role the Internet is playing in driving business productivity and economic competitiveness. It was the Internet, along with related developments in ICT that contributed to Australia’s strong productivity growth in the nineties. And it is the Internet that stands to help Australian industry prosper and grow in an increasingly competitive, 21st century global economy.

This report focuses on a major development that has the potential to transform our economy - the move to faster, high speed broadband. *High speed to Broadband* highlights how Australian businesses stand ready to embrace new technology; with the overwhelming majority wanting to move to high speed broadband, and two-thirds believing their companies will benefit greatly from improved operations and efficiency as a result. Indeed, many are prepared to pay a premium price for such a service, whilst the majority regard the reliability of the service as the critical factor determining uptake.

There is a particular desire for high speed broadband from regional businesses eager to seize the commercial opportunities arising from a high speed connection to the rest of Australia, and the rest of the world.

Unsurprisingly, the survey’s findings are not all positive. The evidence suggests that a significant proportion of firms are failing to utilise the full potential of existing technology, with others remaining in the dark over what high speed broadband can do for their business. A lack of appropriate skills, particularly amongst smaller companies, reinforces the need for investment in ‘next generation’ training to go hand-in-hand with the development of a ‘next generation’ network.

It is not overly dramatic to claim that Australia now stands at the crossroads. Whilst there may be some debate over how the Rudd Government’s promised National Broadband Network should be built and operated, the report’s findings show there is little debate over its future importance to the Australian economy. A high speed broadband network is now urgently needed by Australian industry, with our country and our economy standing to benefit disproportionately from its deployment.

Heather Ridout
Chief Executive
Australian Industry Group



There is no doubt that the establishment of the national broadband network will fundamentally change the way we do business in Australia. From construction to implementation, this network will create a whole new range of business activity.

Eight per cent of the respondents in the National CEO Survey, *High Speed to Broadband* indicated that they will be involved directly in the construction of the network. While over half of the companies surveyed intend to train existing staff to improve skills and capabilities (58.3%), another 24.7% will sub-contract the required capabilities. This will allow them to leverage the potential of increased connectivity once they have access to a new broadband network and its wider implications.

It is clear that job growth resulting from the deployment of a broadband network will stem not only from the immediate demands that arise from the construction, deployment and maintenance of the broadband network but from the longer term indirect demands that will be associated with new products, services and applications.

We will see this translate into enhanced applications and services such as video conferencing, video on demand and VOIP into the home and in fact 80% of respondents consider access to low cost telephony and expanded communications networks to be a very important or moderately important benefit of faster broadband.

The respondents of this survey are from the construction, manufacturing and services sectors, each of which will be impacted strongly by the construction and implementation of the broadband network. However it is only once we deploy the network that we will understand the *true art of the possible*: the limitless possibilities and opportunities that can impact every aspect of our lives.

Damien Tampling
Lead Partner
Technology Media and Telecommunications
Deloitte Australia

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Executive Summary



Executive summary

Broadband increasingly key to Australia's economic success...

Overview

A clear message has emerged from this survey of Australian business leaders: the development and deployment of a high speed (national) broadband network is now seen as crucial in building the future competitiveness of both Australian companies, and the Australian economy.

Internet access has for some time been viewed as a business fundamental. However, the advent of high speed networks has increased both the business appetite for, and commercial application of, such technology. Today, as this survey confirms, broadband is being used as a tool to drive the productive capacity and innovative behavior of many Australian firms.

The overwhelming majority of Australian businesses now have some form of internet access, but the absence of an effective, and truly national, high speed broadband network has meant that many have failed to take advantage of the new applications and 'next generation' services available. Business efficiencies, productivity gains and other commercial benefits have been lost as a result.

The evidence from the global marketplace is equally clear: Australia's competitors are alive to the economic importance of high speed broadband networks and are taking action accordingly. Regrettably, a recent World Economic Forum report showed Australia lagging behind other developed countries in a number of crucial areas, including the cost of broadband, the number of high speed broadband subscriptions and access to digital content across a wide range of platforms.

The Federal Government's intention to build a National Broadband Network over the next five years is recognition of both Australia's current performance, and the potential economic gains stemming from a widespread increase in e-business intensity. Its deployment is something that Australian industry overwhelmingly supports.

A total of 526 Chief Executive Officers, representing companies with sales revenue of more than \$82 billion, and employing around 215,000 people, responded to this survey - an additional indication of the importance Australian industry place upon this matter. The views of Australian businesses matter; and it is hoped that the findings of this survey will help inform the wider public debate around how best to deliver Australia's National Broadband Network.

Key Findings:

1. Two-thirds of Chief Executives (66%) believe their business will benefit greatly from a faster broadband network (page 24).
2. Almost three quarters of all businesses (73.5%) indicated that they were likely to upgrade to high speed broadband, if available (page 25).
3. The desire for high speed broadband is highest among firms located in regional areas. More than three quarters of such firms indicated they were likely to upgrade their connection, more than their metropolitan counterparts (page 25).
4. Reliability of service is the dominant factor influencing the uptake of high speed broadband. Almost half of companies ranked this as the most important issue affecting their decision to connect; followed by the price of service (page 26).
5. A quarter of all companies indicated a willingness to pay a 'premium price' for their business to gain access to higher speed broadband (page 27).
6. The ability to download large data files is considered the most important benefit of a faster network, with 90.5% of respondents regarding this as very or moderately important (page 29).
7. A faster broadband network is likely to result in considerable increases in all areas of business activity for Australian firms (page 31).
8. Small firms are more likely to lack the skills and capabilities to take advantage of the commercial opportunities that will arise from a faster broadband network (page 33).

Other Points of Interest:

9. The proportion of businesses with internet access via broadband connections had more than doubled in three years to reach 90.0% (page 12).
10. A significant proportion of survey respondents, 39.2%, indicated that they were unaware of their current internet connection speed (page 17).
11. Internet access is seen as highly important to the business operations of 85.1% of respondents (page 18).
12. 69.9% of firms surveyed indicated that they believe that internet provides their business with a 'strategic advantage' (page 19).
13. Over 93% of companies indicated that the internet has had a positive impact on their efficiency/productivity (page 22).



Study Details



Study details

The most current reading of Australian CEO opinion on high speed broadband...

The Context

- Broadband plays a key role in building competitive advantage in the Australian economy. It is increasingly becoming a fundamental tool to improve the productive capacity of, and innovation in, Australian firms. It drives electronic business practices by creating new ways of doing business, enabling efficiencies in corporate and manufacturing systems, and generating new products and services.
- By utilising broadband smartly companies are better able to move from a product focus to a customer focus, develop closer online relationships, engage in web-based ordering and adopt advanced communications systems.
- The manufacturing sector in particular is dependent on the potential of broadband to increase its participation in globalised markets and value chains. New knowledge can be brought to the key functions of design, production and distribution through e-business. Broadband can underlie all levels of the manufacturing production process: research & development; design & engineering; purchasing & logistics; operations; marketing; sales & order management; post sale service; and product content & design.
- The Australian business sector currently spends over \$6 billion on data services, with an annual growth rate of between 10-15%¹. In 2006-07, the proportion of businesses with internet access via broadband connections had more than doubled in three years to reach 90%². As new opportunities for connectivity emerge through applications linked to broadband, the interest from firms of all sizes, including small and medium enterprises (SMEs), increases.
- While most businesses have some form of broadband access, without high speed broadband, firms are limited in their ability to take advantage of rapidly advancing new communication/electronic business tools and next generation applications that could provide them with increased efficiencies, or potential new products and services.
- The World Economic Forum's Global IT Report³ shows Australia currently lagging other developed countries in a number of information technology indicators, including cost of broadband, high speed broadband subscriptions and access to digital content across a wide range of platforms.
- The uptake of high speed broadband is related to a number of factors such as: affordability; reliability; lack of awareness of capabilities/perceived benefits; company skills and expertise; or low understanding of new technologies and packages.
- SMEs in particular currently face cost barriers in their ability to load remotely hosted applications onto their local area connections. Regional and rural businesses face other barriers such as speed, reliability and capacity to transact/communicate online.
- Recognising the gains to the Australian economy of widespread, increased e-business, and acknowledging the factors impeding uptake of high speed broadband, in April of this year the Australian Government announced its intention to build a National Broadband Network. The network promises a new open access, high speed, fibre based broadband network, providing download speeds of at least 12 megabits per second to 98% of Australian businesses and homes to be rolled-out over the next five years.

Background

- In order to better understand how central broadband is to business; and to inform policy on this issue, the Australian Industry Group (Ai Group) and Deloitte undertook in August of this year a comprehensive survey of Australian CEOs on current and future use of broadband and its impact on business.
- A total of 526 CEOs in the manufacturing, services and construction sectors participated in the study. Respondents include Ai Group member companies and non-member companies across Australia.
- These companies have sales revenue of around \$82.5 billion and employ around 215,000 people.

Objectives

- The overall objective of the study was to gain an understanding of the importance to business of broadband now and anticipated under the National Broadband Network.
- While some businesses are already making use of higher speed broadband, the study's focus is on the much faster speed access that will be expected from the National Broadband Network.
- The study explores current broadband usage, its importance in business operations, whether it has impacted on efficiency and whether it provides a strategic business advantage for companies. It looks at anticipated up-take and benefits of high speed broadband through the National Broadband Network and the key factors determining up-take.
- The likelihood of businesses increasing activity in a broad range of business activities as a result of adopting high speed broadband is examined.
- The readiness of business in terms of skills and capabilities to take advantage of new opportunities, applications and services is gauged, as are the likely strategies to be used to increase capabilities.
- Finally, the expected involvement by companies in the construction and maintenance of the network is explored.

The report

- The report outlines the findings of each of the 22 questions asked in the survey and presents these in broad sections:
 - Current internet usage
 - Benefits from a faster broadband network
 - Construction of the network.
- The survey was distributed to a random sample of companies from the manufacturing, services and construction sectors.
- The report has been designed so that it can be read from start to finish, or the reader can focus on key themes of interest.

¹ Paul Budde Comm, Australia Broadband Market Overview and Statistics 2008

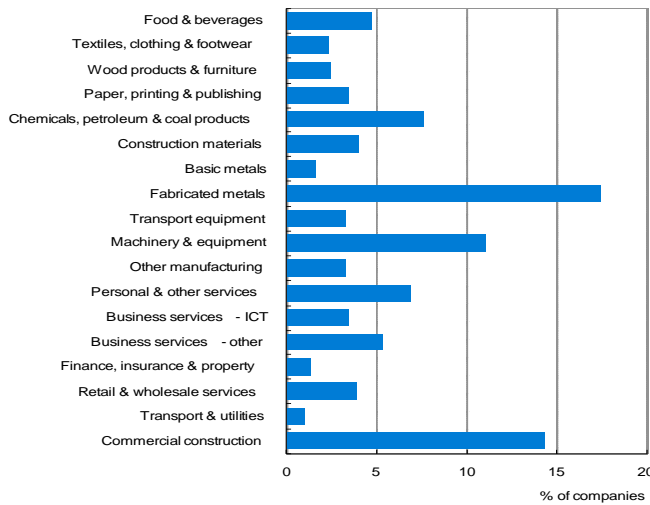
² Australian Bureau of Statistics, Business Use of Information Technology, 2005-06 – ABS Cat. No. 8129.0 December 2007. The ABS defines broadband as an 'always on' Internet connection with an access speed equal to or greater than 256kbps.

³ World Economic Forum, Global Information Technology Report 2007-08

Details of companies in the study

The study includes a diverse range of sectors and companies...

Chart 1: Companies in the study by sector



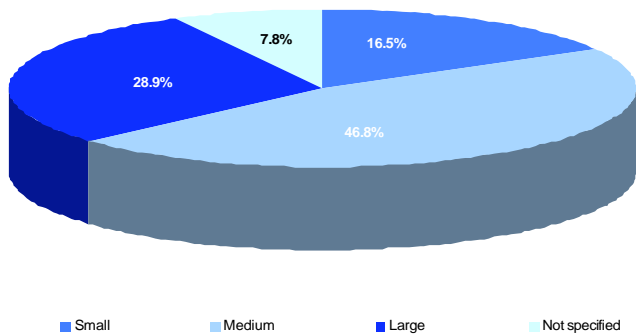
Companies by sector

- Data was collected from 526 companies with total employment of around 215,000 and total annual turnover of \$82.5 billion.
- Data was collected on 18 sectors across the manufacturing, construction and services industries.
- The fabricated metals sector provided the highest number of participants (17.5% of all respondents), followed by commercial construction (13.7%); machinery & equipment (11.0%); and chemicals, petroleum & coal products (7.6%).

Companies by size

- The survey generated a relatively even distribution across firm sizes.
- The largest proportion of CEOs surveyed was from medium-sized firms of 25-100 employees, representing 46.8% of respondents.
- Small firms of fewer than 25 employees accounted for 16.5% of respondents, while large firms of 100 or more employees represented 28.9%.
- 7.8% of respondents did not indicate the number of people employed.

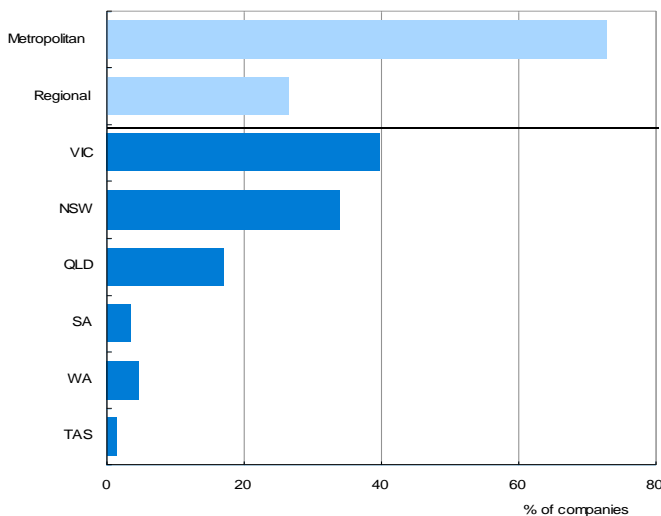
Chart 2: Companies in the study by size



Companies by location

- Data was collected from each of the six states, with respondents also asked to specify whether their location is regional or metropolitan.
- Most companies that responded were city-based with 72.9% saying they were primarily situated in a metropolitan location. Around one quarter (26.0%) of respondents were from a regional location.
- Victoria recorded the highest number of respondents (39.7%), followed by New South Wales (34.0%) and Queensland (14.0%).
- Western Australia provided 4.6% of the respondents, with South Australia and Tasmania representing 3% and 1.3% of total respondents respectively.

Chart 3: Companies in the study by location





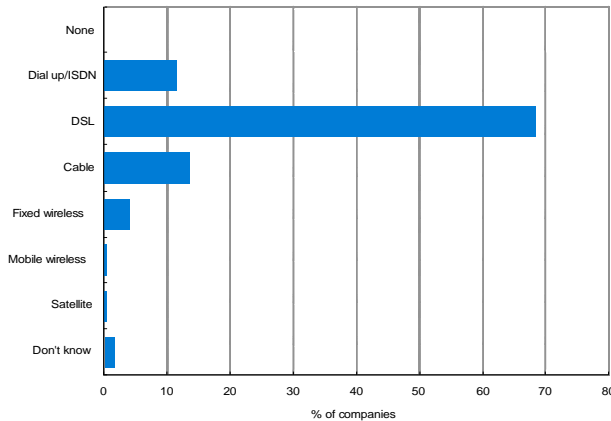
Current Internet Usage



Main type of internet connection

Digital Subscriber Line (DSL) is currently the pre-eminent mode of internet access...

Chart 4: Main type of internet access

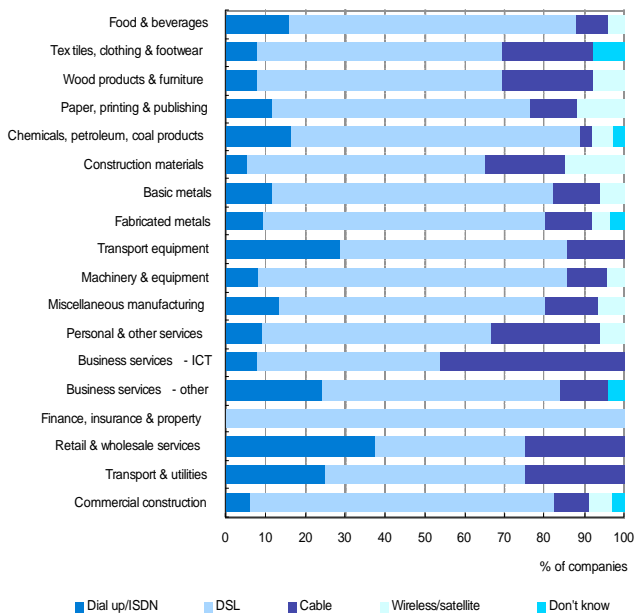


To assess the usage of different modes of internet accounts across business, the survey asked CEOs what is the main type of internet access used in their business.

Overall finding

- All respondents to the survey currently have some form of access to the Internet.
- Digital Subscriber Line (DSL) access is the main mode of internet connection for 68.5% of respondents
- A relatively small proportion (11.6%) employ dialup/ISDN as their main mode of internet connection, while 13.5% use cable access.
- Wireless, mobile, fixed, and satellite access together account for 4.8% of connections, while 1.7% of respondents did not know which type of access their business employs.

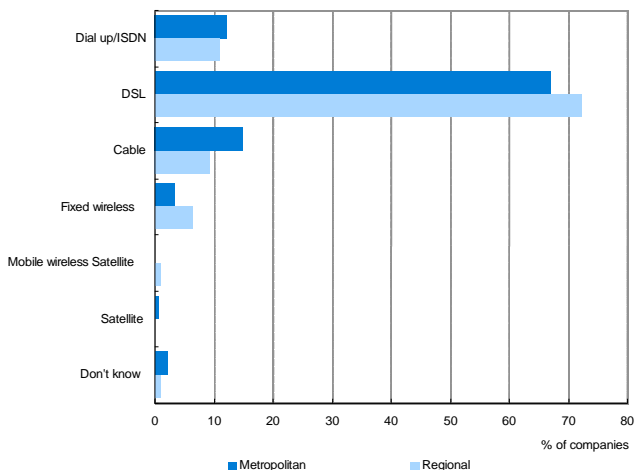
Chart 5: Main type of internet access by sector



Main type of internet connection by sector

- The clearest pattern revealed by the responses to the survey is the prevalence of DSL in most sectors as the main mode of internet access.
- The exceptions to the prevalence of DSL are the ICT business services sector, which uses cable (46.2% of respondents) and the retail & wholesale services sector which uses dialup/ISDN (37.5%), to the same degree as they use DSL. Beyond the prevalence of DSL there are few patterns in terms of internet access mode across sectors.
- A number of sectors have very low rates of dialup/ISDN usage including: construction materials (5%); textiles clothing & footwear; wood products & furniture and; ICT business services (all 7.7%). These sectors have relatively high rates of cable/wireless/satellite usage, 35.0%, 23.1% and 46.2% respectively. However, other sectors with low rates of dialup/ISDN, including machinery & equipment (8.2%); commercial construction (5.9%); and fabricated metals (9.3%) have relatively low rates of cable/wireless/satellite usage.
- Sectors with above average use of older technology are just as likely to use newer forms such as cable, wireless or satellite. For example, the retail & services sector, which is the sector with the highest share of dialup/ISDN (37.5% of responses) in its internet connections, is also the sector with the joint third highest share of cable usage (25%). Similarly, the transport & utilities sector, with a dialup/ISDN share of 25% is the joint third highest user of cable access.

Chart 6: Main type of internet access by region



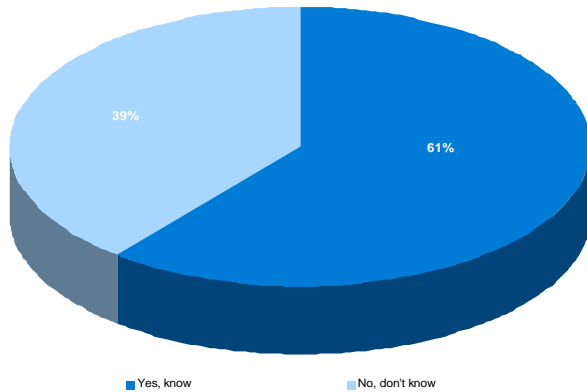
Main type of internet connection by region

- There is limited difference in the main modes of access to the internet between regional and metropolitan respondents to the survey.
- DSL usage is moderately higher at 72.1% among regional users than metropolitan users at 65.8%. Conversely a higher share of metropolitan respondents, 15.0%, uses cable access than regional users at 9.3%.
- Wireless (both fixed and mobile) usage, while relatively low in both cases is higher in the regions (7.0%) than in metropolitan areas (3.5%).

Awareness of the speed of internet connection

Almost 40% of organisations do not know their internet access speed...

Chart 7: Knowledge of internet connection speed



Users have a range of access speeds reflecting their choice of access mode and supplier. The survey asked CEOs to indicate whether they were aware of the speed of their company's internet connection.

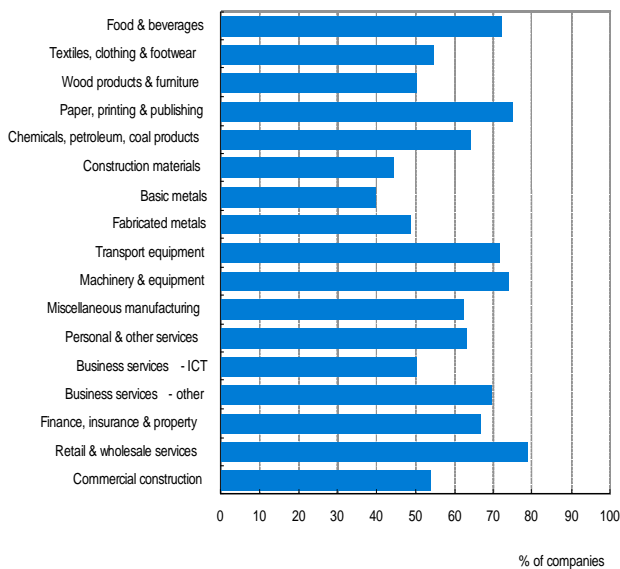
Overall finding

- Whilst a significant proportion of survey respondents, 60.8%, indicated that they knew their connection speed, it is surprising that 39.2%, a sizeable minority, did not know.

Knowledge of internet connection speed by sector

- There is no clear sectoral pattern in terms of firms' knowledge of internet connection speed. Services firms, for example, are no more likely than manufacturers to know the speed of their internet connection.
- The leaders in terms of knowledge of connection speed are the retail & wholesale services (78.6%); paper, printing & publishing (75.0%); and machinery & equipment (74.0%) sectors.
- The sectors with the weakest knowledge of connection speed are the basic metals (40.0%); construction materials (44.4%); and fabricated metals (48.8%) sectors.
- Surprisingly the ICT business services sector ranks relatively lowly, with 50.0% of respondents being aware of their connection speed.

Chart 8: Knowledge of internet connection speed by sector



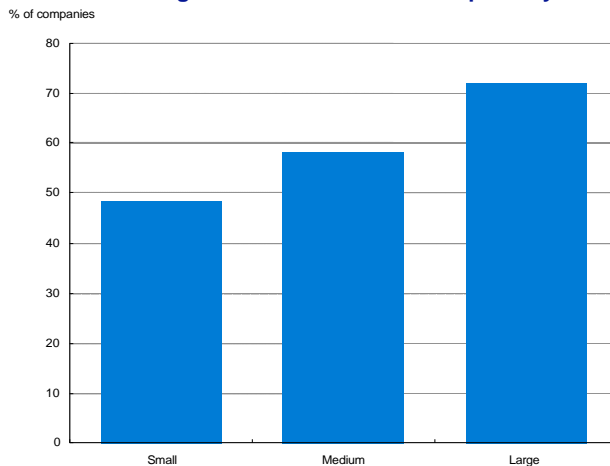
Knowledge of internet connection speed by region

- The knowledge of internet connection speed differs only moderately in terms of a regional/metropolitan comparison.
- 61.3% of metropolitan and 58.4% of regional respondents to the survey know their connection speed.

Knowledge of internet connection speed by size

- Knowledge of internet connection speed differs significantly in terms of a firm size comparison.
- 48.5% of small firms know their connection speed compared with 58.3% of medium-sized firms and 72.2% of large firm respondents to the survey.

Chart 9: Knowledge of internet connection speed by size



The importance of internet access for business operations

Internet access is seen as highly important to 85.1% of companies...

Chart 10: Importance to overall business strategy

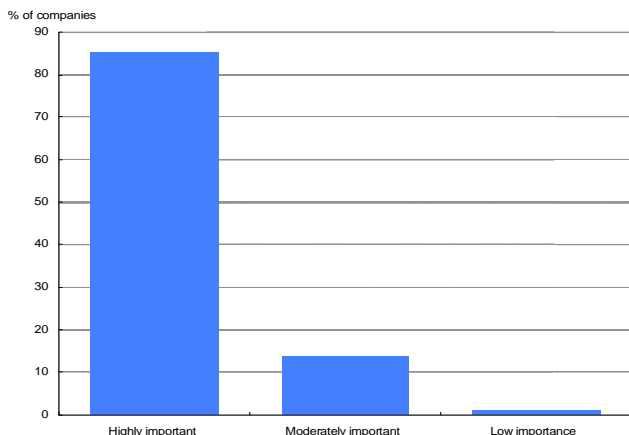


Chart 11: Importance to overall business strategy by sector

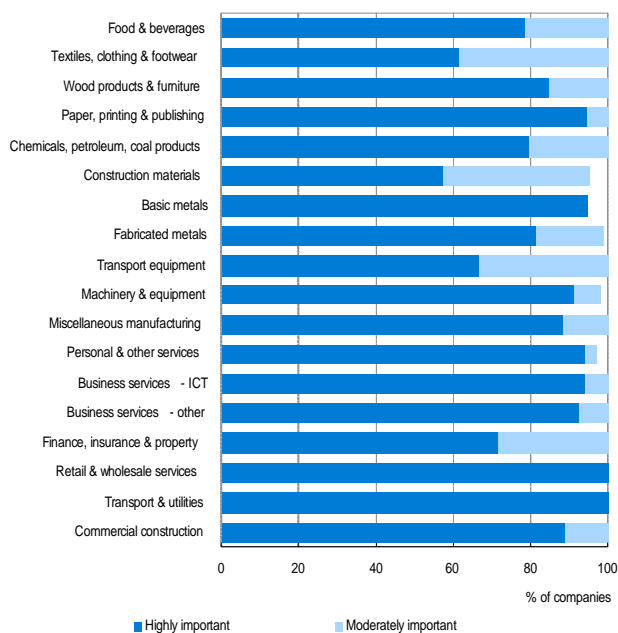
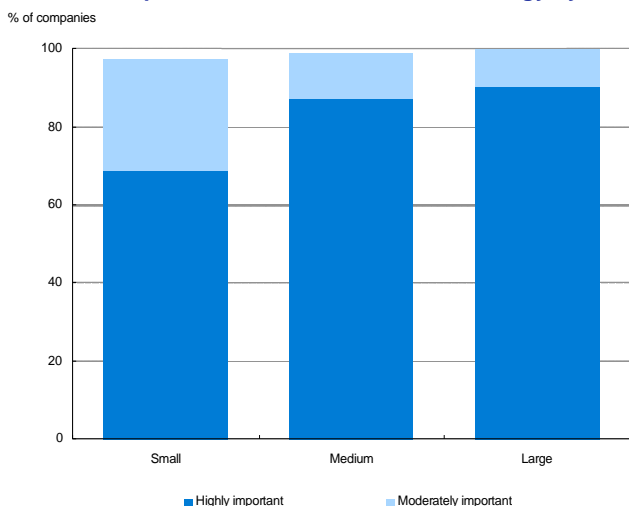


Chart 12: Importance to overall business strategy by size



The survey asked CEOs to identify the importance of internet access to business operations.

Overall finding

- Internet access is seen as highly important to the business operations of 85.1% of respondents, while an additional 13.9% indicated that access is moderately important.

Importance to overall business operations by sector

- Access to the internet is clearly an important facet of business operations. In 12 sectors out of 18 more than 80% of respondents indicated that internet access is highly important to their operations.
- The sectors attaching the highest levels of importance to internet access are transport & utilities (100% of respondents indicating high importance); retail & wholesale services (100%); paper, printing & publishing (94.4%); and business services – ICT (94.1%).
- Respondents attaching the lowest, but nevertheless significant, levels of high importance to internet access were construction materials (57.1%); textiles, clothing & footwear (61.5%); and transport equipment (66.7%).

Importance to overall business operations by region

- The survey indicates little difference in the relationship between region and importance of internet access to business operations.
- 84.8% of metropolitan firms attached high importance to internet access, compared with 86.8% of regional firm respondents.

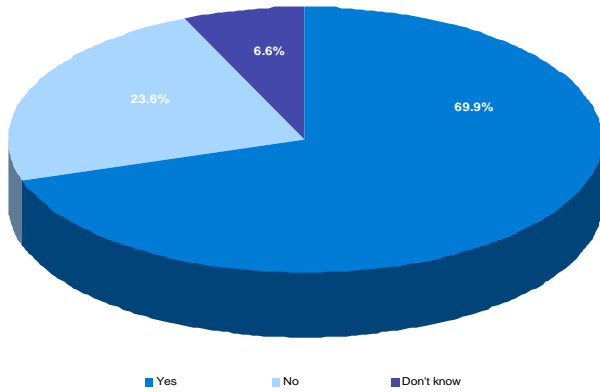
Importance to overall business operations by size

- The survey indicates a relationship between size and importance of internet access to business operations. The larger the firm the higher the importance of internet access.
- 69.2% of small firms attached high importance to internet access, compared with 87.1% of medium-sized firms and 90.6% of large firms.

Strategic business advantage provided by internet access

A solid majority (69.9%) see strategic advantage driven by internet usage...

Chart 13: Internet access and strategic advantage



The survey asked CEOs to indicate whether or not internet access provides a strategic business advantage to their firm.

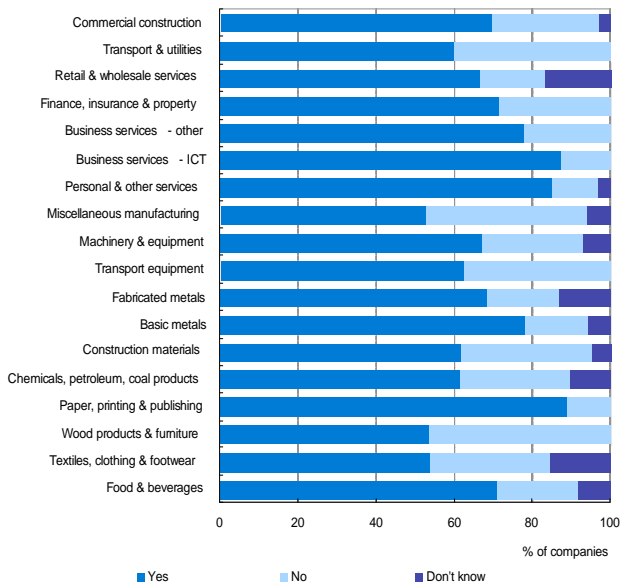
Overall finding

- 69.9% of survey respondents indicated that they believe that internet usage provides their business with a strategic advantage.
- 23.6% of respondents indicated that they see no advantage, with a further 6.6% not knowing of any advantage conferred by their internet access.

Internet and strategic business advantage by sector

- Respondents who saw strategic advantage from internet usage were most prevalent in the paper printing & publishing (88.9%); ICT business services (87.5%); personal & other services (84.8%); basic metals (77.8%); and business services – other (77.8%).
- Sectors identifying less business advantage were miscellaneous manufacturing (52.9%); wood products & furniture (53.8%); textiles, clothing & footwear (53.8%); and transport & utilities (60.0%).

Chart 14: Internet access and strategic advantage by sector

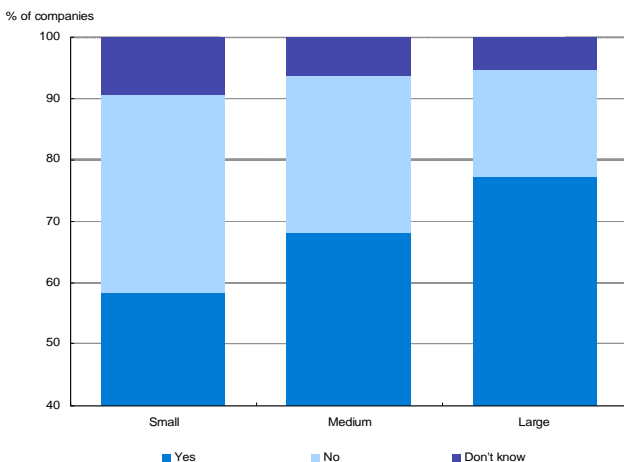


- Interestingly, two sectors which had attached a very high importance to internet access; retail & wholesale services and transport & utilities saw relatively less respondents, 66.7% and 60.0% respectively, indicating that they see a competitive advantage flowing from access.
- This contrasts with sectors which attached high levels of importance to access and also saw strategic benefits flowing from access such as paper, printing & publishing; basic metals and business services – ICT.
- This illustrates that while internet access is a critical element of doing business for many sectors, access does not necessarily endow competitive advantage.

Internet and strategic business advantage by region

- There appears to be a modest relationship between the regional base of a respondent and the likelihood of there being a strategic business advantage flowing to the firm from access.
- 68.7% of metropolitan firms indicated a strategic benefit from internet access compared with 74.1% of regional firms.

Chart 15: Internet access and strategic advantage by size



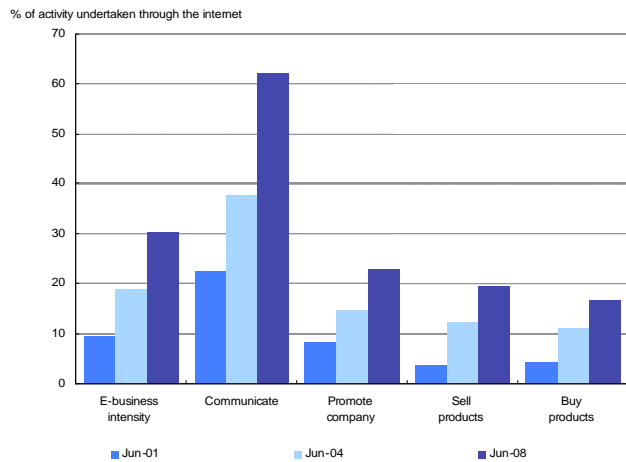
Internet and strategic business advantage by size

- As with the issue of importance of internet access to business operations, there appears to be a relationship between size of a respondent and the likelihood of there being a strategic business advantage flowing to the firm from access.
- 58.4% of small firms indicated a strategic benefit from internet access compared with 68.3% of medium firms and 77.4% of large firms.

e-business intensity across industry

About one third of key business activity is conducted over the internet...

Chart 16: Reliance on internet for business



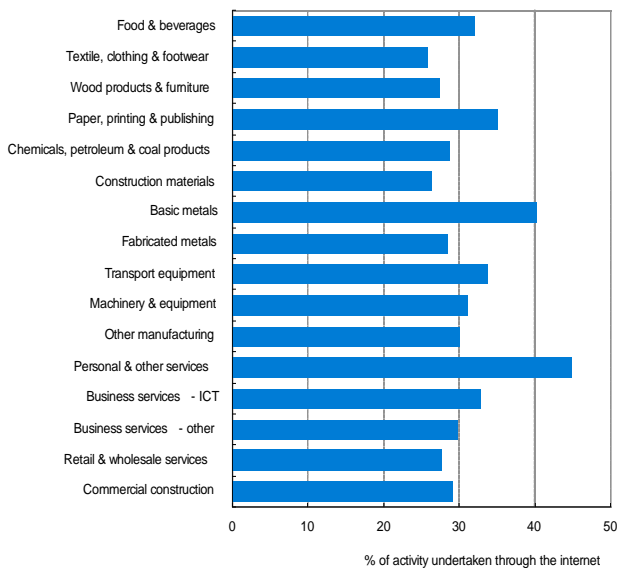
The survey asked CEOs to indicate the extent to which they relied upon the internet to undertake four key basic activities – communicate, promote the company, and to sell and buy products. This was measured as a percentage of total activity for each function.

As well, a measure of e-business intensity was derived which represents the weighted average of the four main uses. Ai Group has been collecting such data on manufacturing since 2001 and was therefore able to compare change in e-business over time (noting that the 2008 findings also include construction and some service activity).

Overall finding

- e-business intensity has steadily climbed since 2001. In 2001, around 9.8% of the four main business activities were conducted over the internet. In 2004 it had risen to 19.1% of activity, and in 2008 to 30.4% of activity.
- The biggest jump has been in the use of the internet to communicate. This has risen to become the chief means of communication, from 22.4% in 2001, to 37.9% in 2004, and over 62.2% in 2008.
- There has also been a steady rise in the use of the internet to promote company products and sell and buy products, although more traditional (non-internet based) forms of activity still predominate. Business internet usage for the buying of products still remains low.

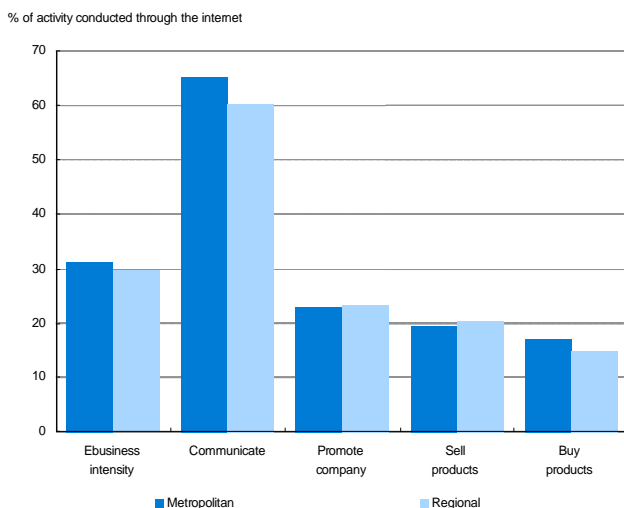
Chart 17 Reliance on internet by sector



Importance of internet by sector

- e-business intensity is fairly consistent across sectors at around the 30% average, with a few exceptions.
- Personal and other services reported the highest e-business intensity, at 44.8%, while textiles, clothing & footwear had the lowest e-business intensity (25.8%).

Chart 18: Reliance on internet by region



Importance of internet by region

- e-business intensity across metropolitan and regional areas is also fairly consistent. Regional areas had a slightly lower e-business intensity (29.8%) compared with metropolitan areas (31.3%).

- The main areas of difference were for the use of the internet for communications, and for buying products which were slightly higher in metropolitan than regional areas.

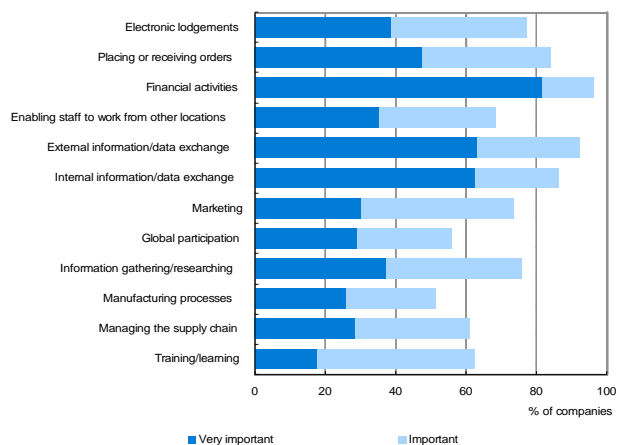
Importance of internet by size

- e-business intensity increased the larger the firm. Large firms, with a hundred or more employees, had an e-business intensity increased in proportion to the size of the firm of 27.9%.
- Again, the difference was reflected through large companies being engaged in higher proportions of communications and product buying over the internet than small companies.

Types of business activities undertaken on the internet

Financial activity and data exchange are the most important uses of the internet...

Chart 19: Importance of internet for specific activities

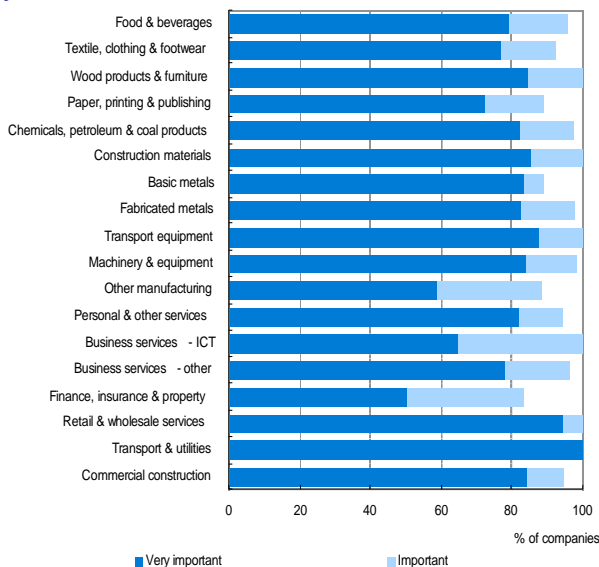


Companies use the internet for a wide variety of business activities. More specifically, they can undertake financial transactions, exchange data, manage the supply chain, undertake electronic lodgement, as well as a range of other activities. The survey asked companies to identify the importance of 12 major activities.

Overall finding

- Consistent with Australian Bureau of Statistics data on business use of information technology, the survey found that businesses ranked undertaking financial activity as the most important use of the internet. A total of 81% of companies reported it as very important, and 15.1% as an important use.
- Data exchange, either internally or externally, was ranked as the second most important use of the internet, with around 63% of companies ranking it as very important, and 29.2% important for customers and 23.6% for internal use.
- The internet was regarded as least important for training, with only 18% citing it as very important and 44.3% important. Also low in importance was the use of the internet for manufacturing processes and managing the supply chain.

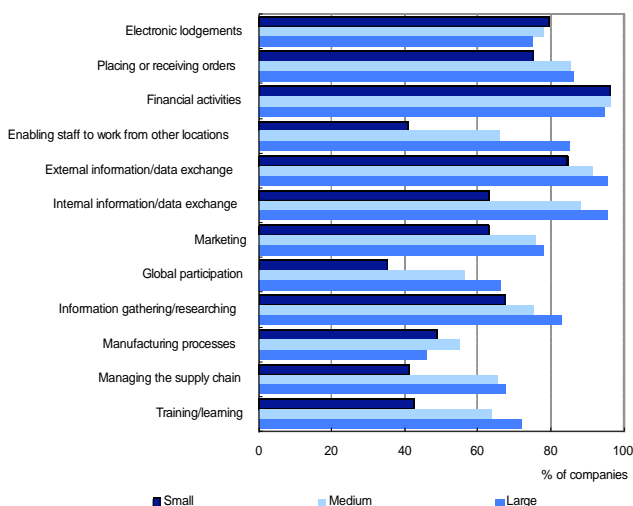
Chart 20: Importance of internet for financial activity by sector



Importance of internet for financial activity by sector

- Taking financial activity as the most important use of the internet, there were some significant differences across sectors.
- Transport and utilities, and the retail and wholesale sector reported the highest level of importance assigned to financial transactions (over 90% regarded it as very important). This is in contrast to other sectors, where around 80% of companies regarded undertaking financial transactions on the internet as very important.
- In contrast, sectors citing use of internet for financial transactions as least important were other manufacturing and the finance, insurance & property sectors.

Chart 21: Importance of internet for specific activities by size



Importance to internet for specific activity by region

- Across all areas of specific activity, with the exception of data exchange with customers and electronic lodgement, higher levels of metropolitan companies regarded the internet as important than regional companies.

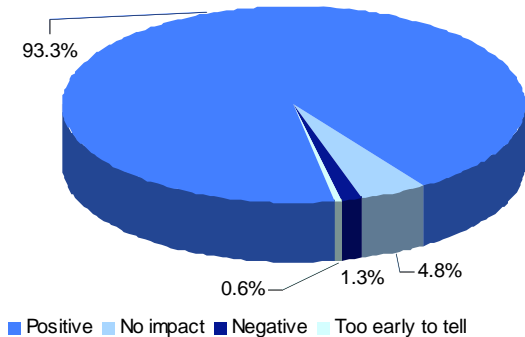
Importance to internet for specific activity by size

- More significant differences in importance for specific uses were recorded by firm size, with large firms placing a greater importance to the use of the internet over small and medium firms.
- While small firms identified electronic lodgement, financial activity, and to a lesser extent placing/receiving orders as equally important as large firms in terms of use of internet, all other activities recorded significant differences.
- The largest differences in importance were recovered for such activities as training, information gathering, internal data exchange, and working from home.

Impact of the internet on the efficiency of business

The internet had an overwhelmingly positive impact on business efficiency...

Chart 22: Impact of internet on efficiency

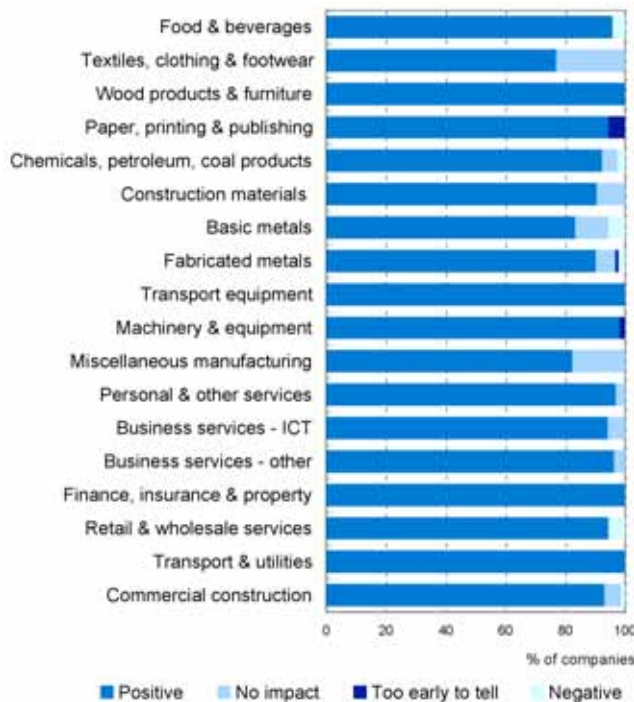


The survey asked CEOs to identify the impact of the internet on the efficiency/productivity of their businesses.

Overall finding

- 93.3% of companies indicated that the internet has had a positive impact on their businesses' efficiency/productivity. Only 1.3% of firms believe that the internet has had a negative impact, while 4.8% believe that it has no impact on the efficiency/productivity of their businesses.

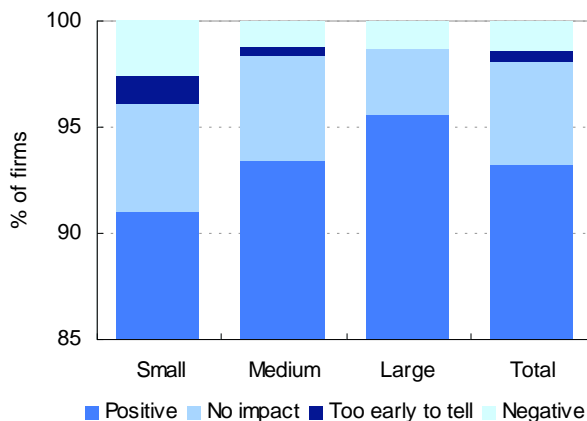
Chart 23: Impact of internet on efficiency by sector



Impact of internet on business efficiency/productivity by sector

- The survey indicates that in 15 sectors out of 18 more than 90% of firms see the internet as having a positive impact on efficiency/productivity.
- The sectors reporting the highest rates of positive impact were transport & utilities (100%); finance, insurance & property (100%); transport equipment (100%); wood products & furniture (100%).
- The sectors in which the highest rates of respondents saw the internet as having no impact on efficiency/productivity were textiles, clothing & footwear (23.1%); other manufacturing (17.6%); basic metals (11.1%); and construction materials (9.5%).
- The small number of sectors indicating negative impacts on efficiency/productivity included basic metals (5.6%); retail & wholesale services (5.6%); food & beverages (4.2%); and chemicals, petroleum & coal products (2.6%).

Chart 24: Impact of internet on efficiency by size



Impact of internet on business efficiency/productivity by size

- A slightly smaller proportion, (91.0%) of small firms indicated that they see their internet connections as being positive for efficiency compared with 93.4% of medium firms and 95.6% of large firms.
- 2.6% of small firms indicated that the internet has had a negative impact on efficiency/productivity compared with 1.2% of medium firms and 1.3% of large firms.
- 5.1% of small firms indicated that the internet has had no impact on business efficiency compared with 5.0% of medium firms and 3.1% of large firms.

Impact of internet on business efficiency/productivity by region

- A modestly larger proportion, (94.1%) of metropolitan firms indicated that they see their internet connections as being positive for efficiency compared with 91.2% of regional firms.
- 0.5% of metropolitan firms indicated that the internet has had a negative impact on efficiency/productivity compared with 3.6% of regional firms.
- 4.5% of metropolitan firms indicated that the internet has had no impact on business efficiency compared with 5.1% of regional firms.



Move to Faster, High Speed Broadband



Extent of benefit to business from a faster broadband network

Two thirds of companies anticipate significant benefit from a faster broadband network...

Chart 25: Extent of benefit from faster broadband

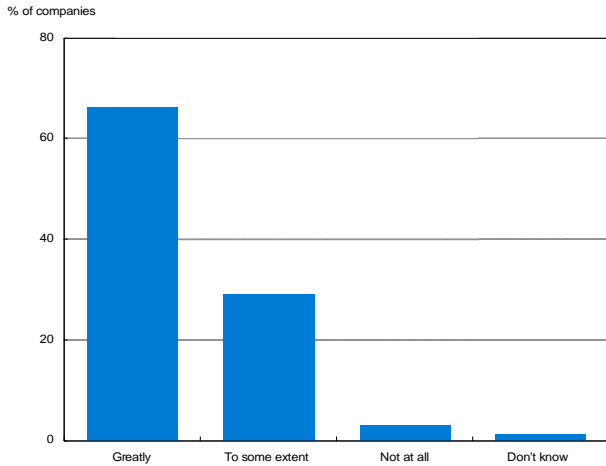


Chart 26: Extent of benefit from faster broadband by sector

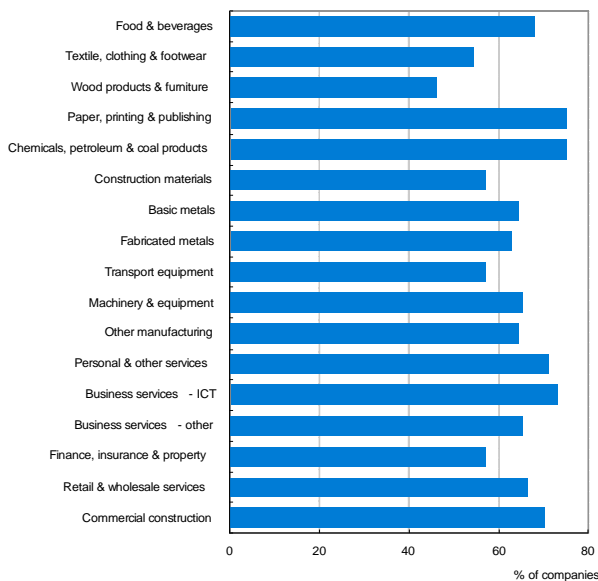
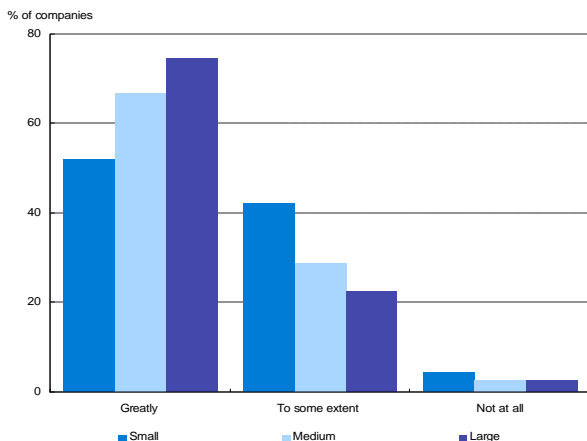


Chart 27: Extent of benefit from faster broadband by size



The National Broadband Network has the potential to change the way many businesses operate in Australia.

Evidence from the World Economic Forum (WEF)'s *Global Information Technology Report 2007-08* suggested that Australia lags behind other developed economies in terms of internet access.

Australia ranked 23rd out of 127 economies in terms of accessibility to digital content across a wide range of platforms including fixed-line internet wireless, internet mobile network satellite etc; 27th in terms of quality of competition in the ISP sector; 19th in terms of high-speed monthly broadband subscriptions; and 29th in terms of lowest cost of broadband.

CEOs were asked the extent to which they believe their business will benefit from the faster network.

Overall finding

- Two-thirds of respondents (66%) believe their business will benefit greatly from the faster broadband network.
- Almost a further third of respondents (29.3%) believe their business will benefit to some extent, with 3% anticipating no benefit at all.

Extent of benefit by sector

- At least half the companies responding from every industry sector expect to benefit greatly from the faster broadband network.
- Companies anticipate the greatest benefit within the paper, printing & publishing sector (75%); chemicals, petroleum & coal products (75%); ICT business services (73.3%); personal & other services (71%); and commercial construction (70.2%).

Extent of benefit by region

- The extent of benefit anticipated from a faster broadband network did not differ markedly according to whether the business was situated in a metropolitan or regional location.
- Regional firms were marginally more likely to see a great benefit resulting from faster broadband (69.7%) than metropolitan firms (65.2%).
- Regional firms were also more likely to anticipate benefitting to some extent (29.9%) than the metropolitan firms surveyed (26.5%)

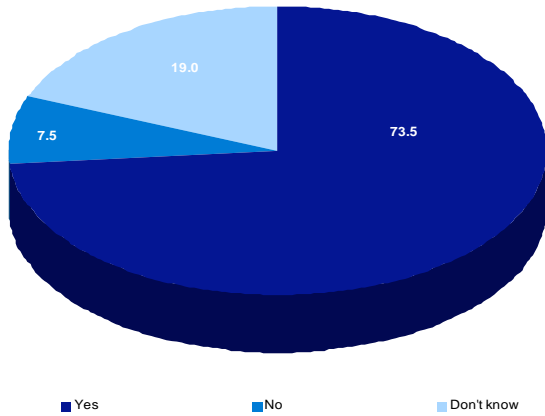
Extent of benefit by size

- Whilst firms of all sizes anticipate benefitting greatly from the faster broadband network, large firms are more likely to believe they will benefit greatly (74.3%), than small firms (66.5%) and medium-sized firms (52.1%)
- A higher proportion of small firms anticipate more limited benefit, with 42.2% believing they will benefit to some extent. This compares with 28.3% of medium sized firms and 22.3% of large firms anticipating some benefit.
- Marginally more small companies expect no benefit at all from the broadband network (4.2%), compared with medium-sized firms (2.5%) and large firms (2.6%)

Demand for faster speed broadband

Three quarters of companies will upgrade to the faster high speed broadband...

Chart 28: Demand for high speed broadband



CEOs were asked whether their business was likely to upgrade its connection to the high speed broadband network when it becomes available.

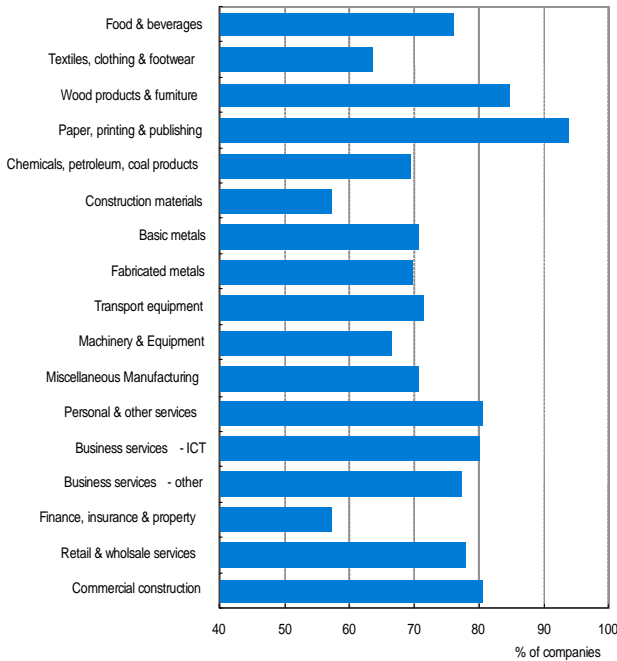
Overall finding

- Almost three quarters of all firms (73.5%) indicated that they were likely to upgrade.
- Only 7.5% of firms advised that they were not likely to upgrade to faster broadband, with 19.0% stating that they did not know, indicating that almost one in every five firms remain uncommitted at this stage.

Demand for high speed broadband by sector

- More than three quarters of firms in the personal & other services (80.6%), ICT business services (80.0%), other business services (77.3%) and retail & wholesale services (77.8%) also indicated that they were likely to upgrade.
- Within manufacturing, the highest intent to upgrade was evident among firms in the paper, printing & publishing; and wood products & furniture sectors, with 93.8% and 84.6% of firms respectively indicating that they were likely to upgrade their connection. This was consistent with the high importance placed on access to the internet by CEOs in both sectors.
- In contrast, the intent to upgrade was at proportions below the national aggregate level in the construction materials (57.1%), textiles, clothing and footwear (63.6%), machinery and equipment (66.5%), chemicals, petroleum, coal products (69.4%), and transport equipment (71.4%) sectors.
- In line with the increasing importance of internet-based communication in the procurement process of construction projects and in the effective exchange of data/information, a relatively high proportion (80.6%) of commercial construction firms indicated a likelihood of upgrading.

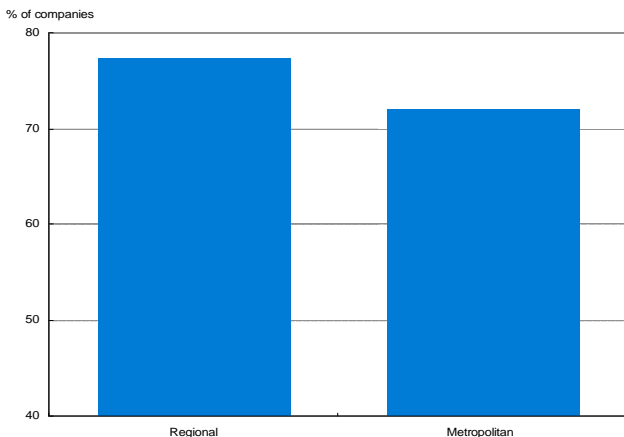
Chart 29: Demand for high speed broadband by sector



Demand for high speed broadband by region

- The intent to upgrade was highest among firms located in regional areas. More than three quarters of regional based firms indicated they were likely to upgrade their connection compared with 72.0% of metropolitan firms.

Chart 30: Demand for high speed broadband by region



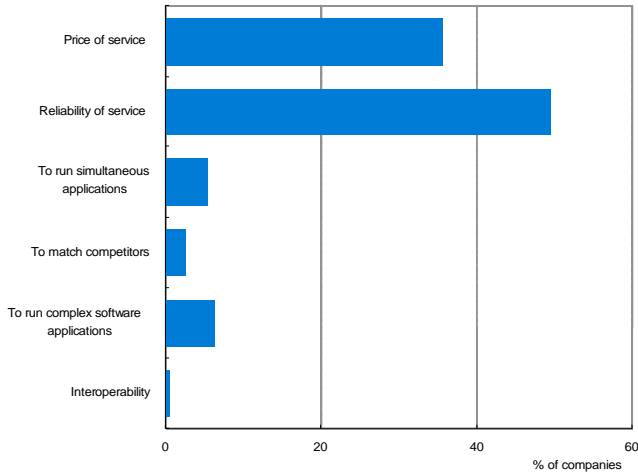
Demand for high speed broadband by size

- Upgrading to the new broadband network is likely to be more prevalent among medium-sized and large firms. More than three quarters of medium-sized and large firms (79.4% and 77% respectively) indicated that they were likely to upgrade.
- This contrasted with 56.3% of small firms indicating a likelihood of upgrading.

Factors determining take-up of high speed broadband

Price and reliability identified as the major considerations...

Chart 31: Factors determining move to high speed broadband

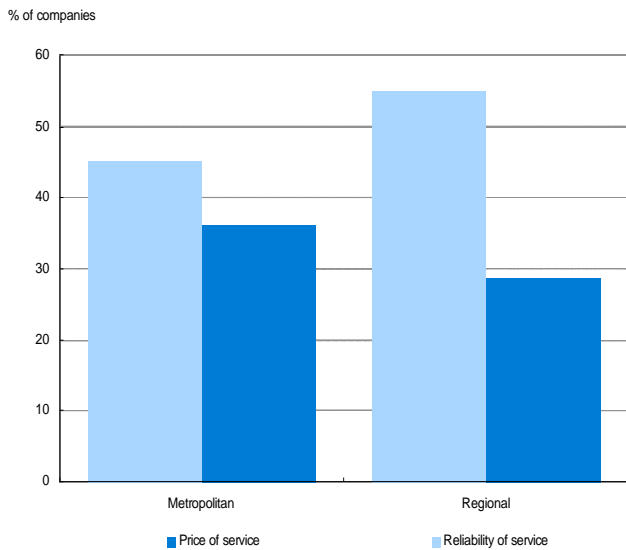


A number of factors are important in the decision to move to high speed broadband. These include: price of service; reliability of service; matching competitors; running of complex software applications; and interoperability.

Overall finding

- Reliability of service was the dominant factor influencing the extent of uptake to high speed broadband, with 49.5% of companies ranking this as a first-order factor in their decision to connect. This was followed by the price of service, ranked by 35.6% of firms as a first level factor.
- A lower emphasis was placed on software usage factors with the running of complex software applications and the running of simultaneous applications ranked as a first level factor by 6.4% and 5.4% respectively.
- The least emphasis was placed on matching competitors (ranked by 2.6% as a first order factor) and interoperability (0.4%).

Chart 32: Price and reliability by sector



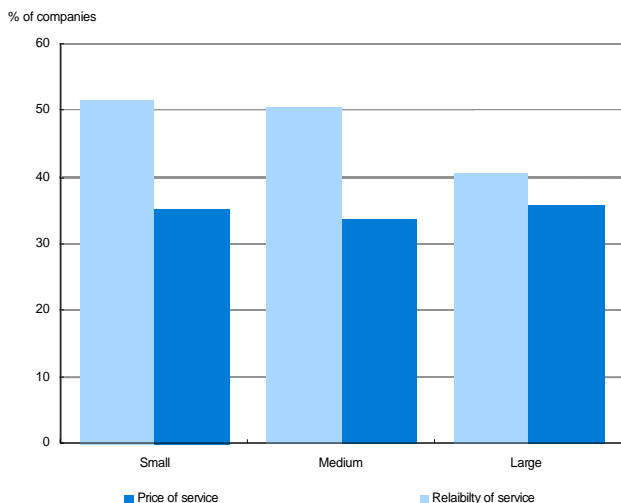
Price and reliability by sector

- Within the services sector, the reliability of service is a more dominant consideration among firms in the finance, insurance & property sector, where 66.7% of firms ranked this as a first order factor. This was also the highest proportion across all sectors surveyed. The reliability of service also ranked relatively highly in personal & other services (56.3%) and other business services (50.0%).
- For manufacturers, reliability of service is more dominant among paper, printing & publishing firms with 66.0% ranking it as the first priority. This was followed by chemicals, petroleum & coal products (55.6% ranked it as a first level factor); machinery & equipment (55.4%); and fabricated metals (54.4%).
- A strong emphasis on the price of the service was also evident in the other business services sector (42.3% ranked it as a first level factor); textiles, clothing & footwear (46.2%); wood products & furniture (41.7%); machinery & equipment (39.3%); and transport equipment (38.5%) sectors.

Price and reliability by region

- Regional companies placed a higher emphasis on reliability of service (54.9% ranked it as a first order factor) compared with metropolitan firms (45.1%). This contrasted with metropolitan firms which ranked the price of the service higher (36.2%) compared with regional firms (28.9%).

Chart 33: Price and reliability by size



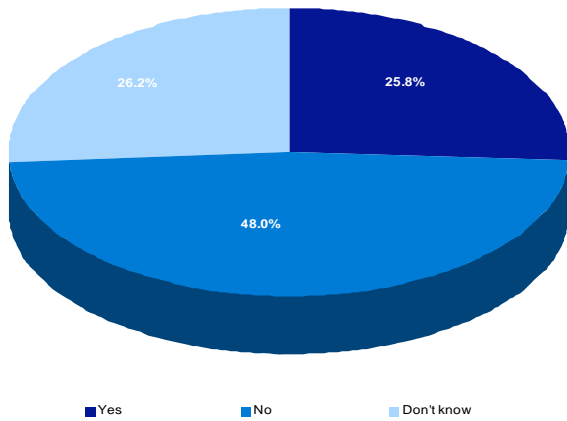
Price and reliability by size

- The reliability of service was seen as more important by small firms in their decision to move to high speed broadband (51.5% of firms). This was closely followed by medium-sized firms (50.6%), while the proportion stood at 40.6% among large firms.
- Whilst the price of service was seen by approximately one third of firms of all size categories as a key factor in determining uptake, higher proportion of large (35.8%) and small firms (35.3%) ranked price as a first order factor, compared with medium-sized firms (33.6%).

Willingness to pay a premium for access to faster broadband

A quarter of companies are willing to pay a premium price for high speed broadband...

Chart 34: Willingness to pay a premium



Earlier in this report it was identified that over a third of companies rank price of service as the dominant factor influencing extent of uptake to high speed broadband.

The survey asked CEOs whether they would be prepared to pay a premium for access to faster broadband.

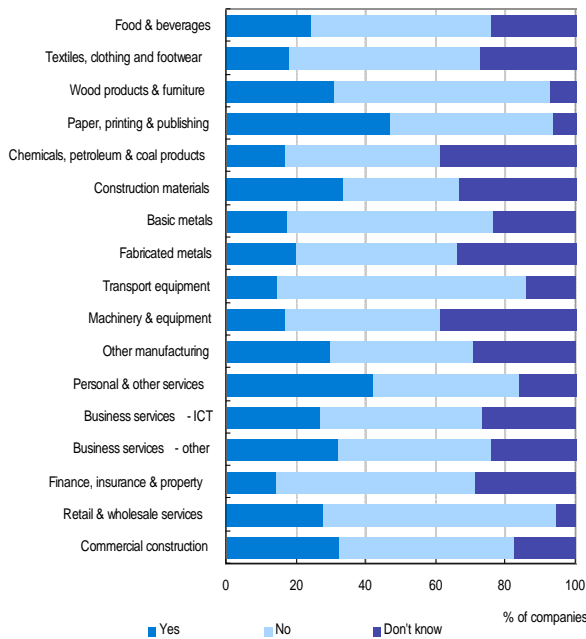
Overall finding

- A quarter of all companies surveyed indicate a willingness to pay a premium price for their business to gain access to higher speed broadband (25.8%), whilst nearly half of the respondents will not pay a premium (47.9%). A further 26.2% did not know at this time whether they would pay a premium or not.

Willingness to pay a premium by sector

- The industry sectors represented by CEOs who most often indicate they are willing to pay a premium to gain access to higher speed broadband include: paper, printing & publishing (46.7%); personal & other services (41.9%); construction materials (33.3%); and commercial construction (32.4%).
- Those industry sectors most unwilling to pay a premium for access include: transport equipment (71.4%); retail & wholesale services (66.7%); basic metals (58.8%); finance, insurance & property (57.1%) and textiles, clothing & footwear (54.5%).

Chart 35: Willingness to pay a premium by sector



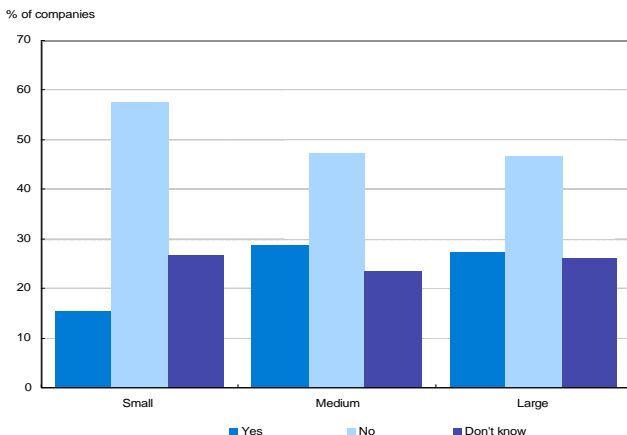
Willingness to pay a premium by region

- Regional firms are modestly more inclined to pay a premium (27.8%) than metropolitan firms (25.2%)
- On the other hand, metropolitan firms indicated a stronger disinclination to pay a premium, with 49.5% indicated they would not, compared with 44.3% of regional firms.
- There was a similar proportion of firms in both categories who do not know at this time whether they will pay a premium.

Willingness to pay a premium by size

- Medium sized firms (28.9%) and large firms (27.3%) are more willing to pay a premium for access to higher speed broadband than small firms (15.5%).
- Over half of small firms were not prepared to pay a premium (57.7%), whilst 47.4% of medium-sized and 46.7% of large firms would be unwilling.

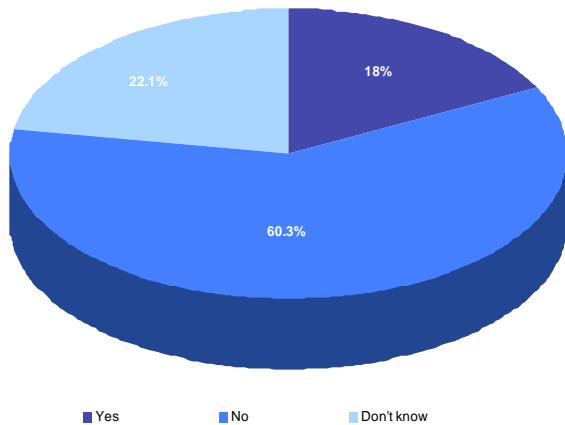
Chart 36: Willingness to pay a premium by size



Likelihood of faster broadband generating new products and services

The faster broadband network is likely to generate new products and services particularly amongst large firms...

Chart 37: Likelihood of new products and services



The faster broadband network will bring with it new opportunities, applications and services for companies. The survey asked CEOs if they believed this would generate new products and services offered by their firms, an important element of innovation.

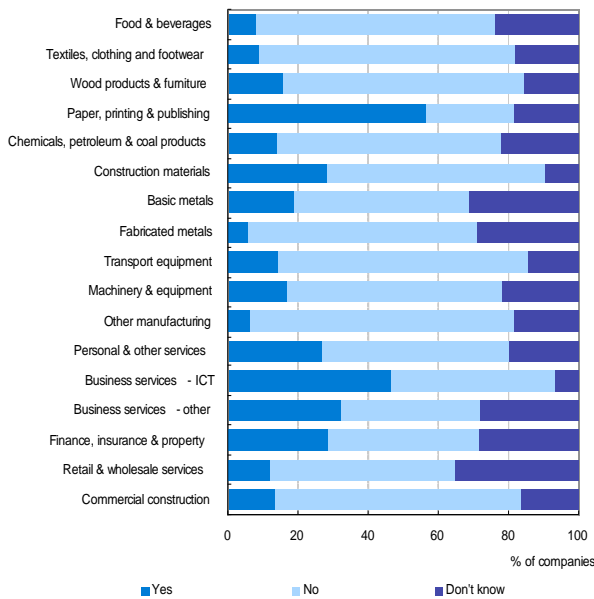
Overall finding

- A small proportion of respondents (17.6%) believe the adoption of faster broadband is likely to generate new products and services offered by the firm, while 60% do not see the generation of new products and services likely. A further 22.1% did not know at this stage whether the new opportunity would lead to new offerings.

New products and services by sector

- Of those respondents believing new products and services will be generated, CEOs in the following industry sectors were more likely to believe new offerings would be generated: paper, printing & publishing (56.3%); ICT business services (46.7%); other business services (32.0%); construction materials (28.6%); and finance, insurance & property (28.6%).
- Industry sectors most often considering that new products and services will not be offered were: textiles, clothing & footwear (72.7%); transport equipment (69.7%); commercial construction (69.7%); and wood products & furniture sector (69.2%).
- Firms in the retail & wholesale sector (35.3%); basic metals (31.3%); and fabricated metals sector (29.1%) most often stated that they did not know whether new products and services will be generated.

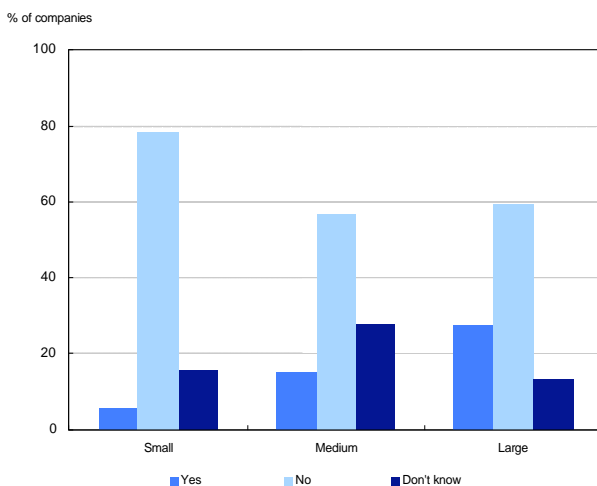
Chart 38: New products and services by sector



New products and services by region

- There was no clear difference apparent between metropolitan and regional firms in terms of likely generation of new products and services. Metropolitan firms were marginally more likely to indicate new products and services would be generated (18.8%) compared with 15.3% of regional firms

Chart 39: New products and services by size



New products and services by size

- A greater proportion of CEOs from large firms believe the adoption of faster broadband will generate new products and services (27.3%) than medium-sized (15.2%) and small firms (5.7%).
- Conversely, a greater proportion of small firms (78.5%) believe new offerings will not result from faster broadband, compared with 59.3% of large firms.
- Medium-sized firms were more likely not to know whether new offerings would be generated (27.8%), with 15.7% of small firms and 13.3% of large firms not knowing.

Potential benefits of a faster broadband network

An increased capacity to download large data files quickly and transact online are perceived as the most important potential benefits of a faster broadband network...

Chart 40: Importance of benefits of a faster broadband network

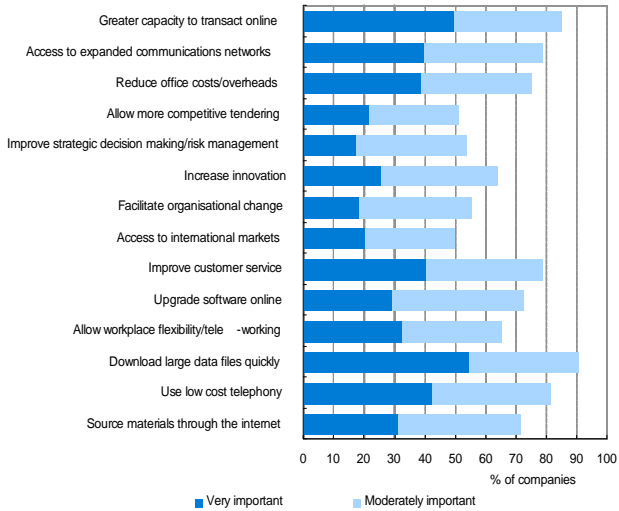


Chart 41: Importance of downloading large data files quickly by sector

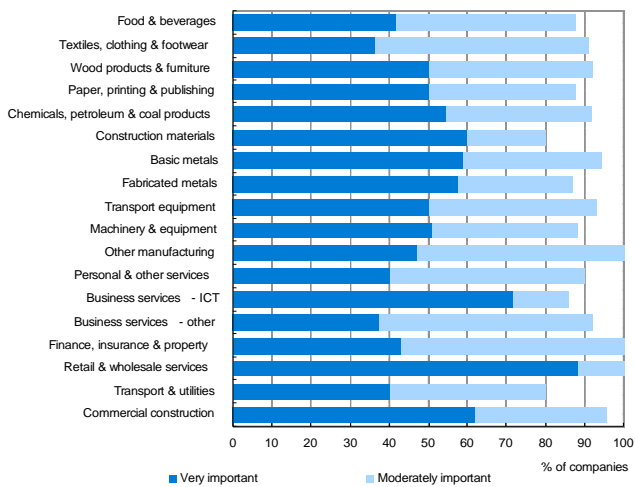
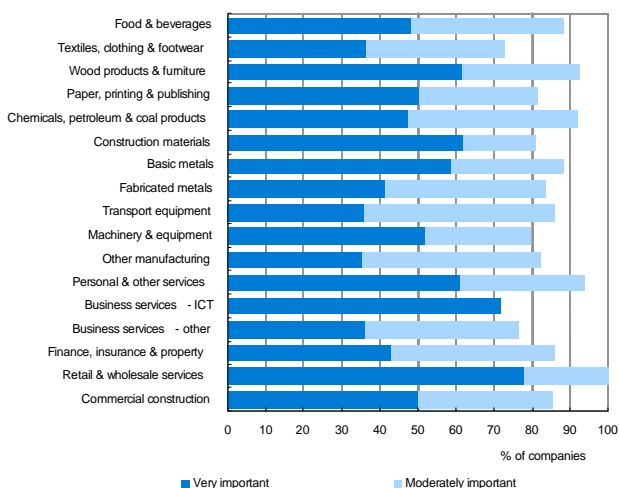


Chart 42: Importance of greater capacity to transact online by sector



Overall finding

To assess the relative importance of the potential benefits of implementing a faster broadband network, the survey asked CEOs to rate the importance of a range of likely benefits.

- The ability to download large data files quickly is considered the most important benefit of a faster broadband network, with 54.2 % of respondents regarding it as a 'very important' potential benefit and an additional 36.3% judging it to be 'moderately important'.
- A greater capacity to transact online is also regarded as a critical benefit of faster broadband, with around one-half of CEOs (49.8%) citing this factor as 'very important' and 35.2% 'moderately important'.
- The survey results indicate that businesses expect faster broadband to provide them with strong opportunities to improve their communications networks. Around 80% of respondents consider access to low cost telephony and expanded communications networks to be a 'very important' or 'moderately important' benefit of faster broadband.
- Improved customer service (40.5%) and reduced costs & overheads (39.7%) are other potential benefits considered 'very important' by a large proportion of respondents.

- Among the potential benefits identified, improved strategic decision making & risk management (17.0%); the facilitation of organisational change (18.3%); and access to international markets (20.0%) attracted the smallest proportions of respondents regarding them as 'very important'.

Potential benefits of a faster broadband network by sector

Potential to download large files quickly

- The potential to download large files quickly is considered a 'very important' benefit of faster broadband by 88.2% of firms in the retail & wholesale services sector and by 71.4% of firms in the ICT business services sector.
- Other sectors with a high proportion of firms deeming the potential to download large files quickly as a 'very important' benefit of faster broadband include: commercial construction (61.8%); construction materials (60.0%); basic metals (58.8%); and fabricated metals (57.6%).
- By contrast, only 36.4% of respondents in the textiles, clothing & footwear sector and 37.5% of firms in the other business services sector consider the potential to download large data files quickly to be a 'very important' benefit of faster broadband.

Greater capacity to transact online

- A greater capacity to transact online is also considered a 'very important' benefit of faster broadband by a large proportion of firms in the retail & wholesale services (77.8%) and ICT business services (71.4%) sectors.
- For each of the sectors surveyed, more than one third of respondents rated a greater of capacity to transact online as a 'very important' benefit resulting from faster broadband. This was also the case for the potential benefit to download large files quickly.
- The widespread support for these two potential benefits clearly indicates they are considered the most important advantages of high-speed broadband.

Potential benefits of a faster broadband network

Increased innovation is more highly regarded as a benefit of faster broadband by firms in the services sector...

Chart 43: Importance of increased innovation by sector

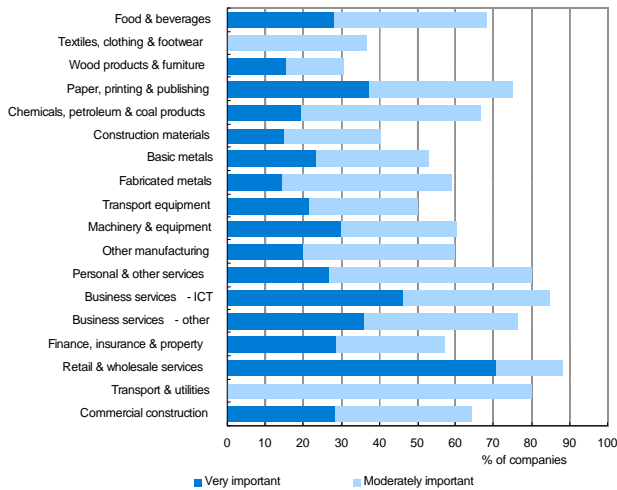


Chart 44: Importance of sourcing materials through the internet by sector

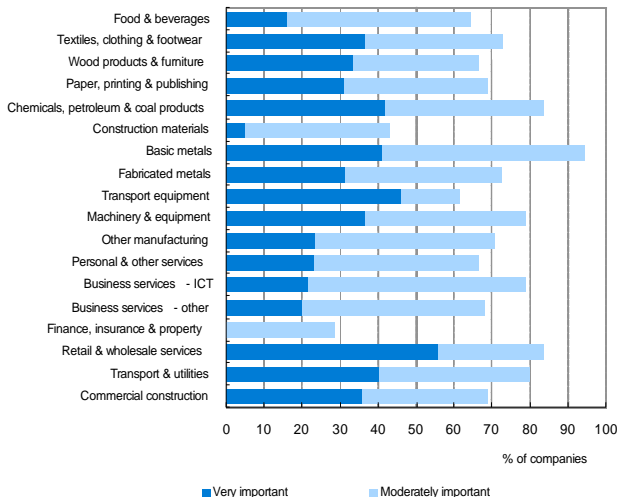
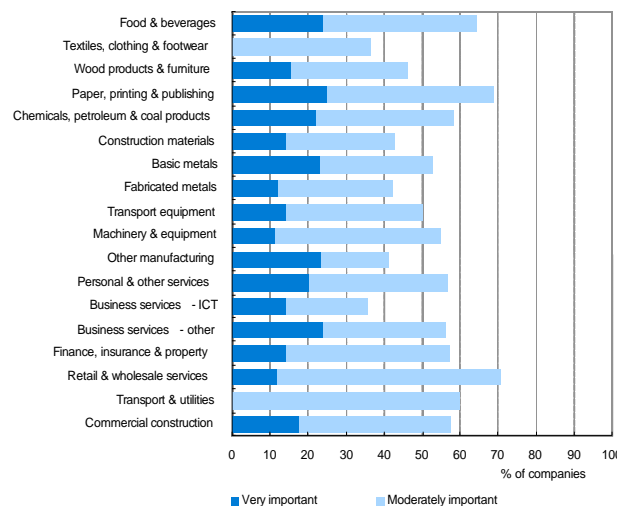


Chart 45: Importance of improving strategic decision making and risk management by sector



Potential for increased innovation

- Across sectors, there is variation in the perceived importance of increased innovation as a benefit of faster broadband.
- The retail & wholesale services sector contains, by far, the highest proportion of firms rating an increase to innovation as a 'very important' benefit of faster broadband (70.6%).
- Increased innovation was judged a 'very important' benefit of faster broadband by 46.2% of firms in the ICT business services sectors and 37.5% of firms in the paper, printing & publishing sector.
- None of the firms in the textiles, clothing & footwear and transport & utilities sectors, and around 15% of firms in the fabricated metals; construction materials; and wood, wood products & furniture sectors, regard increased innovation as a 'very important' benefit of faster broadband.
- **Skilling for Innovation** (the first report in the Ai Group-Deloitte National CEO Survey series) showed that average expenditure on innovative activities (as a percentage of turnover) is higher for the services sector (4.4%), than for the manufacturing and construction sectors (3.4% for both).
- It is unsurprising, therefore, that firms in the sub-sectors of the services industry rate the potential for increased innovation as a more important benefit of faster broadband than their manufacturing and construction counterparts.

Sourcing materials through the internet

- Once again, the retail & wholesale services sector contains, by far, the highest proportion of firms rating the capacity to source materials through the internet as a 'very important' benefit of faster broadband (55.6%).
- Other sectors with a relatively large proportion of respondents ranking the sourcing of materials through the internet highly include: transport equipment (46.2%); chemicals, petroleum & coal products (41.7%); and basic metals (41.2%).
- Excluding the retail & wholesale services sector, firms in the sub-sectors of manufacturing generally seem to regard the sourcing of materials through the internet to be a more important benefit than services firms.

Improving strategic decision making and risk management

- For each of the sectors surveyed, less than one quarter of respondents rated an improvement in strategic decision making and risk management as a 'very important' benefit resulting from faster broadband.
- None of the firms surveyed from the textiles, clothing & footwear and transport & utilities sectors, and a little over 10% of firms in the machinery & equipment; fabricated metals; and retail & wholesale services sectors, regard improved strategic decision making and risk taking as a 'very important' benefit of faster broadband.

Likely areas of increased business activity from faster broadband

Faster broadband is likely to lead to solid increases in the exchange of information and data, both internally and externally...

Overall finding

The survey also asked CEOs to identify the areas in which they expected increased activity due to faster broadband.

Whilst a low proportion of respondents anticipate a large increase in activity in some of areas of business, this might not necessarily indicate faster broadband will not have a significant impact. Rather, it might indicate that a number of other factors, including greater skills, are necessary for large increases in a number of business activities to be made.

- The survey results confirm that faster broadband is likely to result in considerable increases in all areas of business for Australian firms. Of the 12 areas of business identified, a majority of CEOs anticipate either a large or small increase as a result of faster broadband.
- CEOs anticipate the strongest increases in business activity will be in the external and internal exchange of information and data exchange. 43.5% of respondents anticipate a large increase in the external exchange of information and data. Similarly, 40.0% of CEOs expect a large increase in the internal exchange of information and data.

Chart 46: Likely areas of increased activity due to faster broadband

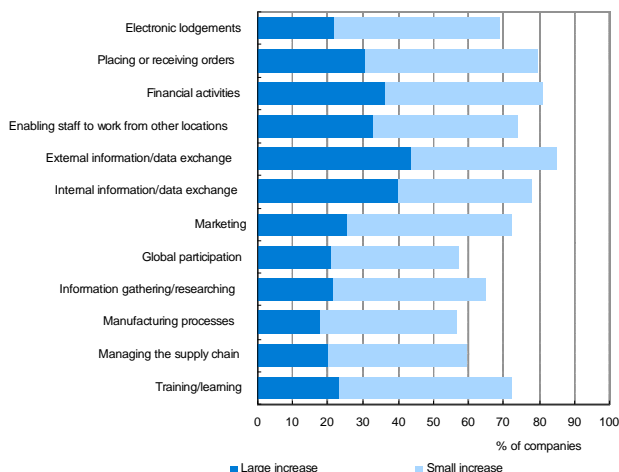
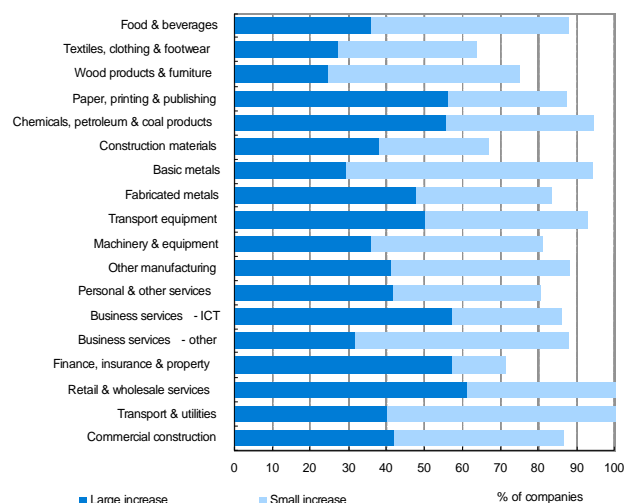


Chart 47: Expected increase in external information/data exchange by sector



- The internal and external exchange of information and data, were identified as the business activities for which the internet is currently most important, excluding financial activities (see page 21). Given the strong and direct connection between the internet and information and data exchange, it is understandable that solid improvements are expected in these areas of business activity.
- Financial activities, the area of business for which the internet is considered most important, are also expected to improve considerably should faster broadband become available. Faster broadband is expected to lead to large increases in financial activities for 36.0% of businesses, while an additional 45.1% expect small increases in this area of business.
- Around one third of all respondents expect faster broadband will lead to a large increase in staff working away from the office (32.5%) and placing and receiving orders (30.5%).
- The areas of business activity with the smallest proportion of respondents anticipating large increases as a result of faster broadband include: manufacturing processes (17.9%); supply chain management (19.9%); and global participation (20.9%).
- The lower response rates for each of these business areas might not necessarily suggest they are less reliant on faster broadband. For each area, in addition to the relevant technical skills, faster broadband will be one factor accompanied by strong management capabilities skills, processes and quality systems. As such, faster broadband by itself might not lead to large increases in these areas.
- The survey results indicate that Australian companies expect the largest increases from faster broadband to be in established business practices and areas, rather than areas of business where they may be relatively inexperienced, such as global participation and improved marketing processes.

Likely areas of increased business activity from faster broadband by sector

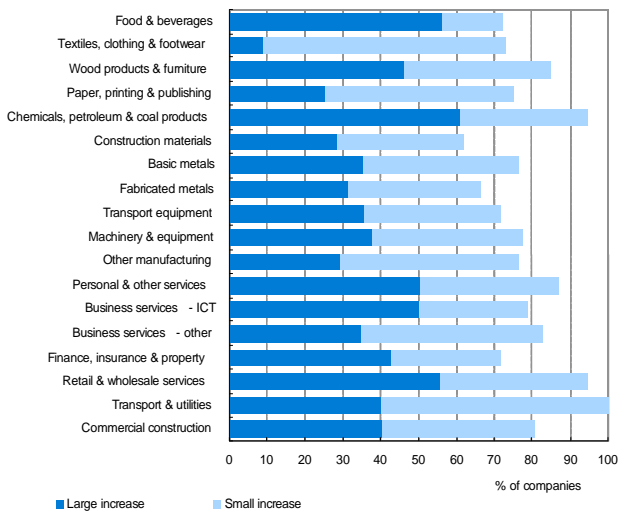
Expected increases in external information and data exchange

- Large increases in external information and data exchange are expected by a high proportion of firms in the retail & wholesale services (61.1%); finance, insurance & property services (57.1%); and ICT business services (57.1%) sectors.
- Business success for firms in each of these sectors is heavily reliant on the rapid exchange of information and data between large numbers of customers and suppliers. Faster broadband is clearly expected to speed up these processes.
- By contrast, only 25.0% of respondents from the wood, wood products & furniture sector and 27.3% of textiles, clothing & footwear firms anticipate large increases in external information and data exchange as a result of faster broadband.

Likely areas of increased business activity from faster broadband

A high proportion of firms in the retail & wholesale services sector expect large increases in internal and external information and data exchange due to faster broadband...

Chart 48: Expected increase in internal information/data exchange by sector



Expected increases in internal information and data exchange

- Large increases in internal information and data exchange are expected by a majority of firms in the chemicals, petroleum & coal products (61.1%); food & beverages (56.0%); and retail & wholesale services (55.9%) sectors.
- In contrast, only 9.1% of respondents from the textiles, clothing & footwear sector expect large increases in internal information and data exchange as a result of faster broadband.

Expected increases in financial activities

- While a smaller proportion of firms might be expecting large increases in financial activities because of faster broadband, there are a number of sectors in which very high proportions of respondents anticipate an increase of any magnitude.
- All of the respondents from the finance, insurance & property services and wood, wood products & furniture sectors indicated they expected an increase in financial activities as a result of faster broadband.
- Interestingly, on page 21 it was revealed that the finance, insurance & property services sector possessed the smallest proportion of firms who consider the internet important in financial activities. Clearly many of these firms expect faster broadband will fill the void left by current internet technology.
- In addition, more than 90% of respondents from the retail & wholesale services; paper, printing & publishing; and chemicals, petroleum & coal products sectors anticipate either small or large increases in financial activities as a result of faster broadband.
- Once again, the textiles, clothing & footwear sector possesses the smallest proportion of firms expecting a 'large' or 'small' increase in financial activities (54.6%) as a result of faster broadband.
- The transport equipment and construction materials sectors also contain a relatively low proportion of firms expecting large or small increases in financial activities as a result of faster broadband, 64.3% and 66.7% respectively.

Chart 49: Expected increase in financial activities by sector

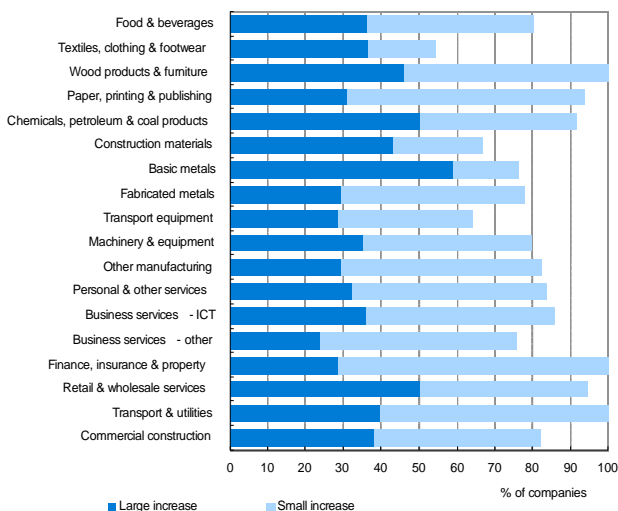
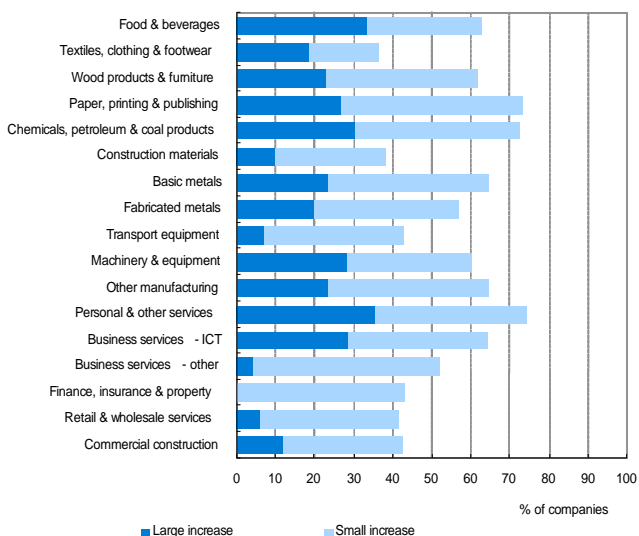


Chart 50: Expected increase in global participation by sector



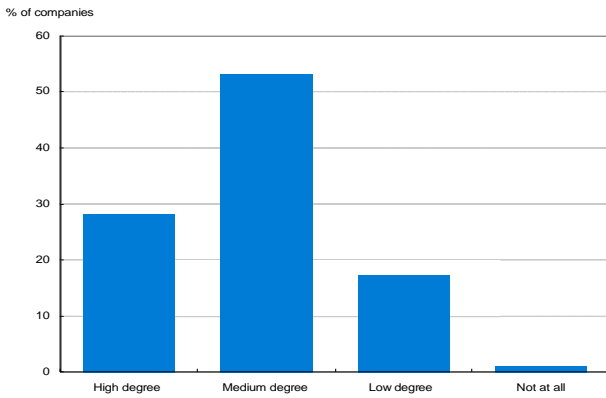
Expected increases in global participation

- Given that global participation relies on many more factors than high-speed broadband, the proportion of firms expecting increases as a result of faster broadband is clearly lower. However, responses to this option by sector might provide an insight into the industries best positioned to use broadband to boost global presence.
- Around one third of firms in the personal & other services (35.5%); food & beverages (33.3%); and chemicals, petroleum & coal products (30.6%) sectors, expect large increases in global participation as a result of faster broadband.
- By contrast, none of the firms surveyed from the finance, insurance & property services sector anticipate large increases in global participation due to faster broadband.
- Less than 10% of respondents from the other business services; transport equipment; and construction materials sectors anticipate a large increase in their global participation as a result of faster broadband.

Existing capabilities to take advantage of faster broadband

The majority of companies have the skills and capabilities needed for the new network...

Chart 51: Capabilities to take advantage of opportunities



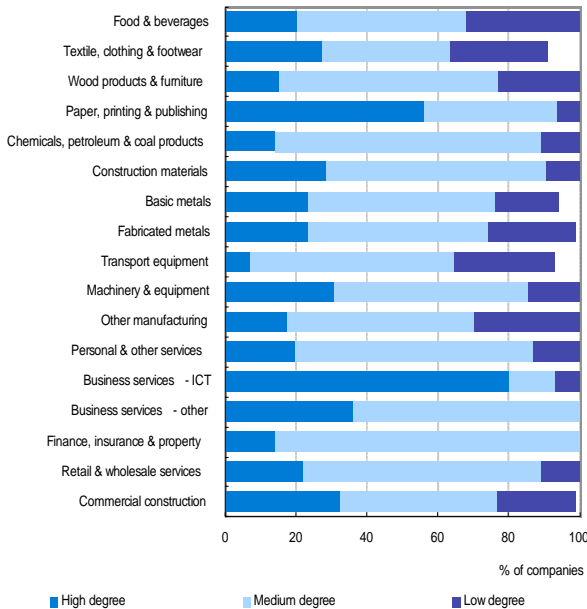
The National Broadband Network will make available new opportunities, applications and services to businesses once it is in place; however these opportunities will also call for requisite skills and capabilities.

The survey asked CEOs the degree to which existing skills and capabilities in their business will allow them to take advantage of new opportunities.

Overall finding

- CEOs responding to the survey were most likely to indicate they have a medium degree of capability (53.2%) to take advantage of the opportunities arising once the faster broadband network is in place.
- Of the remaining respondents, 28.1% believe their skills and capabilities are of a high degree, whilst 17.4% consider their current skills and capabilities are at a low degree.
- Few companies believe they have none of the skills and capabilities needed (1.3%).

Chart 52: Degree of capabilities by sector



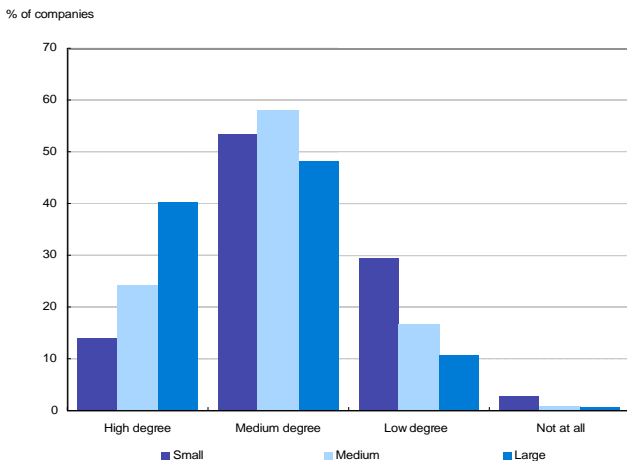
Degree of capabilities by sector

- Industry sectors most likely to indicate firms have a high degree of skills and capabilities required for new opportunities include: ICT business services (80%); paper, printing & publishing (56.3%); other business services (36%); and commercial construction (32.4%).
- Those industry sectors most likely to indicate that skills and capabilities are low in terms of taking advantage of opportunities represent: food & beverages sector (32%); other manufacturing (29.4%); transport equipment (28.2%); and textiles, clothing & footwear sector (27.3%).

Degree of capabilities by size

- CEOs responding from large firms are most likely to consider that their business has a high degree of skills and capabilities to take advantage of the new opportunities (40.4%), compared with medium-sized (24.4%) and small firms (14.1%).
- Small firms are more likely to indicate they have a low degree of skills and capabilities to take advantage of opportunities that will arise (29.6%).

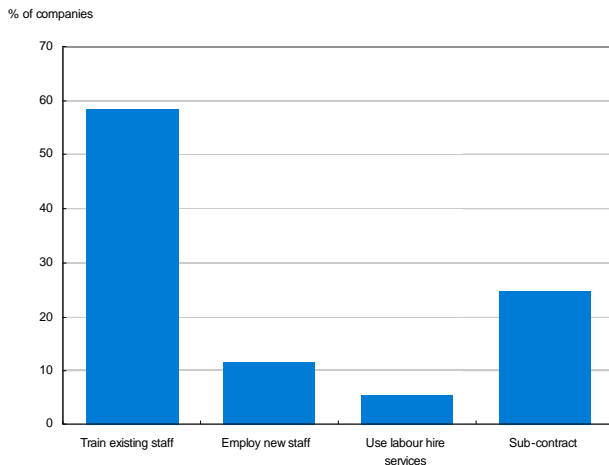
Chart 53: Degree of capabilities by size



Strategies to improve high speed broadband capabilities

Firms favour training existing staff to improve capabilities...

Chart 54: Strategies to improve capabilities



In order to take advantage of opportunities that will arise once the faster broadband network is in place, companies were asked which strategies they would adopt to improve relevant skills and capabilities.

Overall finding

- Over half of the companies responding intend to train existing staff to improve skills and capabilities (58.3%), whilst another 24.7% will sub-contract the required capabilities. The skills gap will be met through the employment of new staff by 11.5% of firms, and 5.5% intend to use labour hire services.

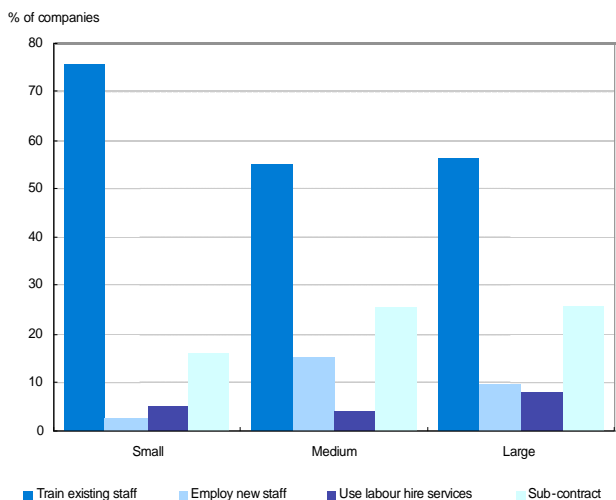
Strategies to improve capabilities by sector

- Industry sectors showing a clear preference in strategy to increase the skills and capabilities needed include: fabricated metals, commercial construction and machinery & equipment sectors which all indicate they will train their own staff.

Strategies to improve capabilities by region

- Of those companies responding there was no clear preference for strategies to improve relevant skills and capabilities according to location. The preferred strategy is to train existing staff, (60.6% of regional firms responding and 57.9% of metropolitan firms). 26.2% of regional firms will sub-contract the required capabilities, with 23.9% of metropolitan firms also sub-contracting.

Chart 55: Strategies to improve capabilities by size of firm



Strategies to improve capabilities by size

- Small firms responding tend to differ from medium-sized and large firms regarding the emphasis placed on strategies to improve relevant skills and capabilities.
- Small firms responding are more likely to favour training existing staff (75.5%), compared with medium-sized (55%) and large firms (56.4%). The small firms consider it less likely that they will employ new staff (2.7%) compared with medium-sized (15.2%) and large firms (9.6%).
- Small firms responding are also less likely to sub-contract (16.2%) compared with medium-sized (25.4%) and large firms (25.8%).



Participation in the Construction of the Network



Expected participation in the construction and maintenance of the national broadband network

A small proportion of companies expect to participate in the construction and maintenance of the network...

Chart 56: Expected participation in construction/maintenance

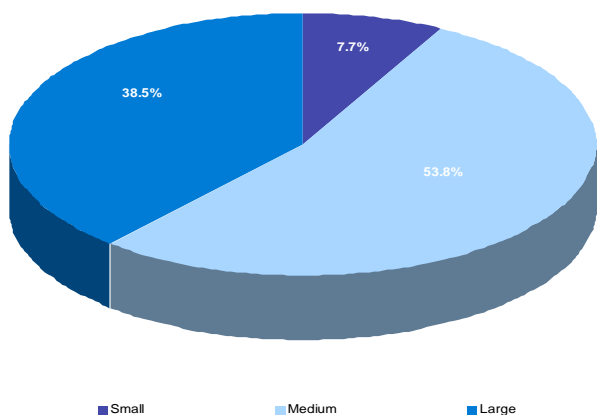


Chart 57: Expected areas of participation

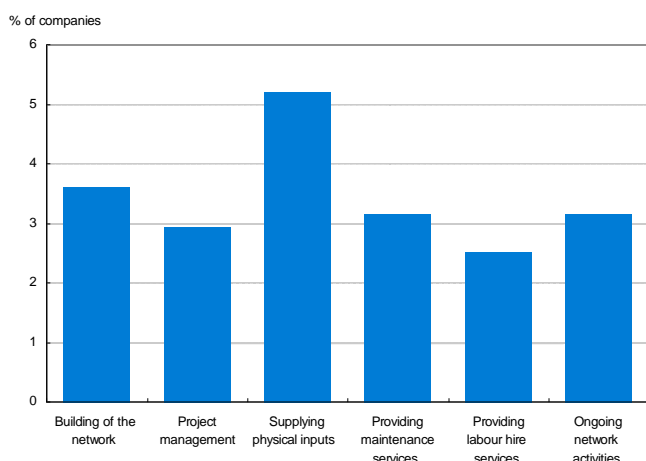
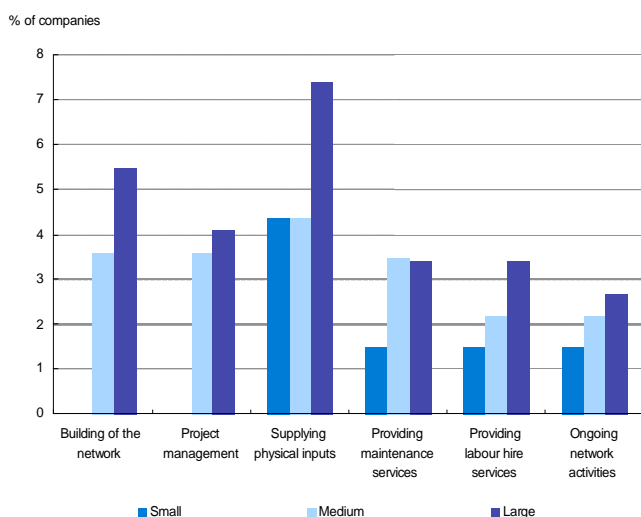


Chart 58: Expected participation by size



The rollout of the National Broadband Network will be the largest infrastructure project ever undertaken in Australia, taking five years to reach 98% of Australian businesses and homes. The survey asked CEOs whether they expect to participate in the construction and maintenance of the network.

Overall finding

- Under one-tenth (8%) of CEOs responding to the survey expect their companies to participate in the construction or maintenance of the network. Of the companies expecting to be involved, some anticipate involvement in more than one type of activity.
- Over half of the companies expecting involvement are medium-sized (53.8%), with 38.5% being large firms and 7.7% small firms.
- Participation by companies in construction and maintenance of the network is expected in the following areas: supplying physical inputs (5.2% of all companies); involvement with the building of the network (3.5%); provision of maintenance services (3.1%); involvement through project management (2.9%); provision of labour hire services (2.5%) and involvement in ongoing network activities (3.1%).

Participation by sector

- Companies in industry sectors most likely to expect participation in construction/maintenance of the network include:
 - Commercial construction sector through involvement in building of the network (10.6%); project management (6.2%); and supplying physical inputs (4.6%);
 - Fabricated metals sector through involvement in supplying physical inputs (5.9%); and
 - Machinery & equipment sector through involvement in supplying physical inputs (7.8%); project management (4.1%); and building of the network (2.0%).

Participation by size

- A greater share of large firms expect to be more involved than medium-sized and small firms with all activities relating to the construction and maintenance of the network, except in providing maintenance services.
- Supplying physical inputs is expected to be the activity with which firms of all sizes are most likely to be involved, with large firms indicating the greatest involvement (7.4%), and 4.4% of both medium-sized and small firms expecting involvement.
- Large firms are also expecting to be more involved with building of the network (5.5%) and project management (4.1%), with no small firms at all expecting any involvement in these two activities.



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