

**The IQ
of the
British
Network**

**Independent Market
Research Report**

Commissioned by



June 2007

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1. Executive Summary from Cisco

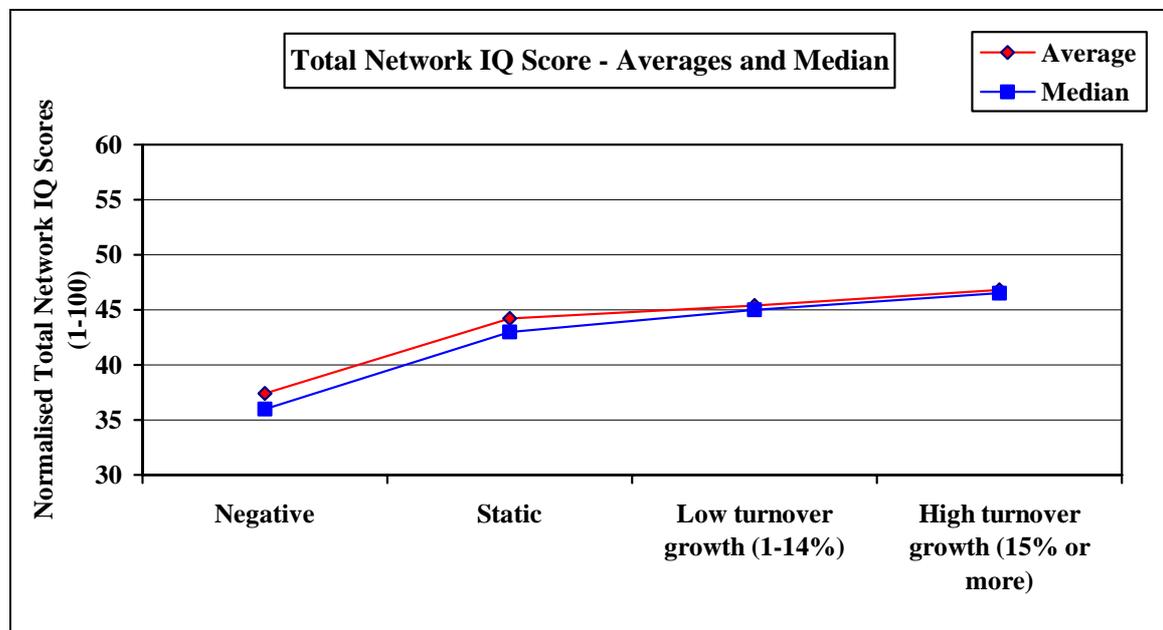
IQ of the British Network, commissioned by Cisco®, surveys more than 600 business and information technology (IT) directors at SMBs (small to medium-size businesses) and mid-market companies across Britain¹, showing just how important a role IT will play in securing the country’s future prosperity. It demonstrates that companies which embrace new ways of working and whose management show strategic leadership on IT investments grow more quickly (figure 1).

The findings show management support is a vital ingredient in the success of any IT project. Without it, the project’s ability to deliver return on investment is potentially undermined. Given the pressures on UK businesses to stay competitive, this is a message executives would do well to heed.

A novel approach to a much-asked question

IQ of the British Network interviewed business directors and IT directors in parallel on a range of topics, from collaboration and information management, to environmental impact and security. The questionnaires were structured to address business issues on the one hand, and the corresponding IT questions on the other. Responses were weighted on a scale developed by Cisco, with the totals tallied and indexed to yield overall “IQ scores”.

The survey found that high-growth companies scored highest, with scores progressively declining as company growth lessens. SMBs scored lower than their mid-size counterparts, and companies in the distribution (e.g. retailers and wholesalers) and manufacturing sectors fared worse than service businesses.



¹ For the purposes of this survey, an SMB is deemed to have between 20 and 250 employees, and a mid-market organisation has 250-1,000 employees. Respondents were drawn from the services, distribution (including retail) and manufacturing sectors, with roughly 2/3 of the total sample located in England and Wales, and the remainder in Scotland.

Technology + Strategic Leadership = Business Growth

Whilst the UK economy is performing well, a number of longer-term trends could undermine future growth. Two of these are brought to the fore by the *IQ of the British Network*.

First, skills. An increasing number of us – around 50% of the UK's workforce² – are opting to take a more flexible approach to our jobs, working from home or on the move, on our own terms. These demands for flexible or remote working are creating fresh challenges for companies, and indeed attracting and retaining the best staff tops the list of concerns voiced by business directors interviewed.

Second, our competitiveness is being undermined by new challenges from abroad – particularly China and India. Concerns over competitiveness are being played out among the businesses surveyed: concerns over improving operational efficiency and responding quickly to change were voiced by 25 per cent and 23 per cent of business respondents respectively.

These forces are pressuring companies to re-think their approach to doing business: for example, using remote and mobile working to recruit the *best* people to do the job, not just the nearest. Technology can provide many of the answers, but almost a fifth of company directors polled claimed that not knowing where to make IT investments was holding their business back.

A blueprint for success

IQ of the British Network found the most successful companies (those whose turnover grew by more than 15% in the past year) exhibit a close alignment of business strategy and IT adoption, and display the following characteristics:

- More likely to view their IT network as a strategic asset to the business
- Almost twice as likely to offer flexible working capabilities
- Nearly seven times more likely to offer Wi-Fi networking in their offices
- Likely to have better security provisions

An uneven picture

The research further highlighted some noteworthy regional and sectoral trends:

a) Small companies missing a trick, but large company directors ignorant

The survey indicated that SMBs lag behind their larger counterparts in many areas, notably mobile working and wireless networking. They are less likely to allow employees to work remotely (54 per cent vs. 32 per cent of mid-size companies say they would not allow employees to work remotely). However, more business directors in large companies (24%) have little knowledge of the IT security risks they face and how good or bad their company's protection is, compared to small companies (11%).

b) Manufacturing needs to catch up

The research found that manufacturing companies have a lower IT maturity, and take more of a knee-jerk approach to replacing hardware. Just 29% of

² Source: Equal Opportunities Commission press release, <http://www.eoc.org.uk/Default.aspx?page=19903>

manufacturing IT directors (compared with 55% in the service sector) said their IT strategy aligned with the company's business plan.

However, business directors in this sector are struggling to keep up with the changing demands of customers. More than any other sector, manufacturing bosses polled are struggling to respond to change, improve operational efficiency, and understand their customers.

c) Retail and Distribution – the most resilient networks, but lowest security awareness

The research found that a greater number of company directors in the distribution sector (including retailers, wholesalers and logistics businesses) claim to have “little knowledge of the security risks” they face – 23 per cent of respondents, compared to 12 per cent of service businesses, and 13 per cent of manufacturers. Security training for employees in this sector also appears to be less of an issue: one IT director in four described security training as either “not very important” or “not at all important”. By contrast, just 13 per cent of IT directors in the service sector agreed with these statements.

Paradoxically, network resilience appears to be far greater here than in other sectors. A quarter of respondents claimed to have “redundant” networks in place to cushion the impact of outages, ensuring users' experience is unaffected (compared with just 13 per cent of manufacturers). The survey also found that companies in the distributions sector are also more likely to have in-house teams to make repairs.

d) IT in Scotland: manifold challenges emerging

The survey found that while Scottish companies are more environmentally friendly, concerns over recruitment and business change are more widespread north of the border. However, one Scottish firm in ten cannot support remote or teleworking, and just one per cent use web conferencing tools.

e) Environmental issues

With the European Union Waste Electrical and Electronic Equipment (WEEE) Directive becoming law on 1st July 2007, the survey established that the vast majority of firms have implemented recycling schemes for IT hardware and consumables. A significant minority – some 35% - have yet to take any action.

Despite this progress, awareness of the “green” benefits IT can deliver remains low. Only one in five IT directors said they use “virtualisation” technology, which can lower power consumption. Over 80 per cent do not set power consumption targets for hardware. By the same token, only a small minority (around one in five) said they encourage employees to use online collaboration / meeting systems, and cut back on business travel.

While calls for all organisations to monitor and minimise their carbon footprint are growing, the working experiences such systems deliver continues to improve. For example, high-definition video conferencing suites, which give participants the feeling they are in the same room together, are available. Such innovations point to the future of working.

A call to action

IQ of the British Network shows that IT can only promise business benefits when executives provide leadership and support. Without it, there is no guarantee of success. Directors who communicate their strategy in a way IT professionals can bring to life through technology will ensure their businesses' future prosperity in an increasingly competitive and interdependent world.

The pages that follow provide a more detailed analysis of the survey's key findings and research methodology.

2. Key Findings

2.1 Key themes:

Importance of the IT network:

- Most business directors (78%) agree that their organisation's IT network is very important or even vital to the business – and this opinion is especially common among directors in large companies, rather than in small ones.
- However, 30% of business directors think the IT network is very important to only some parts of the business.
- But on average, 4 different departments are cited, and large companies and those in the distribution sector cite a wider variety of functions and departments.
- Top of the list is the finance department, where 67% of business directors say the IT network is very important.
- This technology is also deemed to be very important for HR (54%) and marketing (45%) departments, but more (59%) say it carries this status in the sales department.
- Interestingly, 61% of these non-IT, business directors say the IT network is deemed very important for the IT department itself – this is second after finance and above HR, sales and marketing – especially in large companies (79%) and those in the distribution sector (81%).
- In contrast, 10% think the IT network is just another type of technology – a pipe for data.
- And almost as many (9%) do not have a view one way or the other about their organisation's IT network.

Network technologies in place:

- On average, companies use 6 different types of technology in their IT networks; and large companies use more (7.5), compared to small companies (5.4); as do services companies (7.2), compared to manufacturing (5.6) and distribution (5.7) companies.
- The frontrunner technology is firewalls and / or antivirus protection (93%).
- This is followed by a virtual private network (VPN) (62%).
- About 1 in 2 companies have mobile and / or teleworking (54%), wireless LAN (50%), voice and data carried over separate networks (48%) and intrusion detection and / or prevention (48%) technologies in place.
- About 1 in 3 have storage area networking (37%), Voice over IP (VoIP) (31%), wide-area file and/ or application services (31%), quality of service (QoS) (30%) and network event correlation, also known as security event management (29%).

- Fewer (22%, about 1 in 5) have conferencing, a converged voice and data network and extension to mobile telephone, also known as mobility.
- Bottom of the IT network technology list that companies have adopted are some of the more sophisticated network technologies, including voice over Wi-Fi (7%), video telephony (10%), instant and / or video messaging (13%) and unified messaging (16%).

Network IQ scores:

Overview:

- The Network IQ scores have been calculated from respondents' answers to questions about the technology they have in place and their attitudes towards it.
- The business Network IQ score gives an indication of how supportive the business is to the IT department in its development of the company's IT network, as well as insight into how pervasive technology is within the business.
- In contrast, the IT Network IQ score is more about the level of sophistication of the IT network and how strategic the company's approach is to its IT network.
- Thus, for the business sample, the average business Network IQ score is 136, but this ranges from as low as -90 to up to +380 (from a possible range of -150 to +460).
- For the IT sample, the average IT Network IQ score is 334, and this ranges from +45 to +760 (from a possible range of -150 to +1035).
- Large companies (160) have a higher average business Network IQ score, compared to small companies (124).
- Also, large companies (373) have a higher average IT Network IQ score, as do services companies (380).
- In contrast, companies in the manufacturing (292) and distribution (320) sectors, and small companies (309) have a much lower average IT Network IQ score and below the national average.
- One business director among Cisco's customers achieved a high score of 185 – well above the average; as did two IT heads (560 and 710).
- When the two sets of scores are normalised to 1-100 and combined, the average Total Network IQ score is 44, but this ranges from as low as 10 and up to 87.

Relationship between Network IQ score and business performance?

- One of the main objectives of the research was to investigate any relationship between the network technologies a company has in place, the management's attitude towards the network and how well the company has performed financially.
- To this end, the network IQ scores have been analysed alongside company turnover growth status.

- This analysis shows that there is a subtle linear relationship between the Total and business Network IQ scores and the turnover growth status; however, this is not the case for the IT network IQ scores on their own.
- Indeed, for the business sample, companies that have experienced high turnover growth in the last 12 months have a higher average business Network IQ score of 162, compared to companies whose turnover has remained static (125).
- Also, more business directors in high growth companies (59%) think their company's IT network is a vital and strategic platform for all parts of the organisation, compared to static growth companies (40%).
- **This suggests that having support from the business leaders for the development of the IT network leads to business success.**
- Other issues that emerged from the research that support this relationship include:
 - On average, business managers in high growth companies think the IT network is deemed to be very important in more departments (5.7), compared to low (3.3) and static growth (2.7) companies.
 - High growth companies say more business issues will impact on their IT investment priorities in the next 12-18 months, compared to static growth companies.
 - More high growth companies (99%) have firewalls and / or antivirus protection, compared to low (90%) and static (87%) growth companies.
 - More high and low growth companies (both 37%) have quality of service (QoS), compared to static growth companies (16%).
 - More high growth companies (59%) have intrusion detection and / or prevention, compared to low growth ones (42%).
 - More high growth companies (46%) have the technical capability to support remote and teleworking, compared to static growth companies (24%).
 - More high growth companies (23%) have a single integrated management interface that tracks all services, giving a unified view of them, compared to low growth ones (8%).
 - More high growth companies (20%) have their wireless LAN available in every area, compared to static growth companies (3%).
 - Finally, more business directors in high (15%) and low (18%) growth companies say their IT security provisions exceed the current levels of risk, compared to static growth companies (4%).

Purchasing network technology:

Business drivers for IT investment?

- 64% of business directors say there are issues that are holding back their organisations, but companies only have 1 to 2 issues affecting them.

- And no single area stands out from the rest, with no single issue being relevant to more than 26% of the sample – indicating varied problems among these companies.
- And while there is no correlation according to company size, manufacturing companies have more issues holding them back, compared to services and distribution companies.
- 26% of business directors say the issue of attracting and retaining the best staff (wherever they are located) is holding back their company.
- Almost as many are struggling with operational efficiency (25%) and 23% are being held back by their lack of ability to be able to respond quickly to change.
- 21% are struggling with customer management and understanding their needs, but not having enough cash for capital investment is a problem for 1 in 5 (19%) companies.
- But 15% are being held back by IT security issues – especially large (23%) and manufacturing (22%) companies.

Strategic purchasing?

- But are these business challenges translated into wise technology purchasing?
- In fact, 18% of business directors say their company is being held back by not knowing precisely where to invest in IT to get the best business return.
- But 73% of companies replace old equipment when it breaks, and 30% only take this approach to purchasing new technology for the network.
- 36% of IT heads admit that network purchases in their company are driven by ad-hoc requests from business managers or departments.
- Indeed, 41% only approach buying technology for their company in one of these two non-strategic ways – either reacting to ad-hoc requests or replacing old equipment when it breaks – especially manufacturing companies (58%).
- In contrast, 51% approach buying technology for their IT network in a strategic way – especially services companies (65%), compared to the manufacturing (38%) and distribution (45%) sectors.
 - A third (33%) have a long-term IT network strategy – and this is more common in services companies (45%), compared to the manufacturing (23%) and distribution (27%) sectors.
 - 41% say their IT network strategy is in line with the organisation's business plan – again, especially in the services sector (55%), compared to the manufacturing (29%) and distribution (35%) sectors.
- This means 1 in 2 companies (49%) do not approach buying technology for their IT network in a strategic way and seem to ignore the business drivers - especially manufacturing (62%) and distribution (55%) companies, compared to services companies (35%).

Investment priorities?

- For IT heads, the Top 3 issues that will impact IT investment priorities during the next 12-18 months are:
 1. Operational efficiency (61%)
 2. Enabling business growth (57%)
 3. Containing costs (55%)
- Almost 1 in 2 IT heads (45%) say regulatory compliance will affect their spending priorities during this time.
- Some say striving to enhance and streamline business processes (43%) and trying to achieve organisational agility (35%) will have an impact on where the IT budget goes.
- Mobile working (i.e. working from any location) will impact IT spending for 30% of companies, but fewer (20%) will take into account teleworking (i.e. working from home).
- IT issues, such as trying to achieve converged communications will affect IT spending for 23% of companies.
- But more (45%) say IT security issues will affect IT investment priorities in the next 12-18 months.
- Overall, IT investment priorities of large companies and those in the services sector will be affected by more of these issues in the next 12-18 months.
- It seems that, while IT heads do seem to take into account business drivers, their focus is not always completely in line with the main problems the other business directors are facing.

Responding to outages:

- Despite the importance placed on the IT network by business directors, only 19% of companies say that, in the event of an outage, a redundant network infrastructure would support the whole organisation and there would be no impact on the users' experience.
- This means 81% of companies do not have this luxury – including 86% of small companies and 74% of large ones.
- But only 33% think they would experience some reduction or loss in service in such an event – yet more services companies (43%) recognise this, compared to manufacturing companies (24%).
- This may be because 44% say the most critical parts of the organisation would still be running.
- In terms of dealing with the fault, 55% would call a support company – especially small companies (61%).
- In contrast, 56% say repairs would be carried out by in-house staff – especially distribution companies (70%), compared to services (55%) and manufacturing (49%) ones.

IT network security:

- Security is a theme that emerges from the research as important to both IT and business respondents.
- Yet despite this, 1 in 4 IT heads (26%) admit they do not have a formal, documented, IT security strategy in place – especially services companies (32%), compared to manufacturing ones (18%).
- Another 1 in 4 (24%) admit the IT security strategy is focused on technology, rather than the business.
- This means only 1 in 2 companies (50%) have an IT security strategy that is centred on the business needs.
- But while 92% of companies carry out training about IT security issues and any policies that are in place, only 35% say their IT security strategy is accompanied by documented policies for employees to follow.
- Yet 81% of IT heads say this training is important to their company to varying degrees – only 35% describe it as very important, while 17% say it is only quite important.
- In contrast, 19% think this sort of training is not important for employees - especially small companies (14%), compared to large ones (5%); and those in distribution (25%), compared to services companies (13%).
- Furthermore, only 48% of business directors are of the opinion that the IT security provisions that their company has in place are well matched with the levels of risk.
- And only 14% go as far as saying these provisions exceed the current levels of risk.
- In contrast, 15% admit they have little knowledge of the security risks they face or how good or bad their protection might be – especially in large companies (24%), compared to small ones (11%); and among distribution companies (23%), compared to services (12%).
- Another 14% are aware of the risks they face but acknowledge that their IT security could be improved.

Environmentally friendly IT?

- Among IT heads, 92% say their company has taken some steps to be more environmentally friendly, and 82% of business directors agree.
- Indeed, 60% of all the companies interviewed have taken multiple steps towards this aim.
- The most common initiative has been to establish a recycling scheme for consumables and hardware (68%).
- This is followed by the adoption of environmentally friendly sourcing practices (47%).

- But less than 1 in 4 (24%) business directors say their company has adopted the widely available collaboration / meeting systems to reduce employee travel.
- The same amount (24%) have issued an energy policy to all staff - and 21% have backed this up with a personalised statement issued from the CEO about energy efficiency – such an action has been more common in large (30%) and manufacturing (28%) companies.
- Fewer, 1 in 5 (20%), use virtualisation and other technologies to maximise hardware utilisation efficiency.
- In general, large and manufacturing companies have taken more steps to be environmentally friendly.
- Business directors in companies with high growth status say their company has taken more of these steps to become more environmentally friendly, compared to those that have been less successful.
- In contrast, 18% of business directors say their company has not taken any steps in this direction.

2.2 Geographic variation:

Importance of the IT Network:

- Companies across GB agree that the network is important, but among those that think it is only important to some functions or departments, Scottish companies cite more functions and departments than companies in England & Wales.
- Specifically, Scottish business directors think the IT network is deemed to be very important to 5.4 departments, compared to England & Wales (3.6).
 - More Scottish companies (83%) cite the sales department, compared to England & Wales (47%).
 - More (60%) cite the marketing department, compared to England & Wales (38%).
 - More (51%) cite the distribution department, compared to England & Wales (24%).
 - More (71%) cite the operations department, compared to England & Wales (47%).
 - Finally, more (34%) cite the manufacturing department, compared to England & Wales (15%).
- However, while business directors in the Edinburgh and Aberdeen regions think the IT network is very important to more of these departments, compared to the Glasgow region, there is no difference according to which departments they think the IT network is very important to.

Network technologies in place:

- There are few differences between England & Wales and Scotland with respect to the network technology they have in place.
- The two exceptions are firewalls and / or antivirus protection, where more companies in Scotland (99%) have this, compared to England & Wales (91%); and conferencing by web, which is more common in England & Wales (11%), compared to Scotland (1%).
- However, within Scotland itself, the Aberdeen region stands out as having more sophisticated network technology in place.
 - More Aberdeen (21%) and Glasgow (24%) companies have a converged voice and data network, compared to Edinburgh (zero).
 - More Aberdeen companies (38%) have network event correlation, also known as security event management, compared to Edinburgh (5%).
 - More Aberdeen companies (29%) have a single integrated management interface that tracks all network services, giving a unified view of them, compared to Edinburgh (5%).

- However, contrary to this, more Aberdeen companies (58%) say their wireless LAN is only available in certain areas and for particular purposes (e.g. for Internet access or file sharing), compared to Edinburgh companies (18%) which seem to have a slightly more sophisticated arrangement for their LANs.

Business growth and Network IQ Scores:

- More companies in England & Wales (5%) say their turnover has decreased in the last 12 months, compared to companies in Scotland (zero).
- And, more companies in Scotland (49%) claim their organisation's turnover has grown by 10% or more, compared to England & Wales (34%).
- Indeed, the average amount of growth in turnover in the last 12 months is 14.7% for Edinburgh, 17.7% for Aberdeen and 12.2% for Glasgow.
- However, statistically, there is no difference according to country or Scottish regions and the average IT or business Network IQ score.

Purchasing network technology:

Business drivers for IT Investment?

- Business directors in Scotland say more issues are holding them back, compared to England & Wales - in fact, more of them (28%) say 3 or more issues are affecting them, compared to England & Wales (17%).
 - More Scottish companies (27%) are being held back by not knowing precisely where to invest in IT to get the best business return, compared to England & Wales (14%).
 - More Scottish companies (31%) are struggling with customer management and understanding their needs, compared to England & Wales (17%).
 - More Scottish companies (32%) are being held back by their lack of ability to respond quickly to change, compared to England & Wales (20%).
 - More business directors in Scotland (35%) say the issue of attracting and retaining the best staff is holding back their company, compared to England & Wales (23%).

Investment priorities?

- In terms of what is going to impact on the IT investment in the next 12-18 months, more Scottish companies (87%) have multiple issues that will have an impact, compared to England & Wales (71%).
 - More Scottish companies (75%) say operational efficiency will have an impact, compared to England & Wales (57%).

- However, more companies in England & Wales (26%) say converged communications will have an impact on their IT investment priorities in the next 12-18 months, compared to Scottish companies (14%).
- Within Scotland, companies in the Aberdeen and Glasgow regions say more issues will impact their IT investment priorities in the next 12-18 months, compared to the Edinburgh region.
 - More Aberdeen companies (58%) say customer management will have an impact, compared to Edinburgh (27%).
 - More Glasgow companies (64%) say regulatory compliance will have an impact, compared to Edinburgh (23%).
 - More Aberdeen (21%) and Glasgow (20%) companies say converged communications will have an impact, compared to Edinburgh (zero).

Responding to an outage:

- There is very little geographic variation according to how well a company would cope with an outage; however:
 - More companies in Scotland (68%) would contact a support company in the event of an outage, compared to companies in England & Wales (50%).
 - More companies in the Glasgow region (24%) say a redundant network infrastructure would support the whole organisation and there would be no impact on the user experience, compared to Edinburgh (zero).

IT network security:

- Within Scotland itself, Edinburgh companies place more importance on the role of employee training about IT security issues and the policies they have in place, compared to the other regions.
- Indeed, more Aberdeen companies (38%) think the role of such training is only quite important, compared to Edinburgh (9%).
- Indeed, more business directors in the Glasgow region (33%) say they have little knowledge of the IT security risks their company faces or how good or bad their company's protection might be, compared to Edinburgh (8%).
- And more Glasgow companies (44%) do not have a formal, documented, IT security strategy in place, compared to Aberdeen (13%).
- However, more business directors in Edinburgh (22%) are aware of the risks they face, but admit their IT security could be improved, compared to Aberdeen (6%).

Environmentally friendly IT?

- On the one hand, more companies in England & Wales (95%) have taken steps to be more environmentally friendly, compared to companies in Scotland (85%).
- But Scottish companies have taken more steps to become environmentally friendly, compared to England & Wales.
- In fact, more Scottish companies (51%) have taken 3 or more steps, compared to England & Wales (34%); and more (24%) have taken 5 or more steps, compared to England & Wales (11%).
 - More Scottish companies (42%) have improved the building fabric to save energy, compared to England & Wales (30%).
 - More Scottish companies (37%) have issued an energy policy to all staff, compared to England & Wales (19%).
- Within Scotland itself, companies in the Edinburgh region have taken more steps to be environmentally friendly, compared to Aberdeen and Glasgow.
- Indeed, more Edinburgh companies (73%) have taken multiple steps, compared to Aberdeen (42%) and Glasgow (44%) - also, more Edinburgh companies (50%) have taken 3 or more steps, compared to Glasgow (16%).
 - More Edinburgh companies (82%) have established a recycling scheme for consumables and hardware, compared to Aberdeen (46%).
 - More Edinburgh companies (32%) use virtualisation and other technologies to maximise hardware utilisation efficiency, compared to Aberdeen (8%).
 - More Edinburgh companies (27%) have adopted the widely available collaboration / meeting systems to reduce employee travel, compared to Aberdeen and Glasgow (both 4%).
 - More Edinburgh companies (18%) have set energy saving targets for hardware, compared to Glasgow (zero).
- In fact, more companies in the Aberdeen region (33%) say their company has not taken any steps and does not operate an environmental policy, compared to Edinburgh (5%).
- And, more companies in the Aberdeen (17%) and Glasgow (16%) regions are unsure what their company has done to be more environmentally friendly, compared to Edinburgh (zero).

3. Research Methodology

3.1 Overview:

This report was commissioned by Cisco and details quantitative research with IT heads and business directors in large and mid-sized companies in GB with their headquarters based in the UK.

3.2 Quantitative Research:

In total, 634 interviews were collected: 274 are with IT heads and 360 are with business directors. The telephone interviews were conducted by Dynamic Markets Limited between 2nd March and 30th April, 2007. Before and during the interviews, respondents were not aware that Cisco Systems had commissioned the research.

Respondent type:

The IT interviews were carried out with IT professionals with ultimate responsibility for IT +/- telecoms on a day-to-day basis – in nearly all cases, this was an IT professional, and especially in the larger companies. The questions posed to the IT respondents sample can be found at Appendix A.

The business director interviews were carried out within a variety of functions (excluding IT). The levels of seniority of these directors is as follows:

- CEOs – 3%
- MDs – 19%
- Group head – 11%
- Divisional head – 13%
- Departmental head – 47%
- Head of operations / logistics – 7%

All business respondents confirmed prior to interview that they were not a trained IT professional and which of the above job roles they occupied. The questions posed to the business director sample can be found at Appendix B.

These two samples (IT and business) are split according to company size, broad industry sector and UK regions.

Company size:

All respondents confirmed prior to interview the size of their company. In total, 414 interviews were collected among companies with 20-249 employees and 220 were collected from companies with 250-1000 employees. This ratio between the sub-samples reflects the fact that there are more small companies in the UK than there are larger ones.

Table 3.1: Sample split by company size:

Sector	IT sample	Business sample	Totals
Small (20-249 employees)	167	247	414
Large (250-1000 employees)	107	113	220
Totals	274	360	634

Industry sector:

The sample covers the broad industry sectors of manufacturing (UK SIC codes 15-39), distribution (UK SIC codes 40-64) and services (UK SIC codes 64-74). Indeed, manufacturing includes engineering, construction, agriculture and mining etc; and distribution includes retail, wholesale and transport.

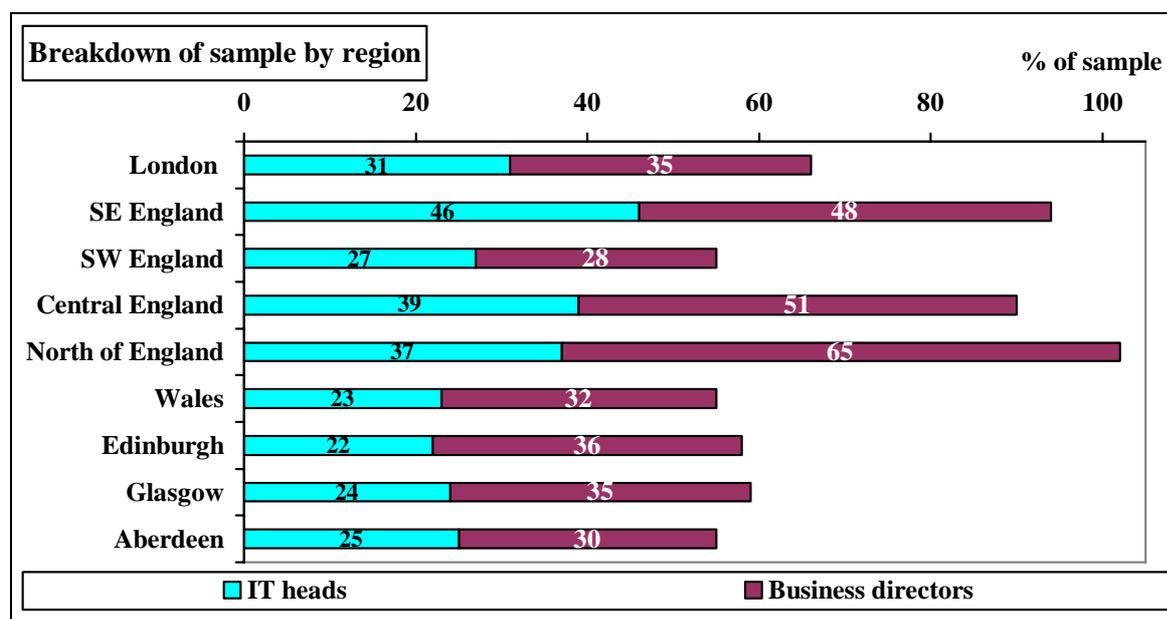
Within both the IT and the business sub-samples, there are relatively more services companies, compared to manufacturing and distribution.

Table 3.2: Sample split by industry sector:

Sector	IT sample	Business sample	Totals
Services	110	170	279
Manufacturing	98	108	206
Distribution	66	82	148
Totals	274	360	634

Region:

The total sample covers 9 regions across the UK, with the sample in each region split roughly evenly between IT heads and business directors. Any differences in the number of interviews between regions, as well as deviation from a 50:50 split according to respondent type, is the result of poor availability of data for some regions.



For Scotland, we focused the sampling around the three major cities (Edinburgh, Glasgow and Aberdeen), which effectively split the country into 3 broad areas. The following table summarises which postcode districts fall under each of the 3 Scottish regions:

Table 3.3: Sample split by Scottish regions:

Region	Aberdeen region	Glasgow region	Edinburgh region
Postcode districts	AB - Aberdeen DD – Dundee KW – Kirkwall PH – Perth IV - Inverness	G – Glasgow DG – Dumfries KA – Kilmarnock ML – Motherwell PA – Paisley	EH – Edinburgh FK – Falkirk TD – Galashiels KY – Kirkaldy

Growth status:

During the interviews, respondents were asked to indicate approximately how much their turnover had grown by during the last 12 months. This information was then used to categorise companies according to how successful they had been during this time, where:

- ‘High’ turnover growth is defined as turnover having grown by 15% or more
- ‘Low’ turnover growth is defined as turnover having grown by between 1 and 14%
- ‘Static’ is defined as 0% growth where the turnover had stayed the same
- ‘Negative’ where the turnover had decreased by an amount

Network IQ score:

The IT and business questionnaires were constructed to ascertain their opinions of the IT network and the degree of sophistication of the technology they had in place. Tick-box options in the questions were allocated scores, typically from between –20 to +30.

A total score was then allocated to each individual respondent’s interview. Averages for the total samples (business and IT) and the various sub-samples (e.g. company size, sector etc) are reported in Sections 3.2 and 3.4.

Comparative Analysis:

The findings of the survey have been analysed and compared according to:

- Company size
- Industry sector
- Large scale regions (Scotland v England & Wales)
- Scottish regions
- Growth status

Where any differences exist that are significant at a 95% confidence level, they are described accordingly in this report.

Table 3.4: Margin of error at a 95% confidence level:

The following statistical confidence at a 95% level has been used when analysing the data.

Sample size	50	100	200	300	400	500	1000
5% or 95%	±6.2	±4.4	±3.1	±2.5	±2.2	±1.9	±1.4
10% or 90%	±8.5	±6.0	±4.2	±3.5	±3.0	±2.7	±1.9
25% or 75%	±12.5	±8.7	±6.1	±5.0	±4.3	±3.9	±2.7
50%	±14.1	±10	±7.1	±5.8	±5.0	±4.5	±3.2

Table 3.5: Sub-Sample Sizes (n) – IT heads sample – 274 interviews:

Company size	n=	Sector	n=	Large scale regions	n=	Scottish regions	n=	Growth Status	n=
Large (250-1000 employees)	107	Services	110	Scotland	71	Edinburgh	22	High growth	71
Small (20-249 employees)	167	Manufacturing	98	England & Wales	203	Aberdeen	24	Low growth	62
		Distribution	66			Glasgow	25	Static	31
								Negative	11

Table 3.6: Sub-Sample Sizes (n) – Business manager sample – 360 interviews:

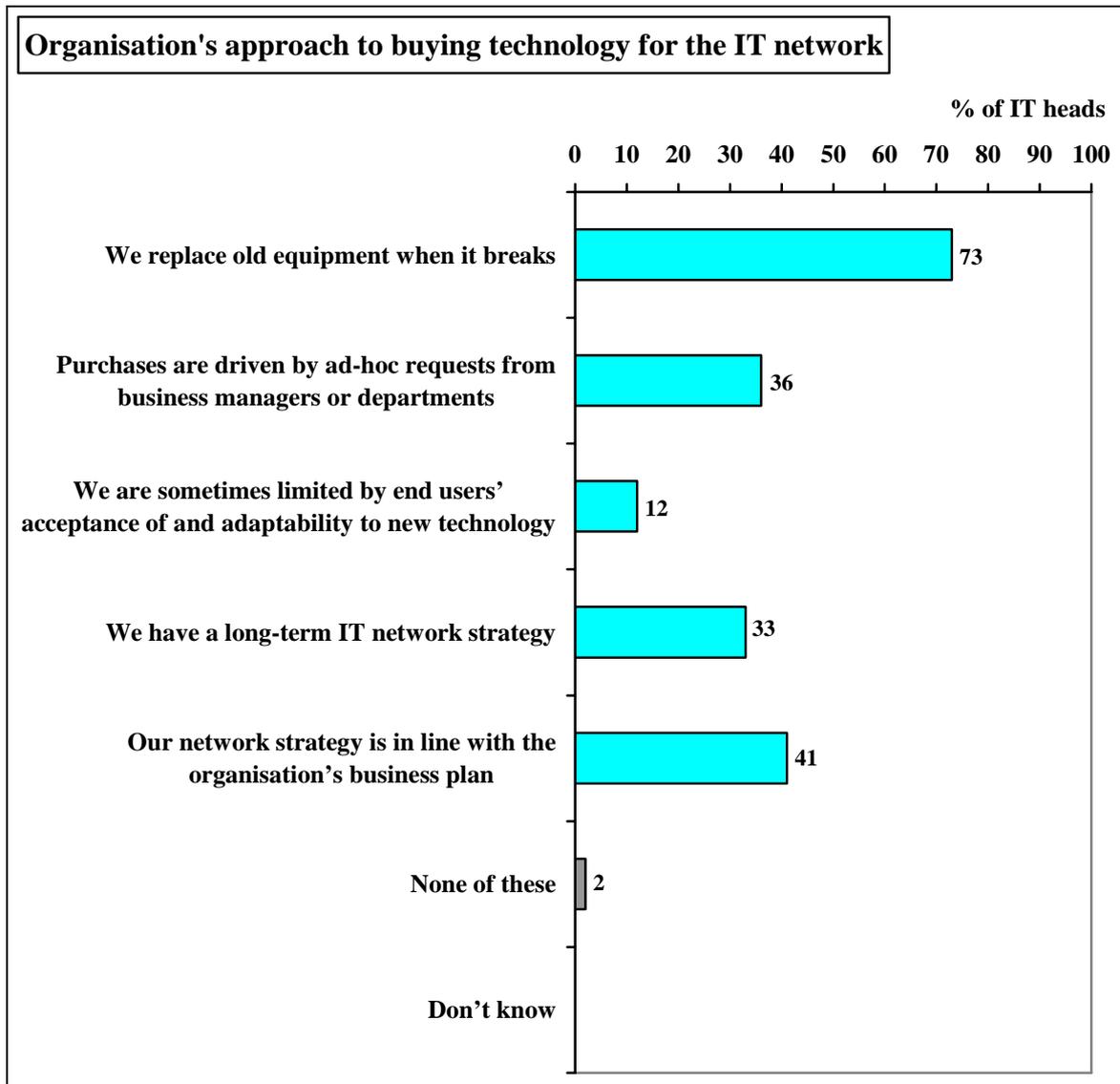
Company size	n=	Sector	n=	Country	n=	Scottish regions	n=	Growth Status	n=
Large (251-1000 employees)	113	Services	169	Scotland	101	Edinburgh	36	High growth	79
Mid-sized (20-250 employees)	247	Manufacturing	108	England & Wales	259	Aberdeen	35	Low growth	85
		Distribution	82			Glasgow	30	Static	50
								Negative	7

Throughout this report, where any numbers do not add up to 100%, it is either because respondents were allowed to select more than one tick-box option in the question, or because of minor rounding errors, which should be ignored.

4. Research Findings

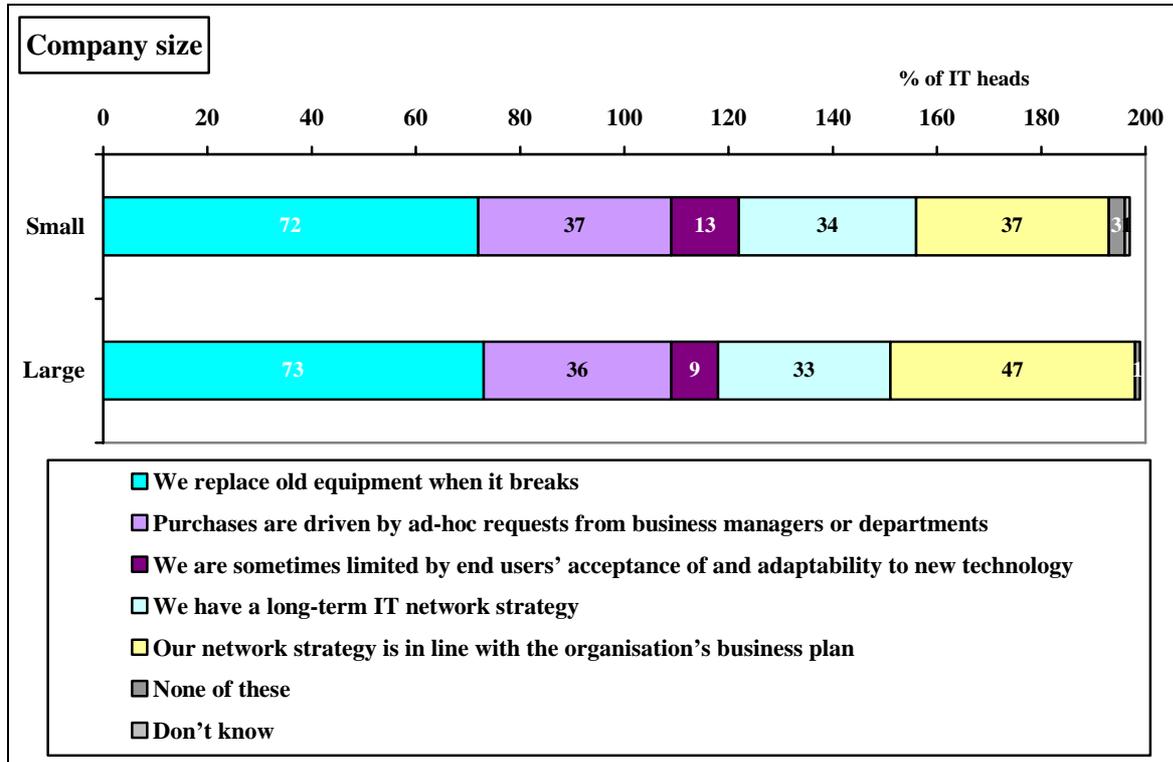
4.1 IT Decision Makers

4.1.1 Which of the following best describe your organisation’s approach to buying technology for your IT network?

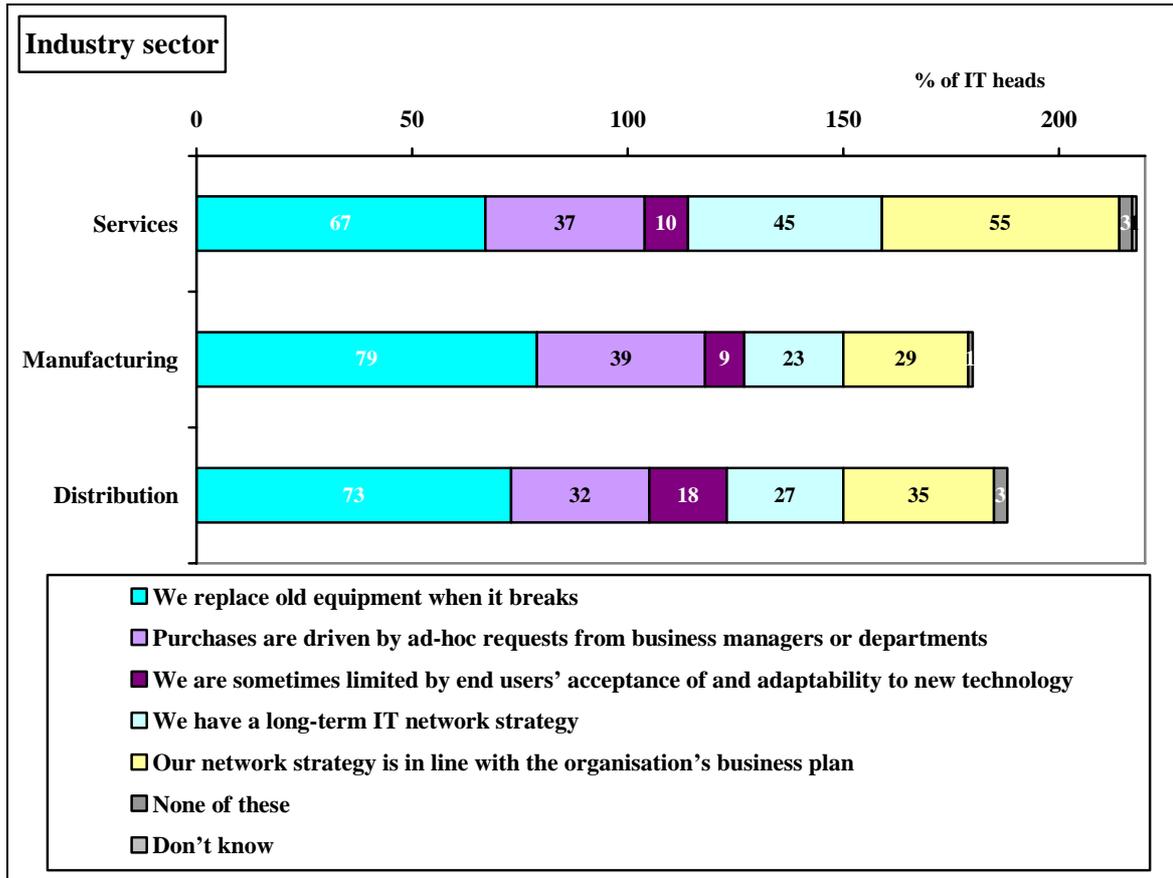


- 73% of companies replace old equipment when it breaks – for 30%, this is the only approach they take [not shown].
- 36% of IT heads admit that network purchases in their company are driven by ad-hoc requests from business managers or departments – for 6%, this is the only approach they take [not shown].
- Indeed, 41% only approach buying technology for their company in one of these two ways – either reacting to ad-hoc requests or replacing old equipment when it breaks [not shown].

- In contrast, 33% have a long-term IT network strategy and 41% say their IT network strategy is in line with the organisation’s business plan.
- This means, collectively, 51% approach buying technology for their IT network in a strategic way, whereas 49% of companies do not [not shown].
- 12% of IT heads say they are sometimes limited by end users’ acceptance of and adaptability to new technology.

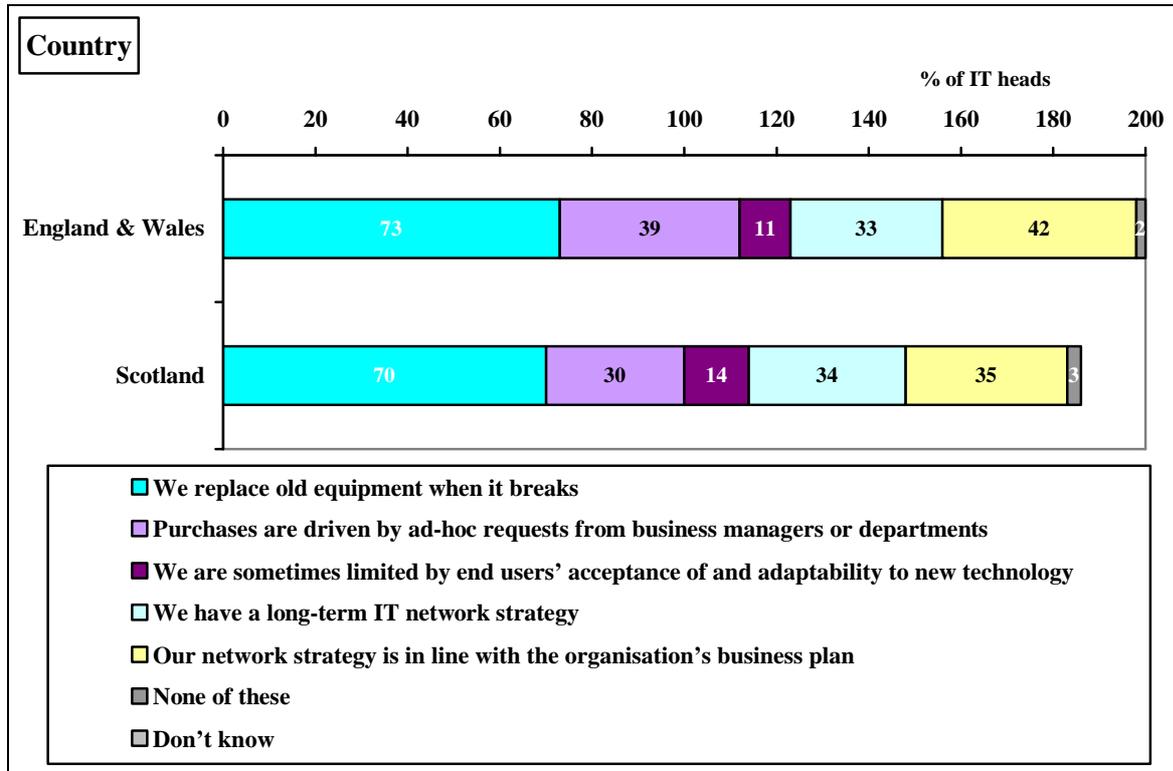


- Statistically, there is no significant difference according to a company’s size and its approach to buying technology for the IT network.

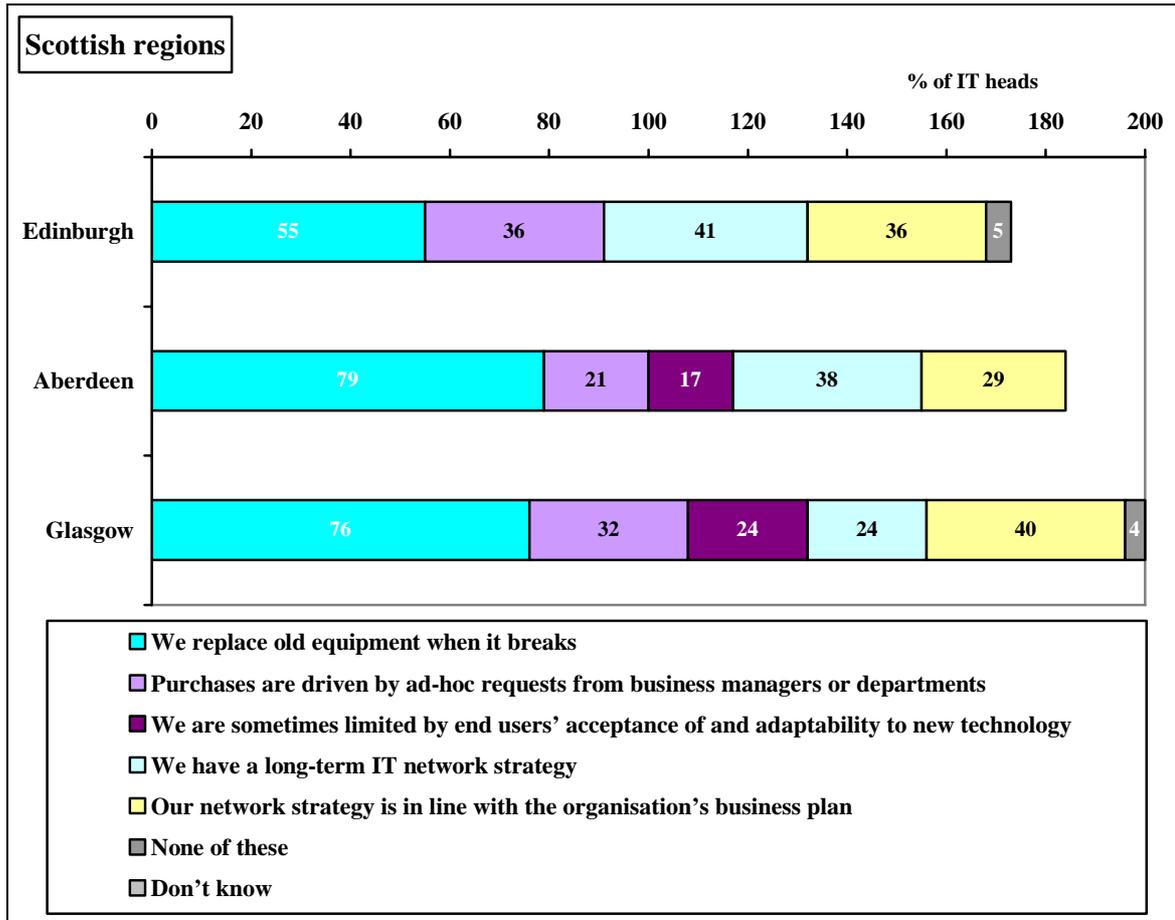


- Overall, services companies take on more of these approaches to purchasing for their IT network, compared to manufacturing companies (i.e. length of bars in the above chart).
- In detail, more manufacturing companies (40%) replace old equipment when it breaks and only take on this approach, compared to the services sector (21%) [not shown].
- Similarly, more manufacturing companies (12%) admit that network purchases in their company are driven by ad-hoc requests from business managers or departments and only take on this approach, compared to those in the services (2%) and distribution (3%) sectors [not shown].
- Indeed, more manufacturing companies (58%) only approach buying technology for their company in one of these two ways – either reacting to ad-hoc requests or replacing old equipment when it breaks, compared to the services (28%) and distribution (38%) sectors [not shown].
- In contrast, more services companies (45%) have a long-term IT network strategy, compared to the manufacturing (23%) and distribution (27%) sectors.
- Also, more services companies (55%) say their IT network is in line with the organisation's business plan, compared to the manufacturing (29%) and distribution (35%) sectors.
- Indeed, more services companies (65%) approach buying technology for their network in a strategic way, compared to manufacturing (38%) and distribution (45%) sectors [not shown].

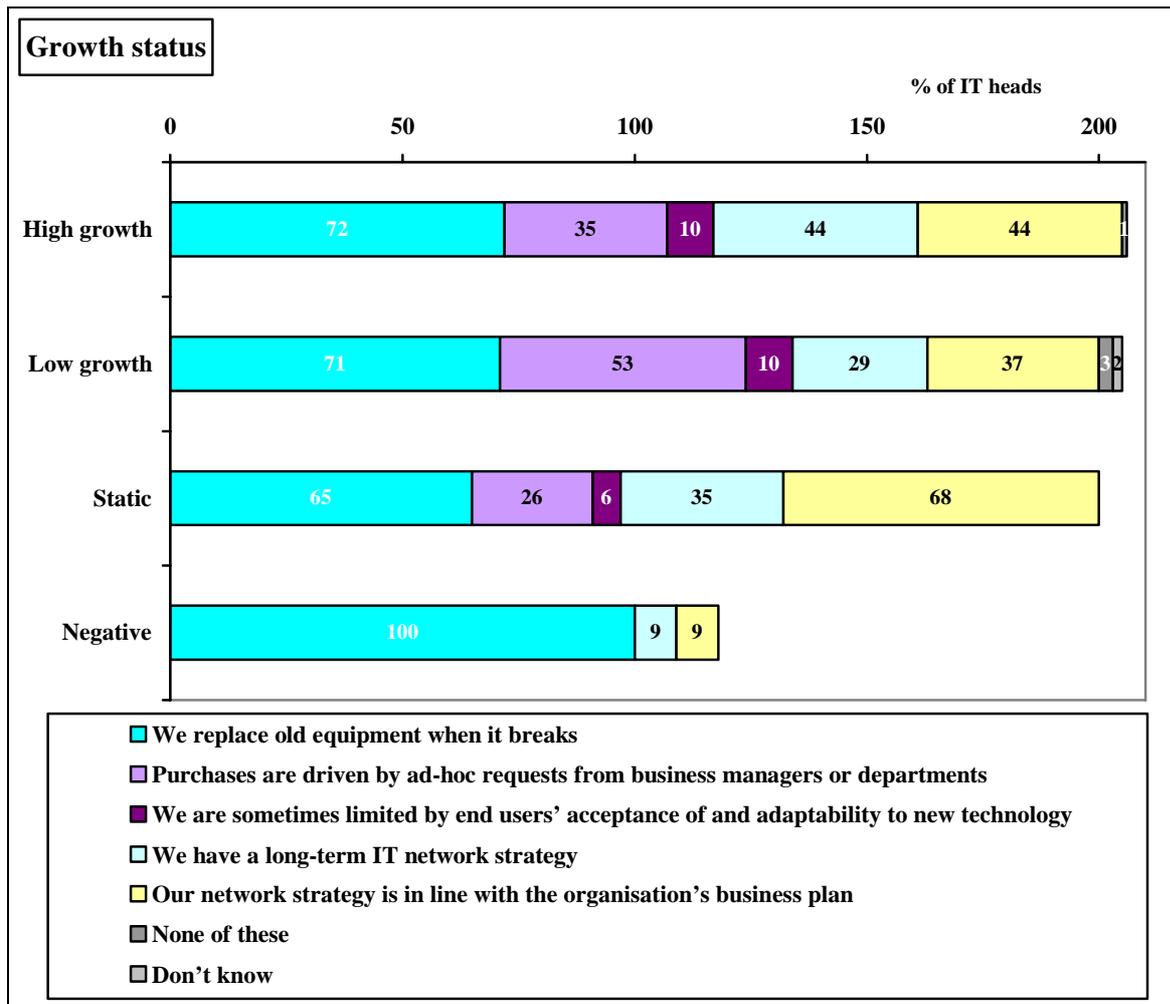
- In contrast, more manufacturing (62%) and distribution (55%) companies do not do this, compared to services companies (35%) [not shown].



- Statistically, there is no significant difference according to country and a company's approach to buying technology for the IT network.

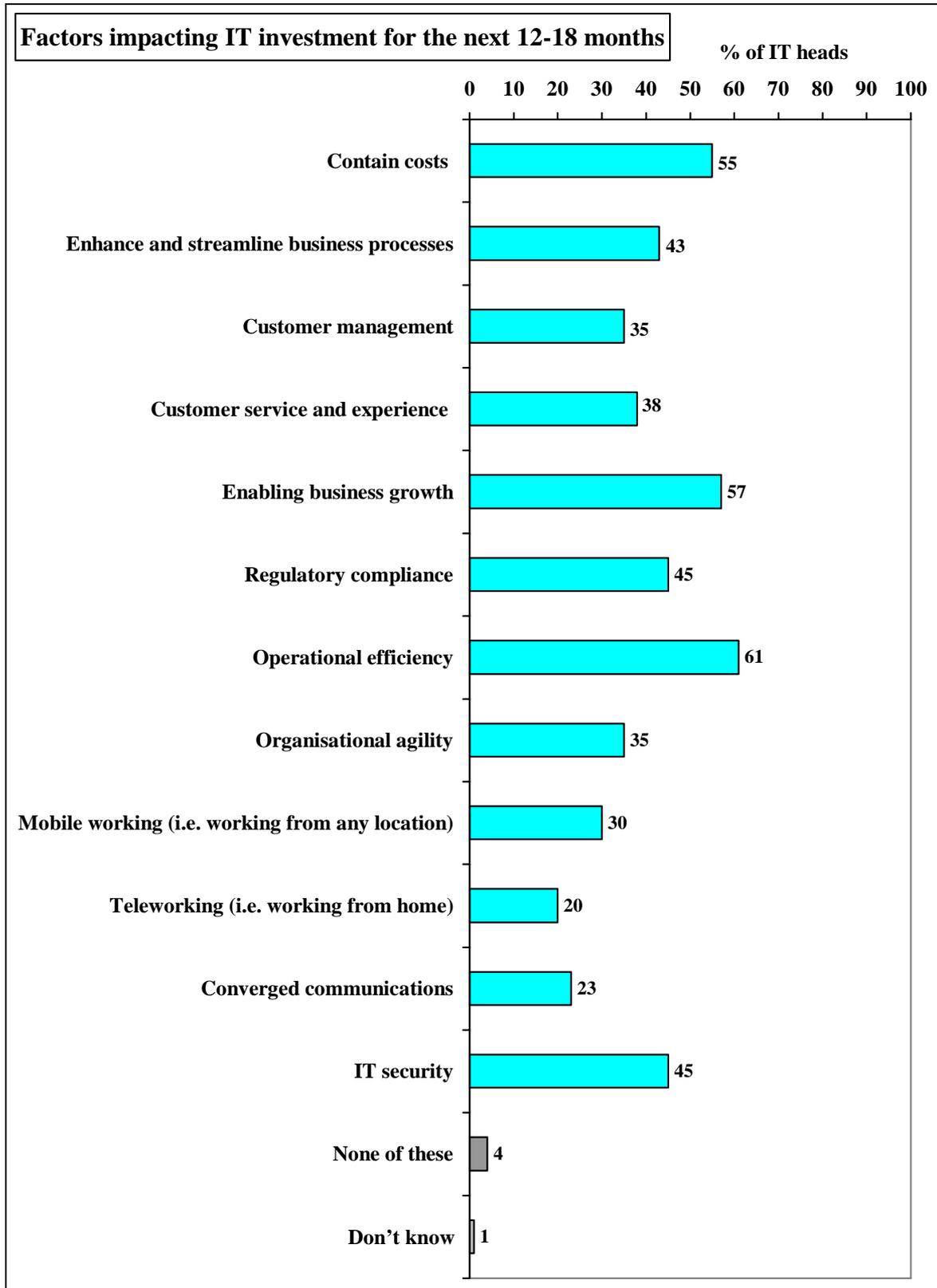


- Overall, companies in the Glasgow region take on more of these approaches to IT network purchasing, compared to those in the Edinburgh region (i.e. length of bars in above chart).
- In detail, more companies in the Aberdeen (17%) and Glasgow (24%) regions say they are sometimes limited by end users' acceptance of and adaptability to new technology, compared to companies in the Edinburgh region (zero).
- Otherwise, statistically, there is no difference according to Scottish region and which of these approaches companies take towards purchasing technology for their IT network.



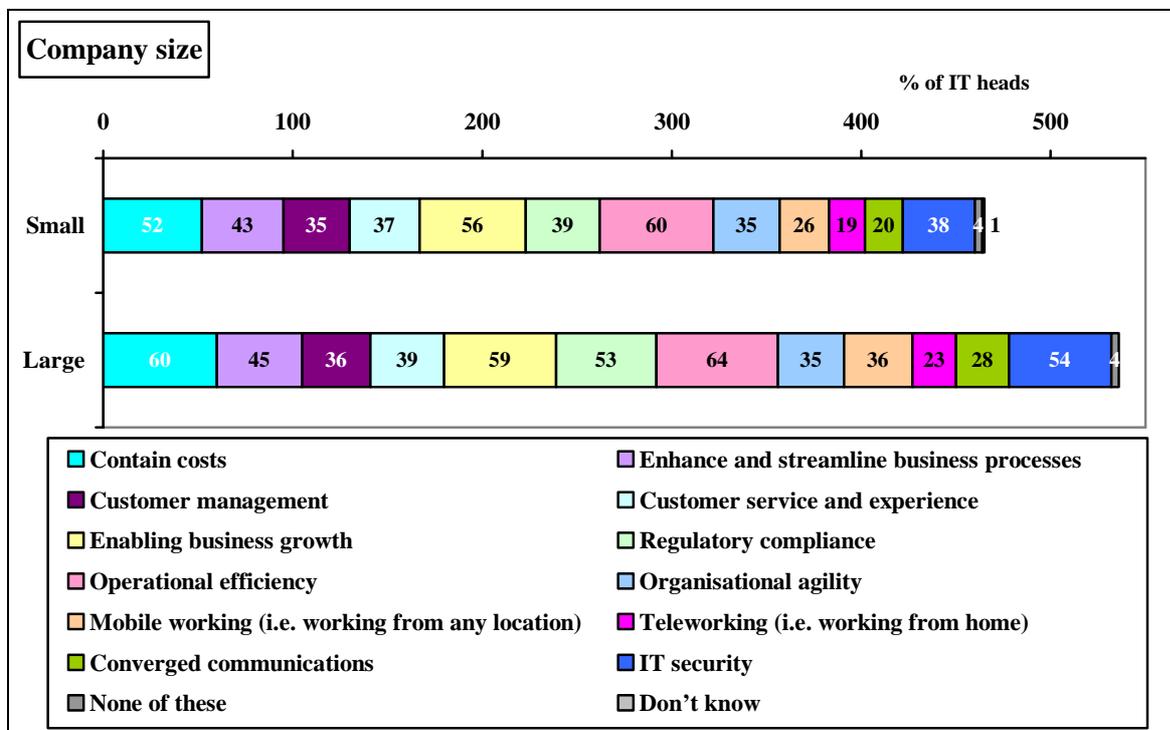
- More companies that have experienced low turnover growth in the last 12 months (53%) admit that network purchases in their company are driven by ad-hoc requests from business managers or departments, compared to those that have experienced high turnover growth (35%) and those that have remained static (26%).
- Indeed, more companies that have experienced low turnover growth (13%) admit that network purchases in their company are driven by ad-hoc requests and this is the only approach they take, compared to those that have remained static (zero) [not shown].
- More companies that have remained static in terms of turnover growth (71%) approach buying technology for their IT network in a strategic way, compared to those companies that have experienced low turnover growth in the last 12 months (42%) [not shown].
- Conversely, more companies that have experienced low turnover growth (58%) do not approach buying technology for their IT network in a strategic way, compared to those that have remained static [not shown].

4.1.2 Which of the following will have an impact on your IT investment priorities for the next 12-18 months?

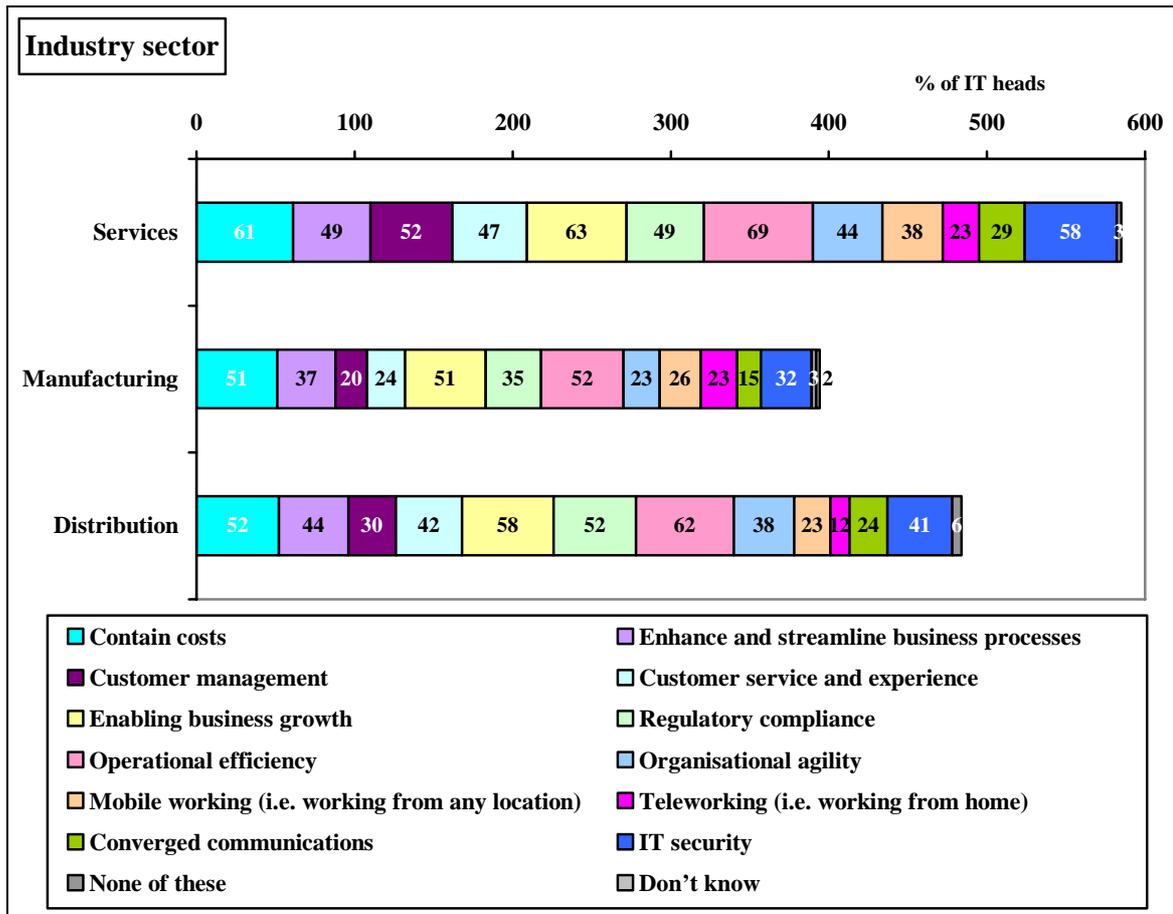


- Overall, 96% of companies have at least 1 of these business issues that will have an impact on their IT investment priorities in the next 12-18 months.

- On average, IT heads say 5 of these issues will affect them; indeed 76% say more than 1 will have an impact, 53% say more than 3 issues will affect them in this way and 16% have 10 or more that will impact on IT investment priorities [not shown].
- The Top 3 issues that will impact IT investment priorities during this time are:
 1. Operational efficiency (61%)
 2. Enabling business growth (57%)
 3. Containing costs (55%)
- Almost 1 in 2 IT heads (45%) say regulatory compliance will affect their spending priorities during the next 12-18 months.
- Some say striving to enhance and streamline business processes (43%) and trying to achieve organisational agility (35%) will have an impact on where the IT budget goes.
- Customer management (35%) and customer service / experience (38%) will be issues to consider for others.
- More specifically, mobile working (i.e. working from any location) will impact IT spending for 30% of companies, but fewer (20%) will take into account teleworking (i.e. working from home).
- IT issues, such as trying to achieve converged communications will affect IT spending for 23% of companies.
- But more (45%) say IT security issues will affect IT investment priorities in the next 12-18 months.
- However, 4% say none of these issues will impact IT spending priorities for them and 1% are unsure which will have an impact.

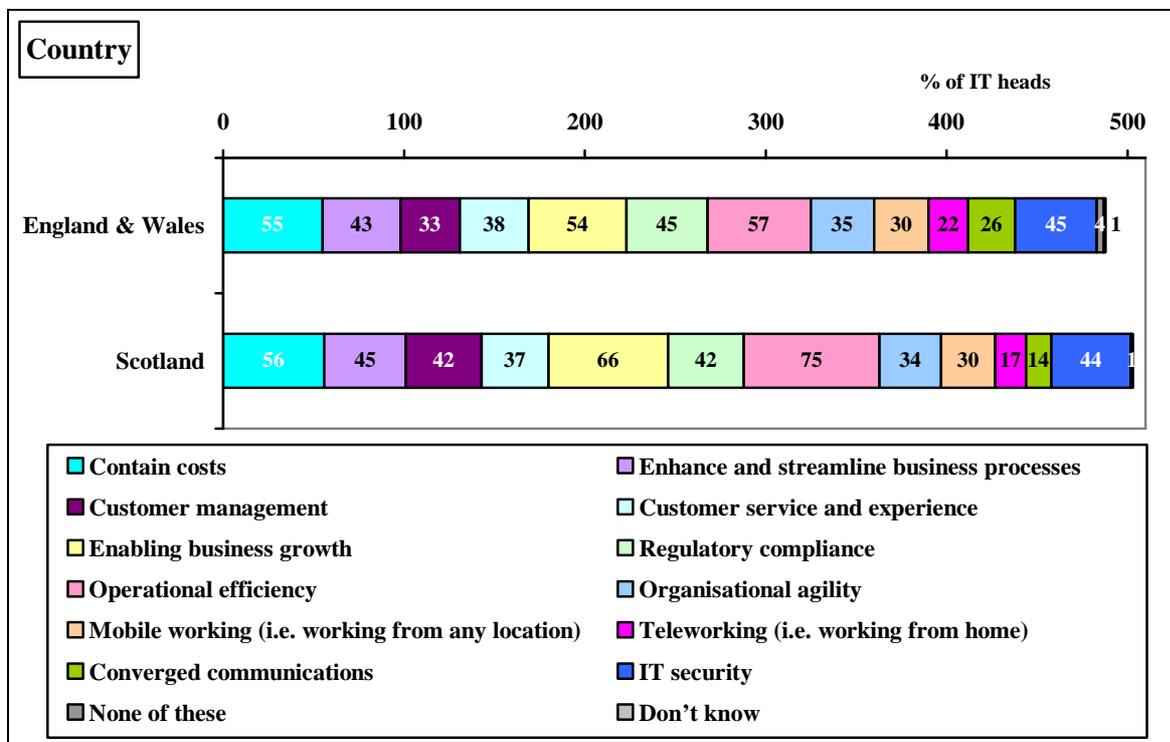


- Overall, large companies’ spending priorities will be affected by more of these issues in the next 12-18 months, compared to small companies (i.e. length of bars in the above chart).
- More large companies (53%) say regulatory compliance will have an impact on their IT investment priorities in the next 12-18 months, compared to small companies (39%).
- Also, more large companies (54%) say IT security issues will impact their IT investment priorities, compared to small companies (38%).

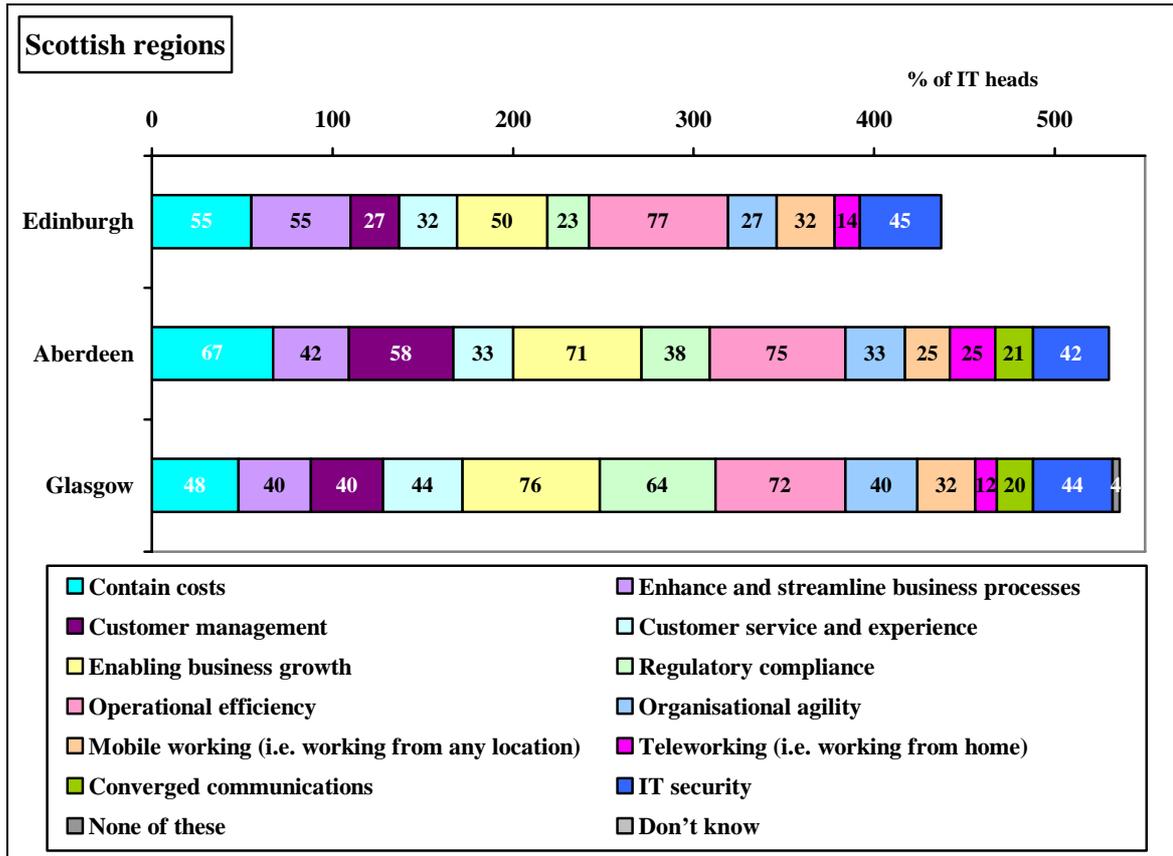


- Overall, IT spending in services companies will be affected by more of these issues in the next 12-18 months, compared to manufacturing companies (i.e. length of bars in the above chart).
- Indeed, on average, services companies say 5.8 of these issues will have an impact on their IT investment priorities in the next 12-18 months, compared to those in manufacturing (3.9) and distribution (4.8) [not shown].
- And more services companies (84%) say multiple issues will have an impact, compared to manufacturing companies (67%) [not shown].
- Indeed, more services companies (61%) say more than 3 will have an impact, compared to manufacturing companies (43%) [not shown].
- And, more services companies (23%) say more than 10 will have an impact, compared to manufacturing companies (9%) [not shown].

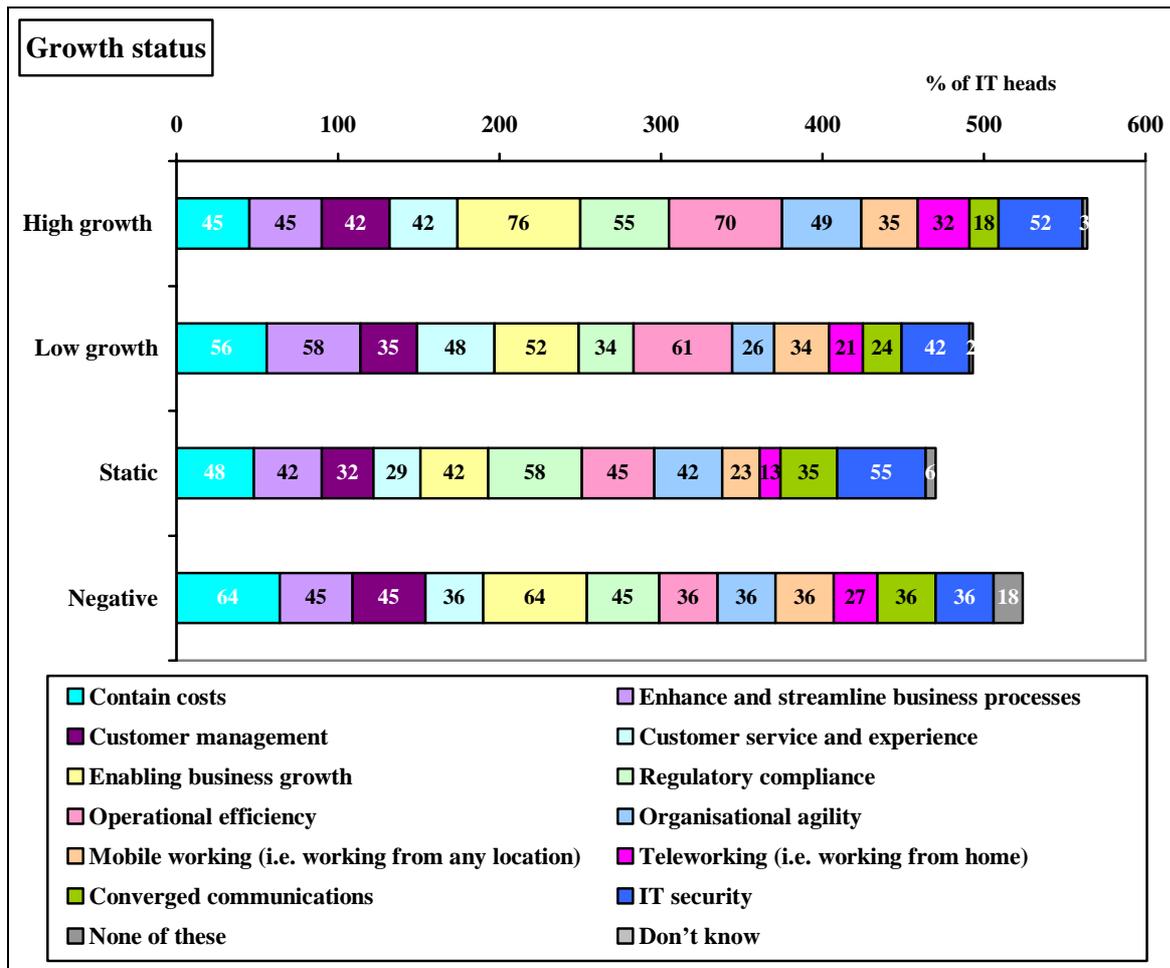
- In more detail, more services companies (52%) say customer management will have an impact on their investment priorities in the next 12-18 months, compared to manufacturing (20%) and distribution (30%) companies.
- Also, more services (47%) and distribution (42%) companies think customer service and experience issues will impact their investment priorities, compared to manufacturing companies (24%).
- And, more services (49%) and distribution (52%) companies think regulatory compliance will impact them in this way, compared to manufacturing companies (35%).
- Once again, more services companies (69%) think operational efficiency will impact their IT investment priorities, compared to manufacturing companies (52%).
- Also, more services (44%) and distribution (38%) companies think striving for organisational agility will impact them in this way, compared to manufacturing companies (23%).
- Furthermore, more services companies (38%) think mobile working (i.e. working from any location) will have an impact on their investment priorities, compared to distribution companies (23%).
- And more services companies (29%) think converged communications will impact their IT investment priorities, compared to manufacturing companies (15%).
- Finally, more services companies (58%) say IT security will have an impact on their investment priorities in the next 12-18 months, compared to manufacturing (32%) and distribution (41%) companies.



- More Scottish companies (87%) say multiple issues will have an impact on their IT investment priorities in the next 12-18 months, compared to companies in England & Wales (71%) [not shown].
- In detail, more Scottish companies (75%) say operational efficiency will have an impact, compared to companies in England & Wales (57%).
- However, more companies in England & Wales (26%) say converged communications will have an impact on their IT investment priorities in the next 12-18 months, compared to Scottish companies (14%).

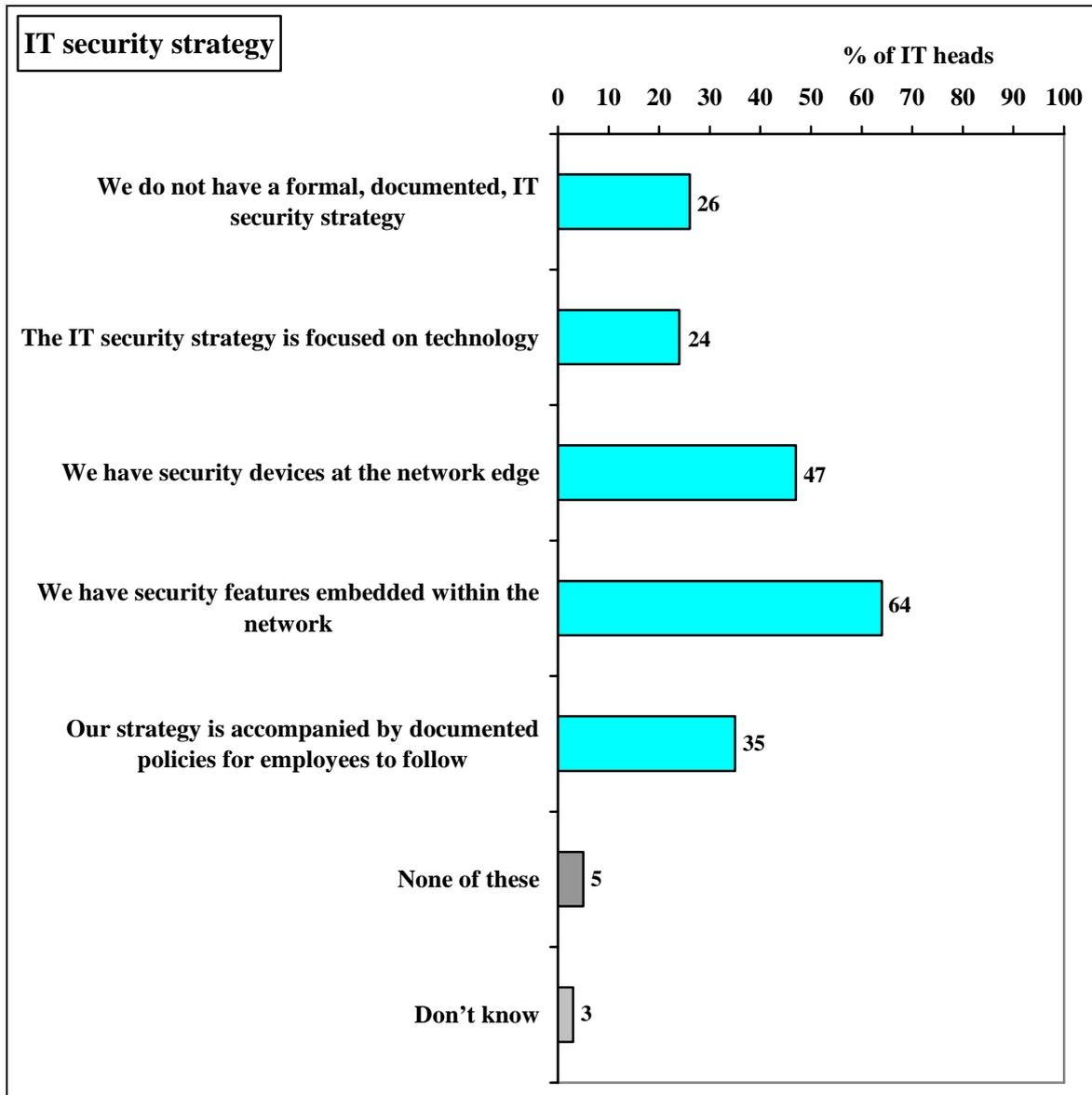


- Overall, companies in the Aberdeen and Glasgow regions say more of these issues will impact their IT investment priorities in the next 12-18 months, compared to companies in the Edinburgh region (i.e. length of bars in the above chart).
- In detail, more companies in the Aberdeen region (58%) say customer management will have an impact on their IT investment priorities in the next 12-18 months, compared to companies in the Edinburgh region (27%).
- But more companies in the Glasgow region (64%) say regulatory compliance will have an impact on them, compared to companies in the Edinburgh region (23%).
- And more companies in the Aberdeen (21%) and Glasgow (20%) regions say converged communications will have an impact on them, compared to companies in the Edinburgh region (zero).

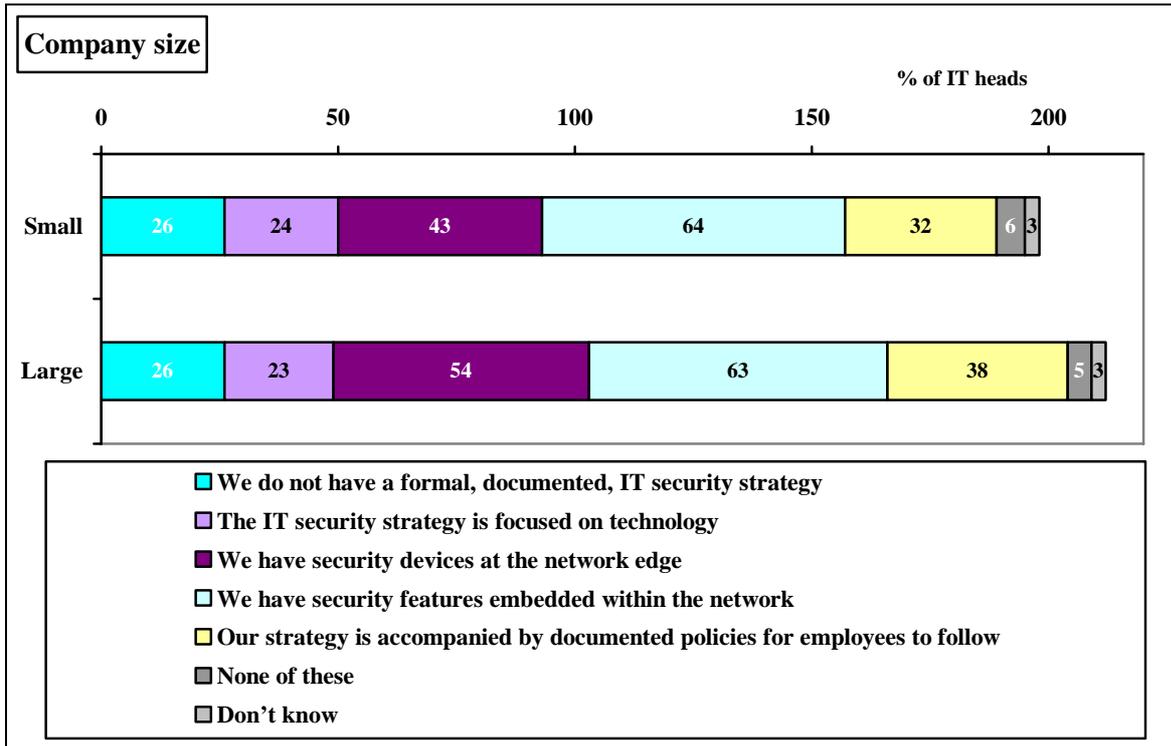


- Overall, companies that have experienced high turnover growth say more of these issues will impact on their IT investment priorities in the next 12-18 months, compared to those companies that have remained static (i.e. length of bars in the above chart).
- In detail, more companies that have experienced high turnover growth (76%) say enabling business growth will have an impact on their IT investment priorities, compared to those with low turnover growth (52%) and those who have remained static (42%).
- Also, more companies that have experienced high turnover growth (55%) and those who have remained static (58%) say regulatory compliance will have an impact on their IT investment priorities, compared to those with low turnover growth (34%).
- Furthermore, more companies that have experienced high turnover growth (70%) say operational efficiency will have an impact, compared to those who have remained static (45%).
- Similarly, more companies that have experienced high turnover growth (49%) say organisational agility will affect them in this way, compared to those with low turnover growth (26%).
- Finally, more companies that have experienced high turnover growth (32%) say teleworking (i.e. working from home) will have an impact on their IT spending, compared to those who have remained static (13%).

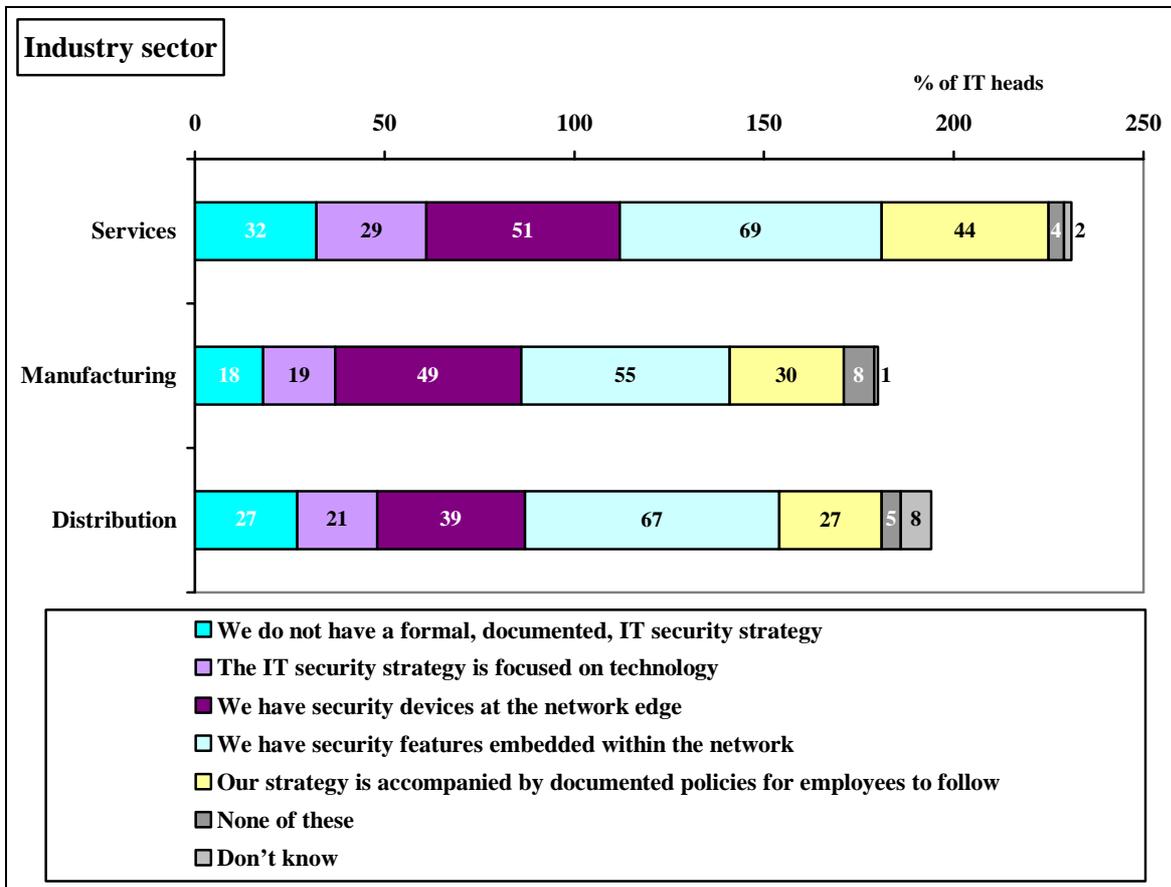
4.1.3 Which of the following apply to your IT security strategy?



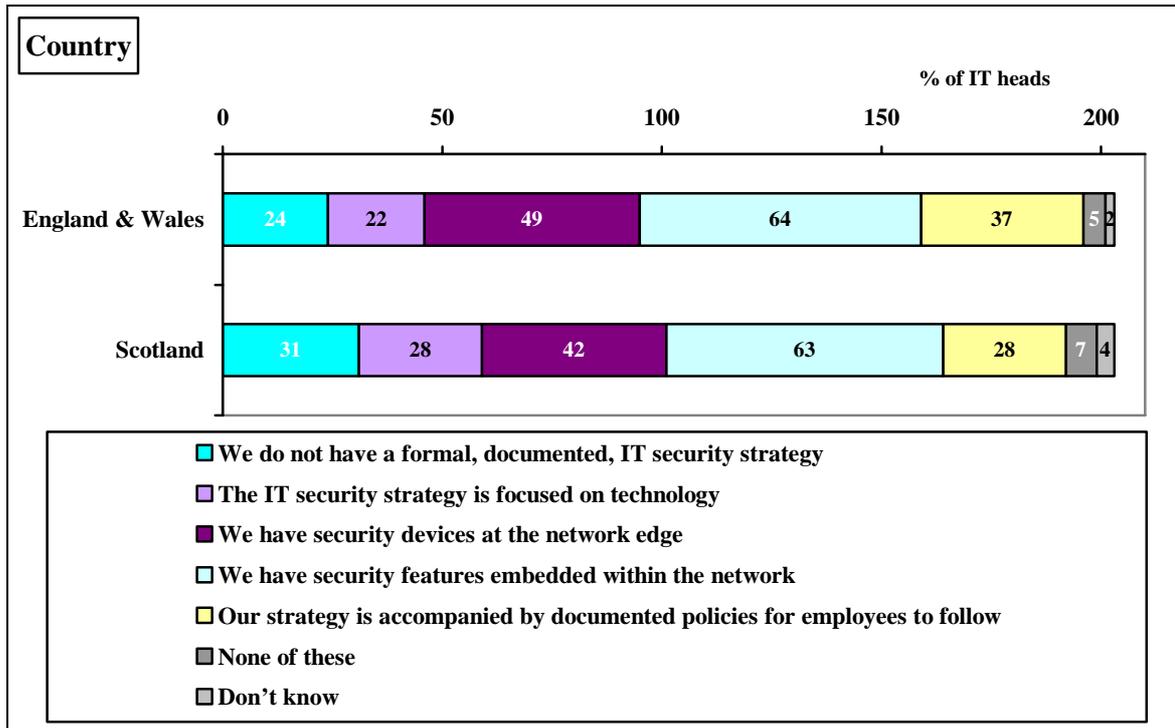
- 1 in 4 IT heads (26%) admit they do not have a formal, documented, IT security strategy in place.
- Another 1 in 4 (24%) admit the IT security strategy is focused on technology, rather than the business.
- Furthermore, only 35% say their IT security strategy is accompanied by documented policies for employees to follow.
- 47% of IT heads say they have security devices at the network edge, whereas 64% have security features embedded within the network.
- In contrast, 5% say none of these apply to their IT security strategy, and 3% are unsure which apply.



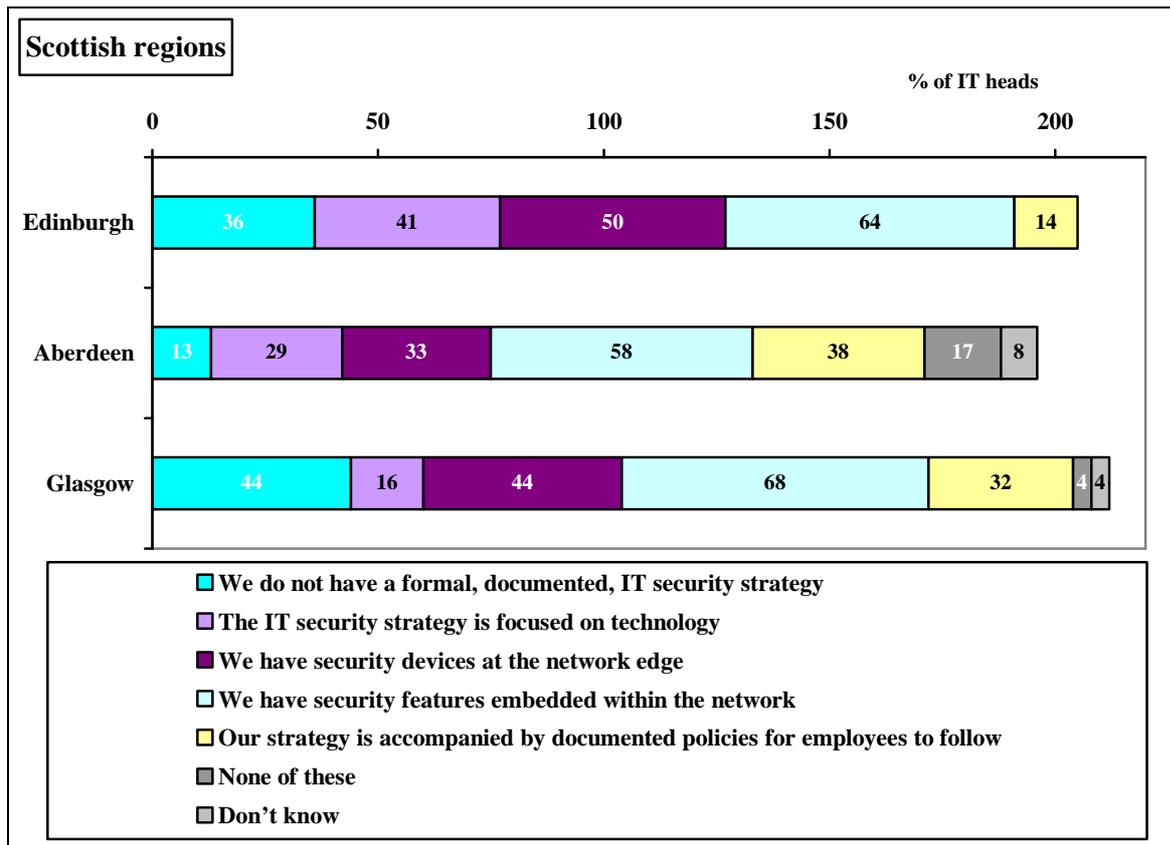
- Statistically, there is no significant difference according to a company's size and which of these apply to its IT strategy.



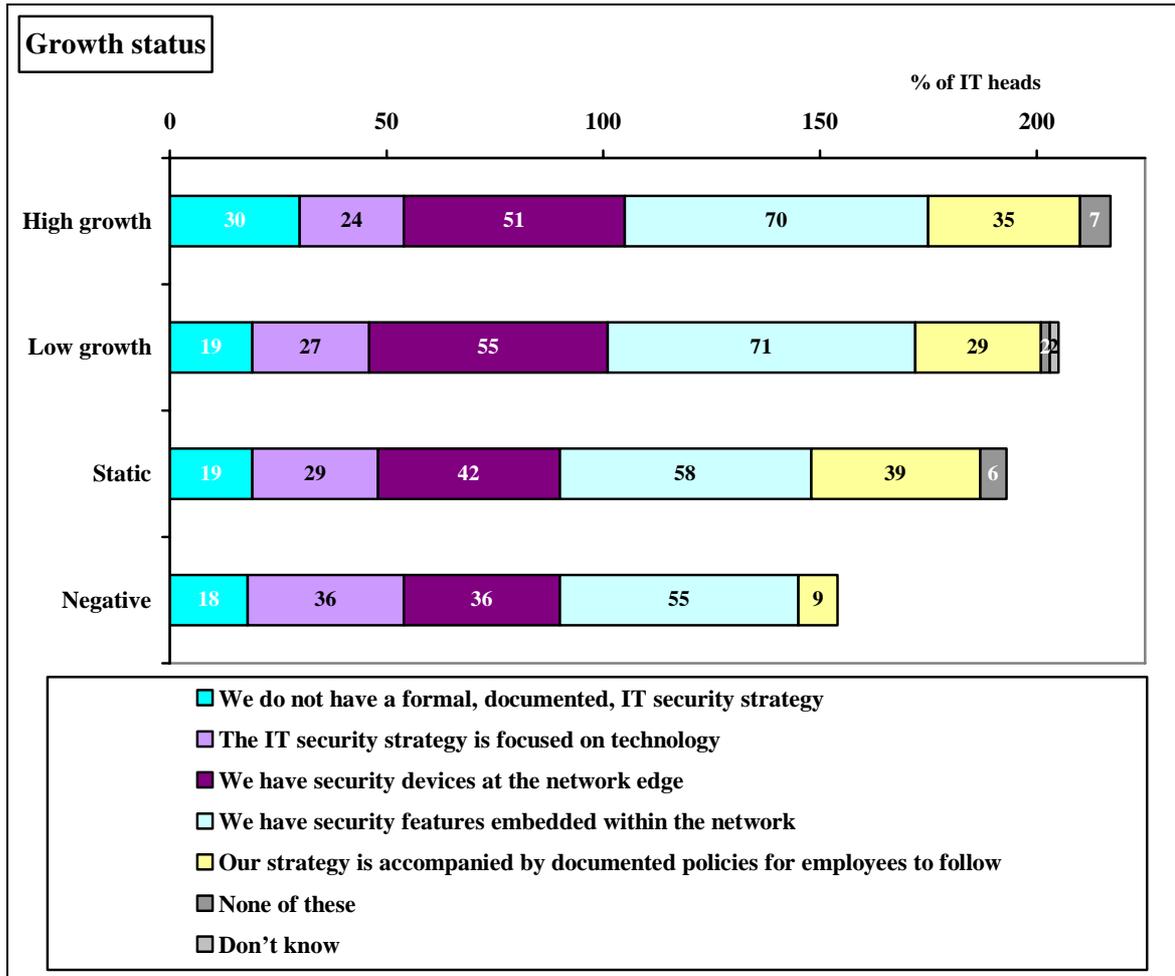
- More services companies (32%) admit they do not have a formal, documented, IT security strategy in place, compared to manufacturing companies (18%).
- Similarly, more services companies (69%) say they have security features embedded within the network, compared to manufacturing companies (55%).
- However, more services companies (44%) say their IT security strategy is accompanied by documented policies for employees to follow, compared to manufacturing (30%) and distribution (27%) companies.



- Statistically, there is no significant difference according to country and which of these apply to a company's IT strategy.

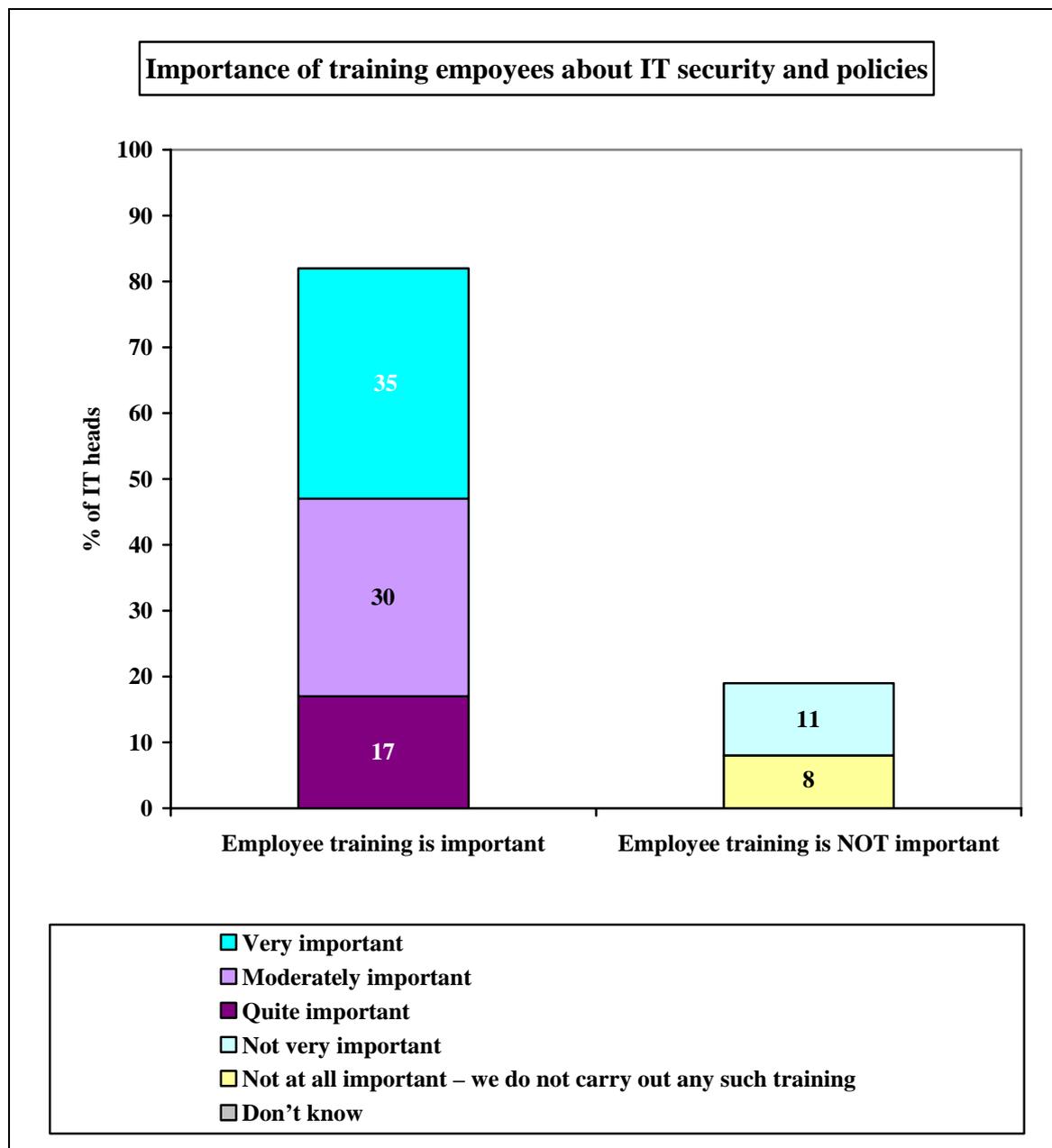


- More companies in the Glasgow region (44%) admit they do not have a formal, documented, IT security strategy in place, compared to companies in the Aberdeen region (13%).
- But, more companies in the Aberdeen region (17%) say none of these apply to their IT security strategy, compared to companies in the Edinburgh region (zero).

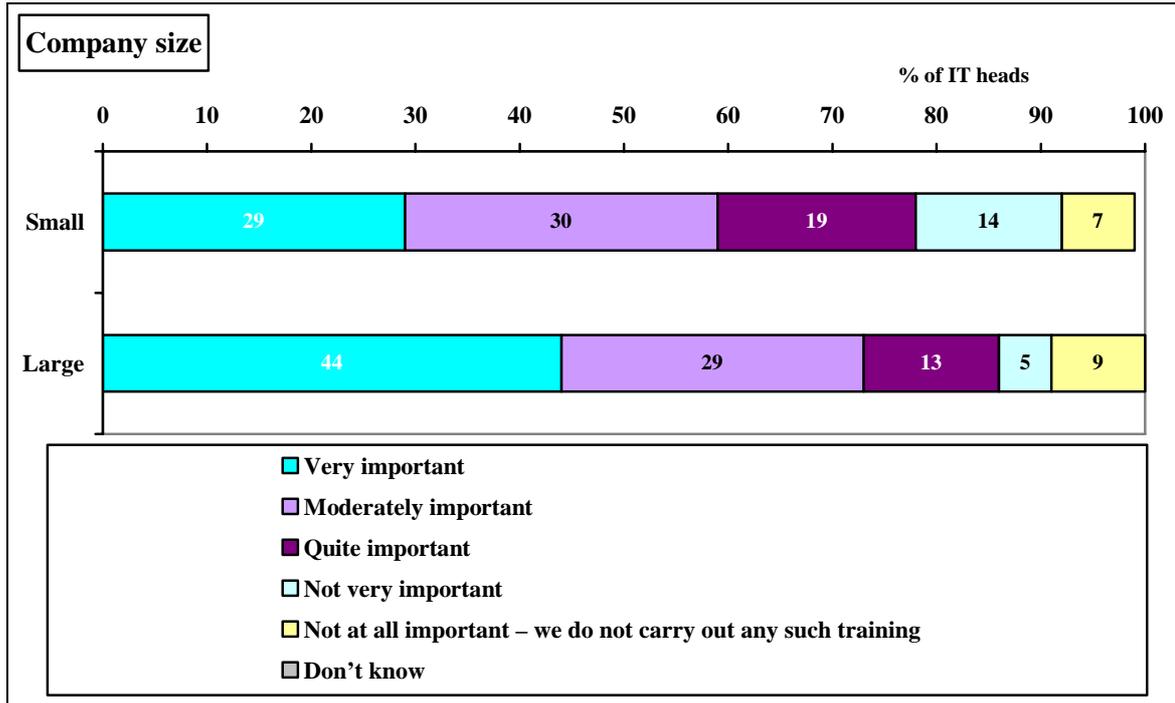


- Statistically, there is no significant difference according to a company's growth status and which of these apply to its IT strategy.

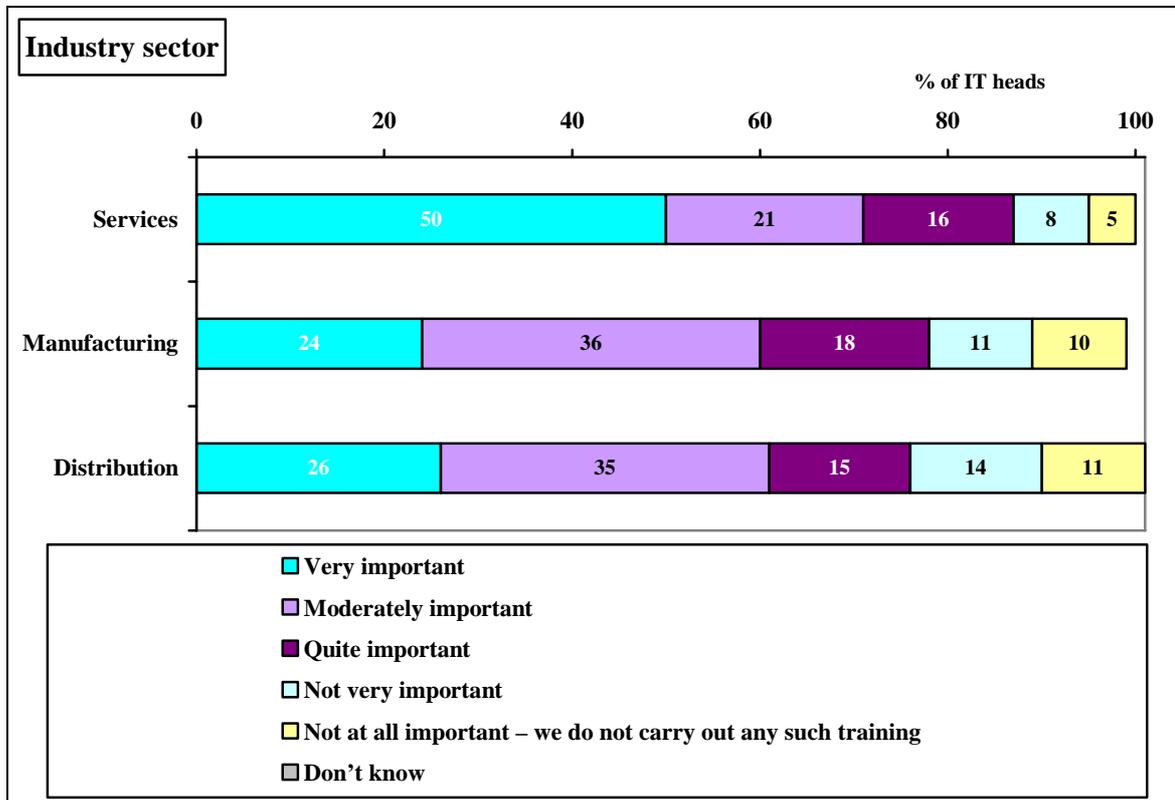
4.1.4 How important to your organisation is the role of employees’ training about IT security issues and the policies you have in place?



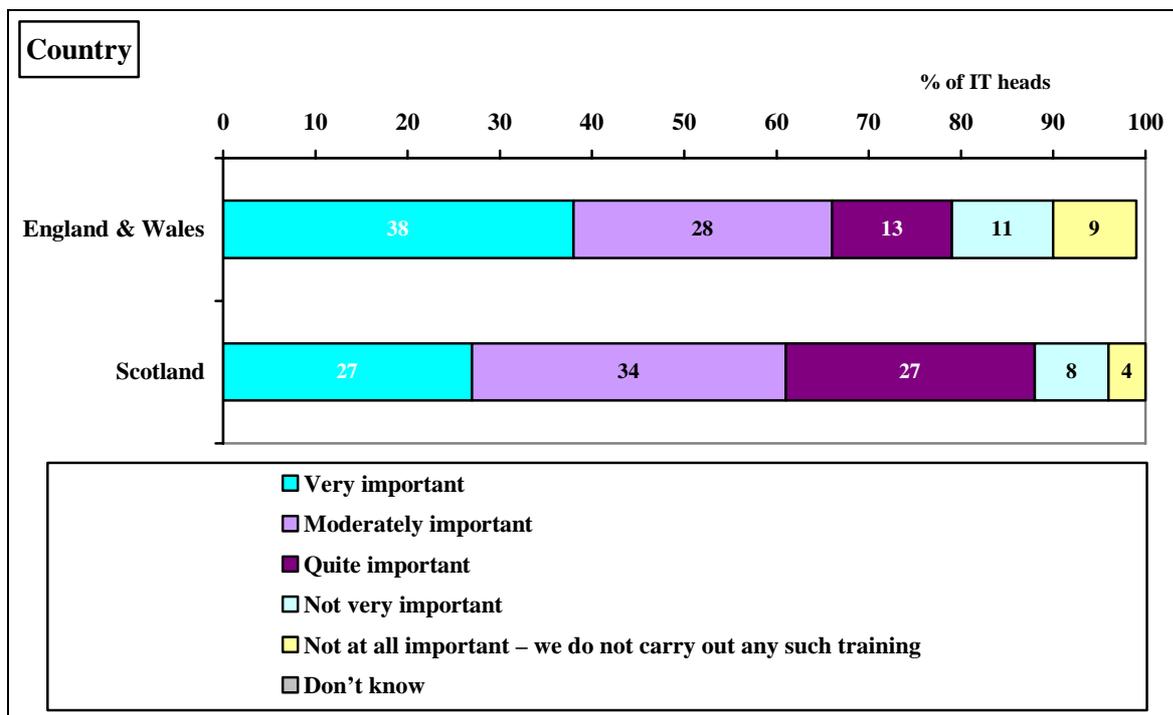
- Collectively, 92% of companies carry out training about IT security issues and any policies that are in place.
- 81% of IT heads say this training is important to their company to varying degrees – but only 35% describe it as very important, while 30% say it is moderately so and another 17% say it is only quite important that employees are trained accordingly.
- In contrast, 19% think training about IT security issues and any relevant policies that are in place is not important for employees.
- Indeed, 8% do not carry out any such training.



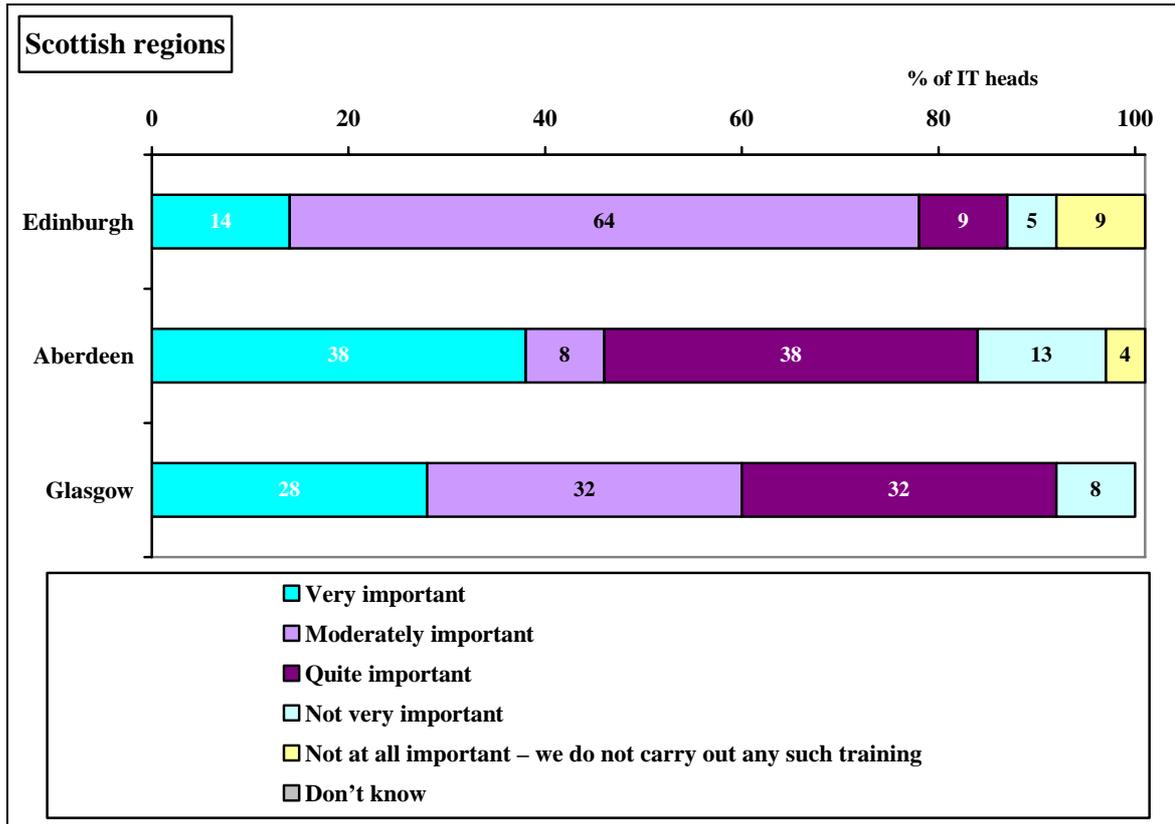
- More large companies (44%) think the role of employee training about IT security issues and the policies they have in place is very important, compared to small companies (29%).
- Conversely, more small companies (14%) think the role of such employee training is not very important, compared to large companies (5%).



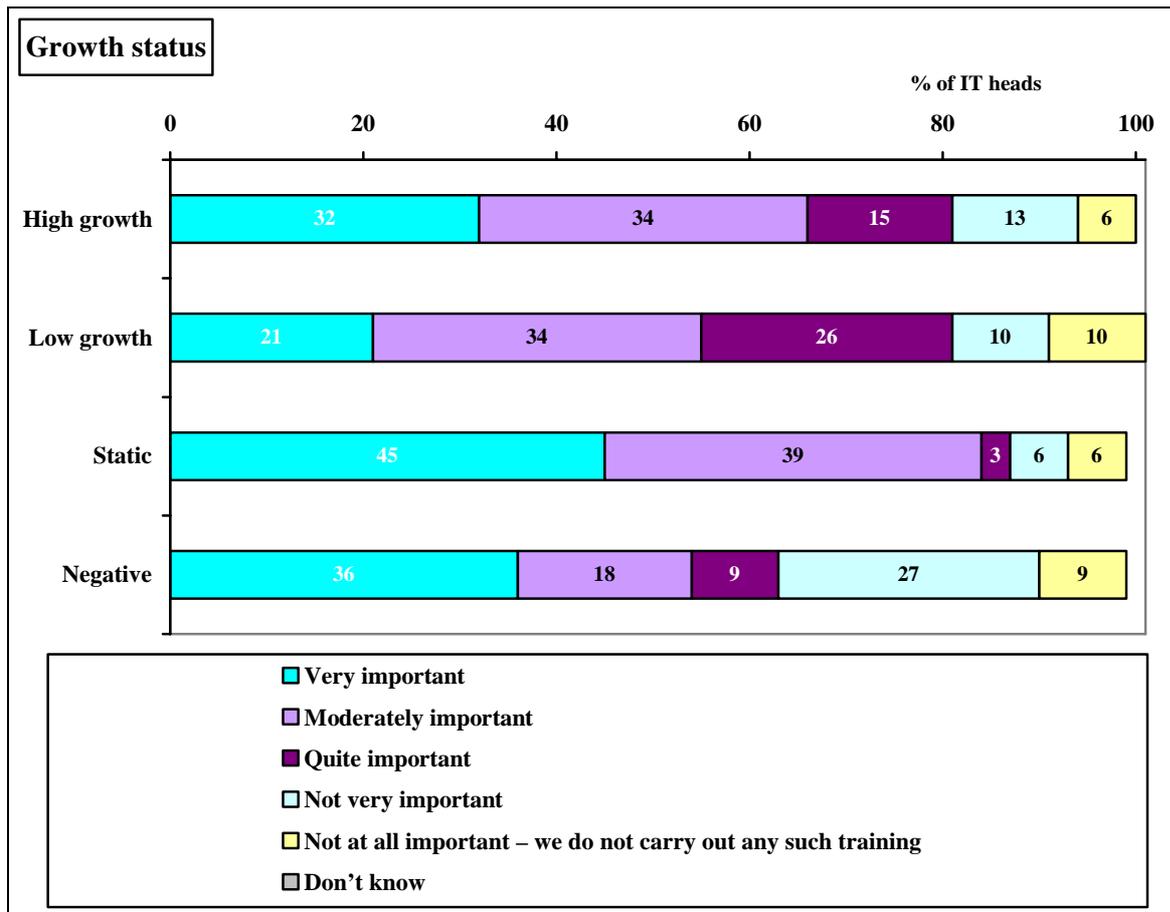
- More services companies (87%) think the role of employee training about IT security issues and the policies they have in place is important, compared to distribution companies (76%).
- Also, more services companies (50%) think the role of such employee training is very important, compared to manufacturing (24%) and distribution (26%) companies.
- However, more manufacturing (36%) and distribution (35%) companies think the role of such employee training is only moderately important, compared to services companies (21%).
- Indeed, more distribution companies (25%) think the role of such employee training is not important, compared to services companies (13%).



- More companies in Scotland (27%) think the role of employee training about IT security issues and the policies they have in place is quite important, compared to companies in England & Wales (13%).
- Otherwise, statistically, there is no significant difference according to country and how important companies think employee training is about IT security issues and the policies they have in place.

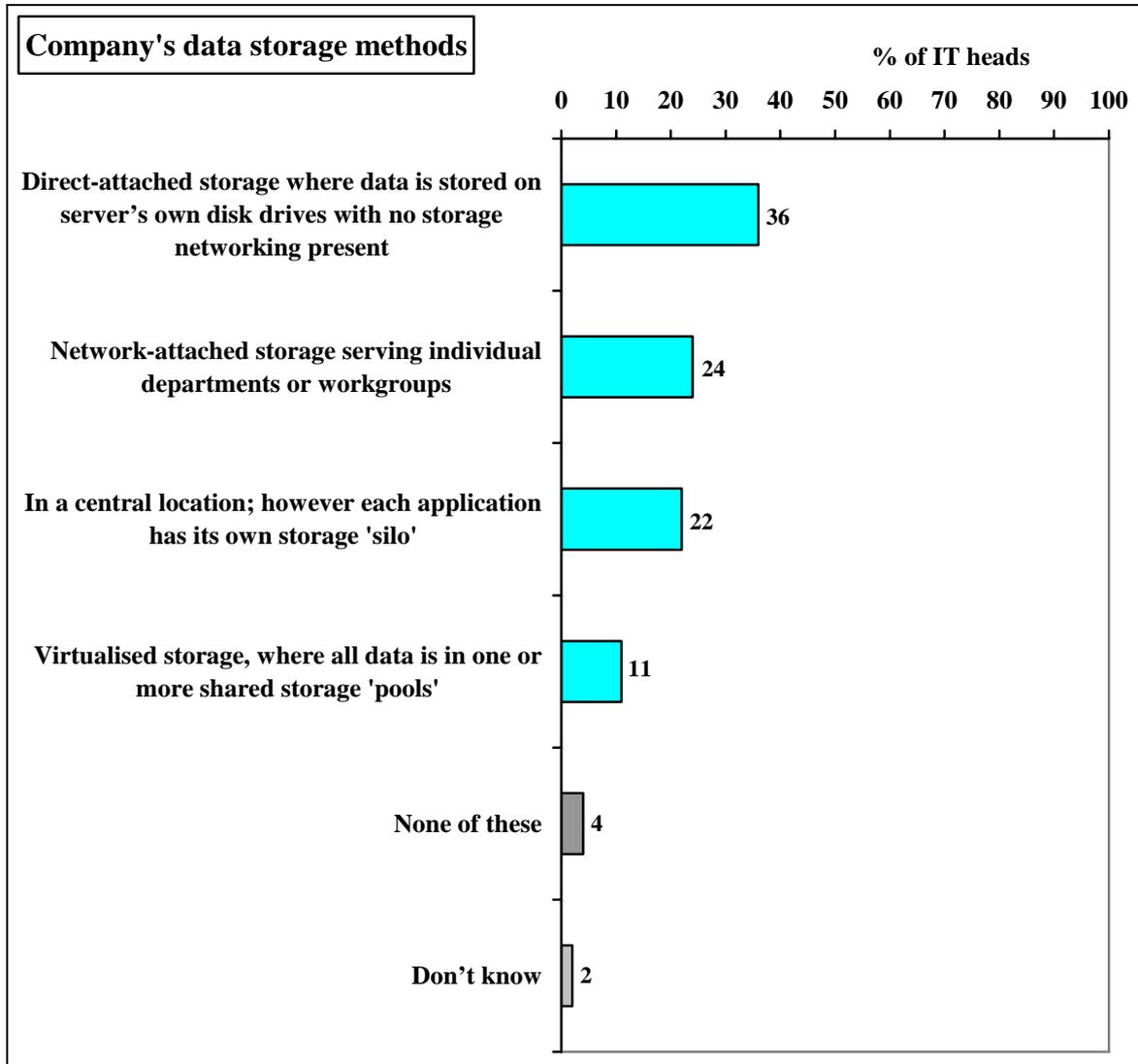


- More companies in the Edinburgh region (64%) think the role of employee training about IT security issues and the policies they have in place is moderately important, compared to companies in the regions of Aberdeen (8%) and Glasgow (32%).
- However, more companies in the Aberdeen region (38%) think the role of employee training about IT security issues is only quite important, compared to companies in the Edinburgh region (9%).

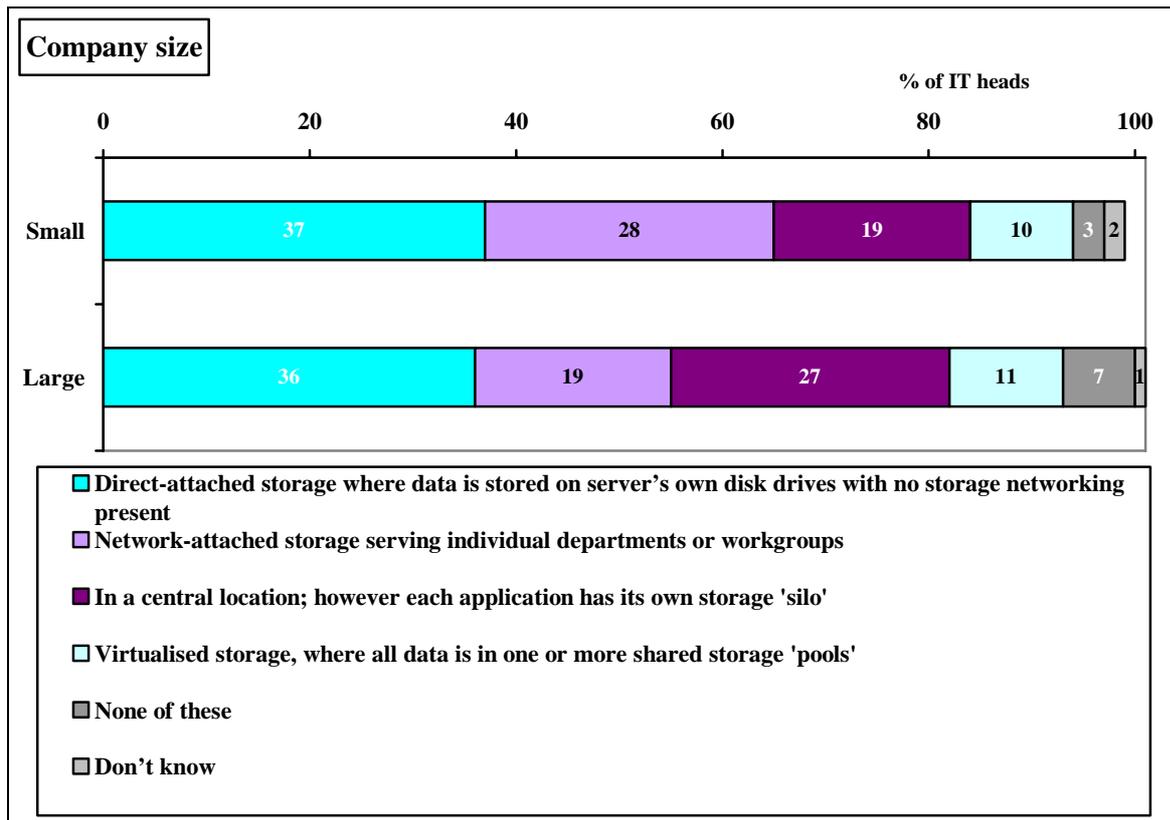


- More companies whose turnover has remained static in the last 12 months (45%) think the role of employee training about IT security issues and the policies they have in place is very important, compared to those with low turnover growth (21%).
- Conversely, more companies that have experienced low turnover growth (26%) think the role of such employee training is only quite important, compared to those who have remained static (3%).

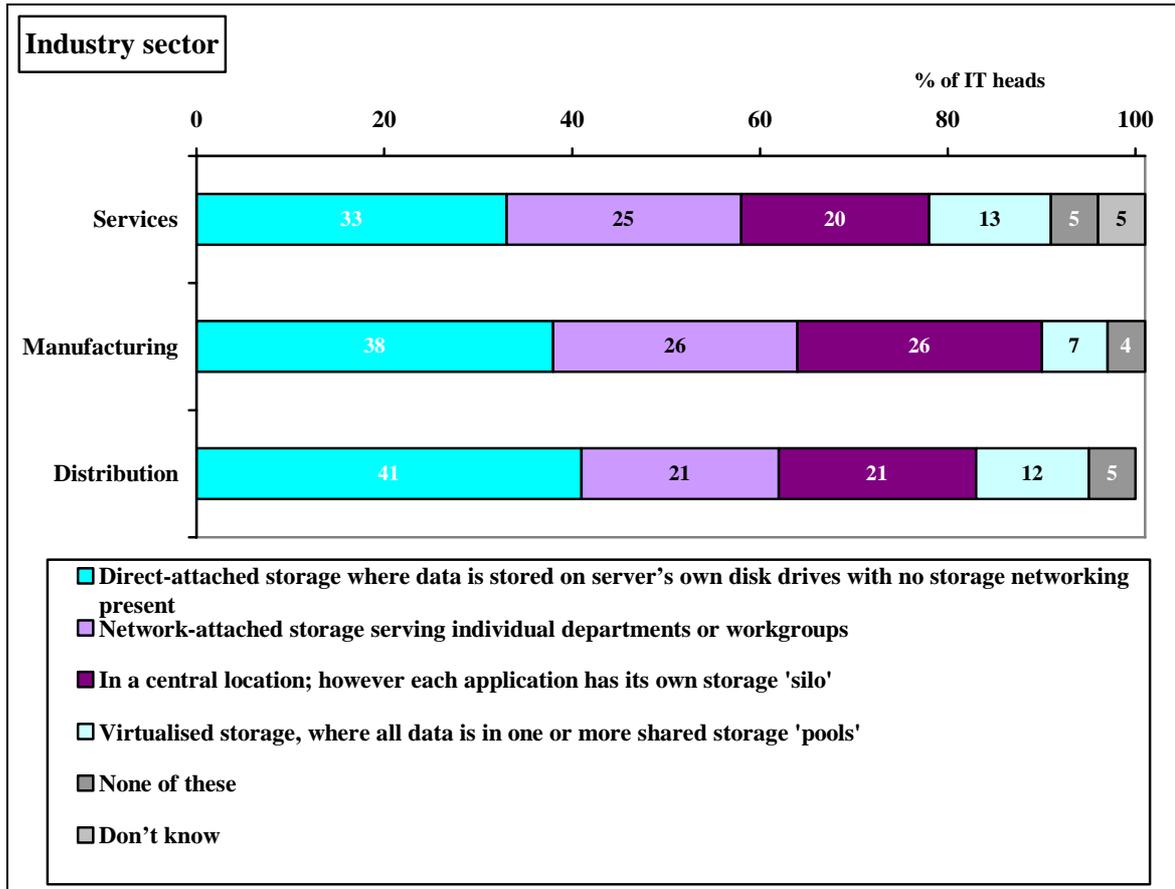
4.1.5 Which of the following best describe how your organisation stores its data?



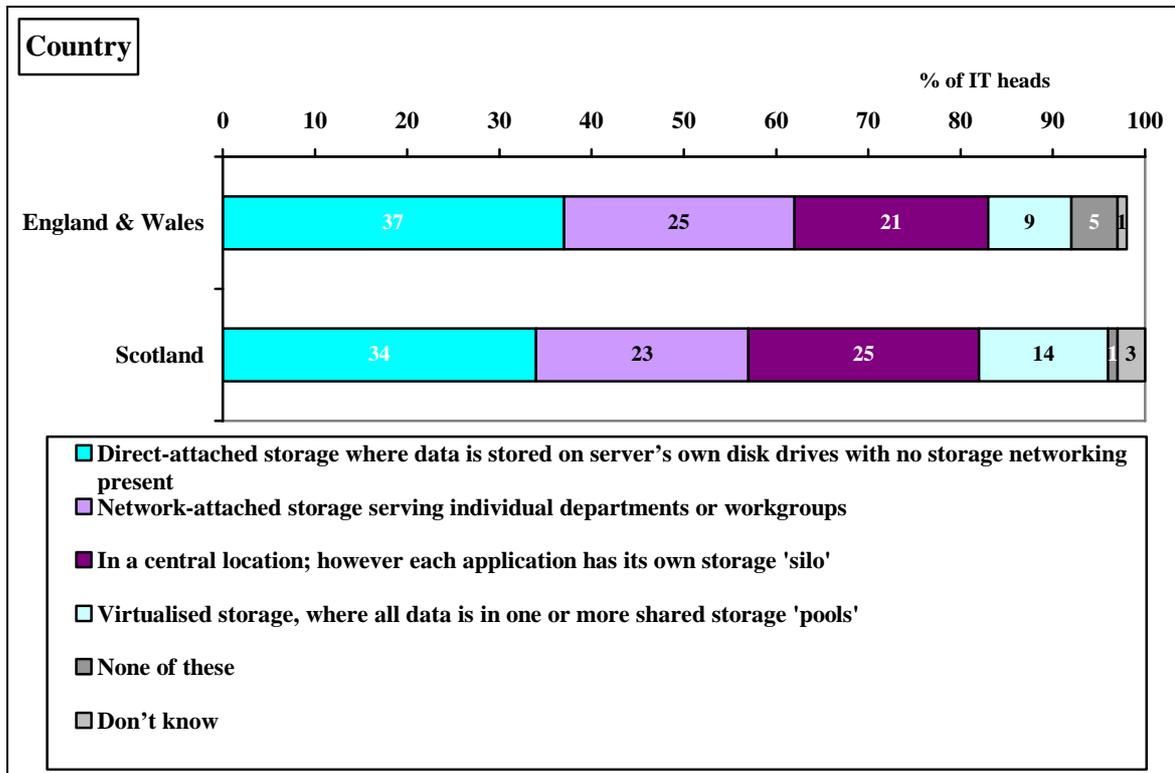
- The most common way of storing data is to have direct-attached storage where data is stored on a server's own disk drives with no storage networking present (36%).
- However, 24% have network-attached storage serving individual departments or workgroups.
- Fewer (22%) have data stored in a central location with each application having its own storage 'silo'.
- Only a minority (11%) use virtualised storage where all the data is in one or more shared storage 'pools' – indicating that 89% do not store data in this way.
- 4% of companies do not use any of these approaches to the storage of their data, and 2% are unsure which apply.



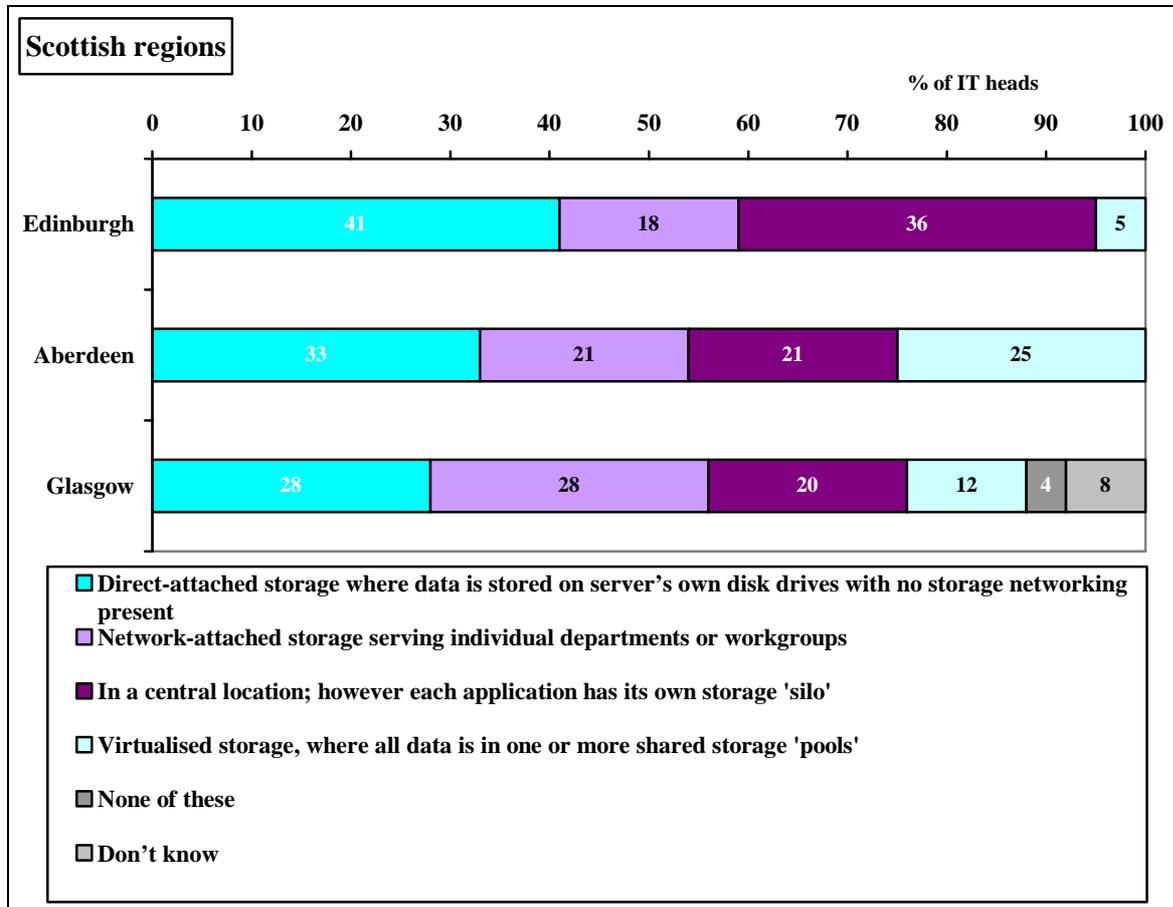
- Statistically, there is no significant difference according to a company's size and how it stores its data.



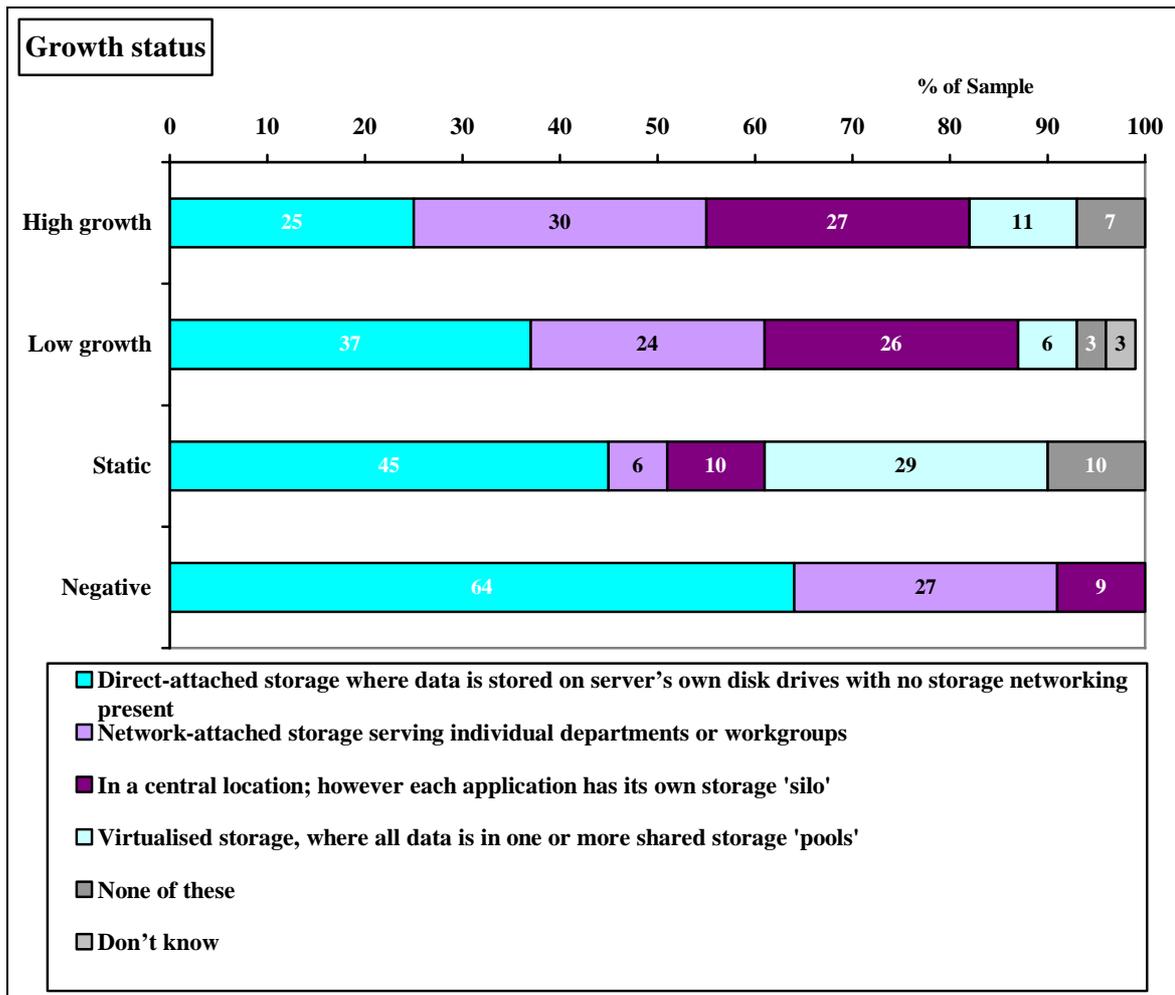
- Statistically, there is no significant difference according to industry sector and how a company stores its data.



- Statistically, there is no significant difference according to country and how a company stores its data.

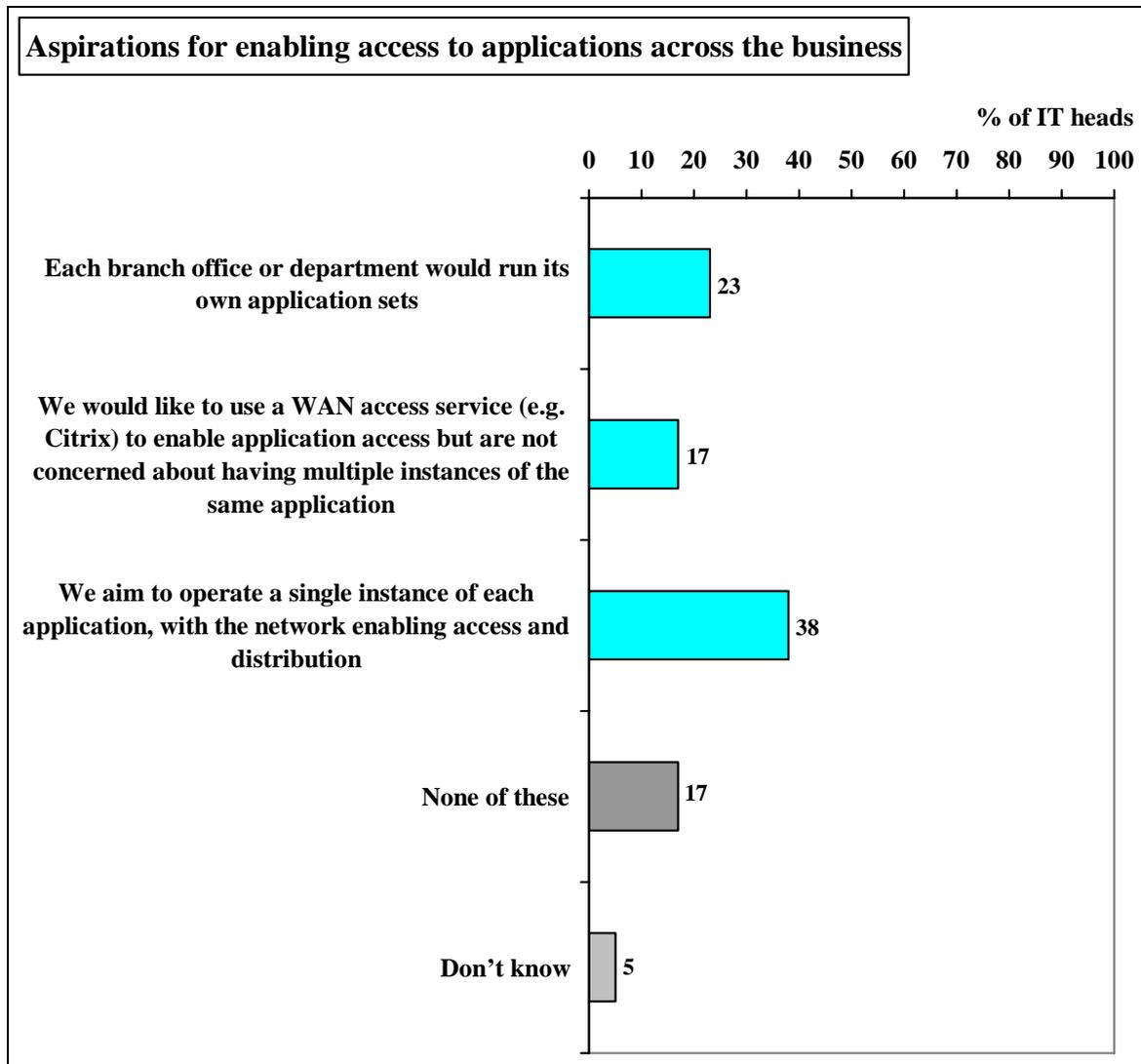


- Statistically, there is no significant difference according to Scottish region and how a company stores its data.

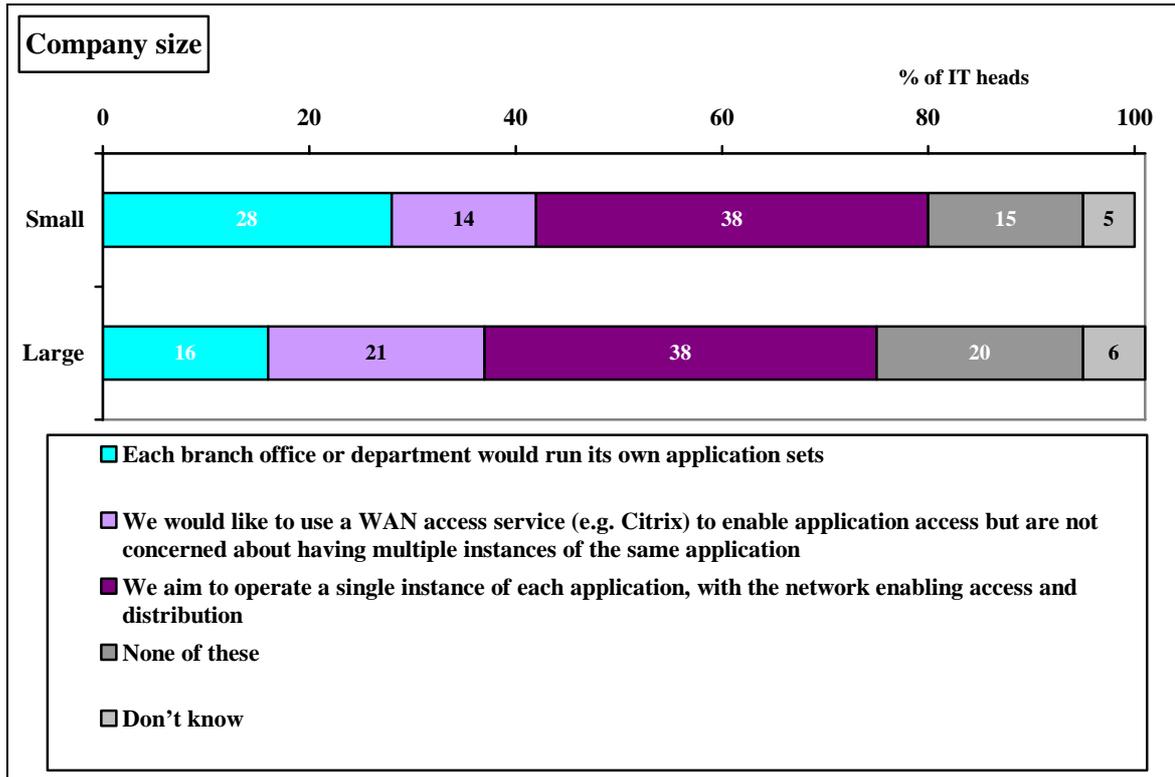


- More companies that have remained static in terms of turnover growth (45%) say they have direct-attached storage where data is stored on a server's own disk drives with no storage networking present, compared to companies with high turnover growth (25%).
- And, more companies that have experienced high (30%) or low (24%) turnover growth say they have network-attached storage serving individual departments or workgroups, compared to companies that have remained static (6%).
- But, more companies that have remained static in terms of turnover growth (29%) use virtualised storage where all the data is in one or more shared storage 'pools', compared to those with high (11%) or low (6%) turnover growth.
- Conversely, more companies that have experienced high (89%) or low (94%) turnover growth do NOT use virtualised storage, compared to those that have remained static (71%).

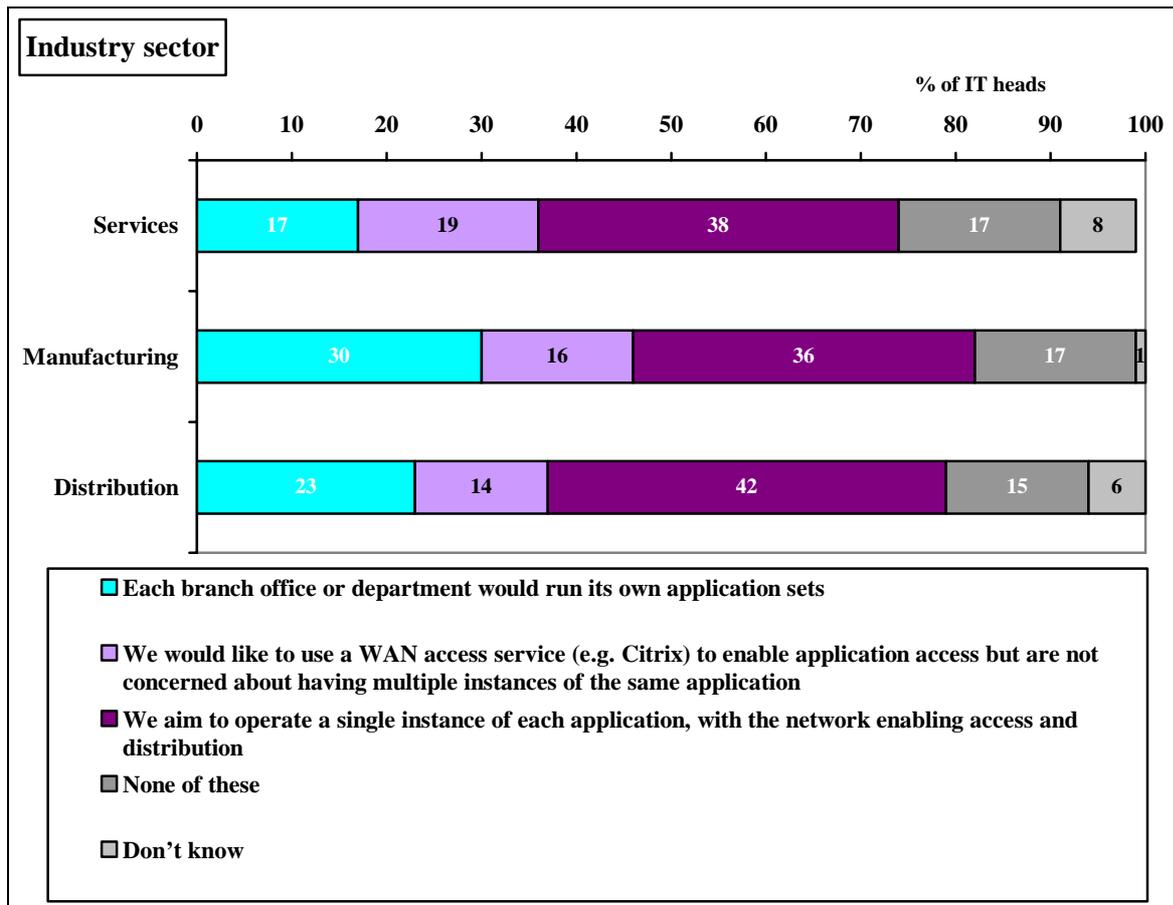
4.1.6 When it comes to enabling access to your applications from across the business, which of the following best describe the model you aspire to?



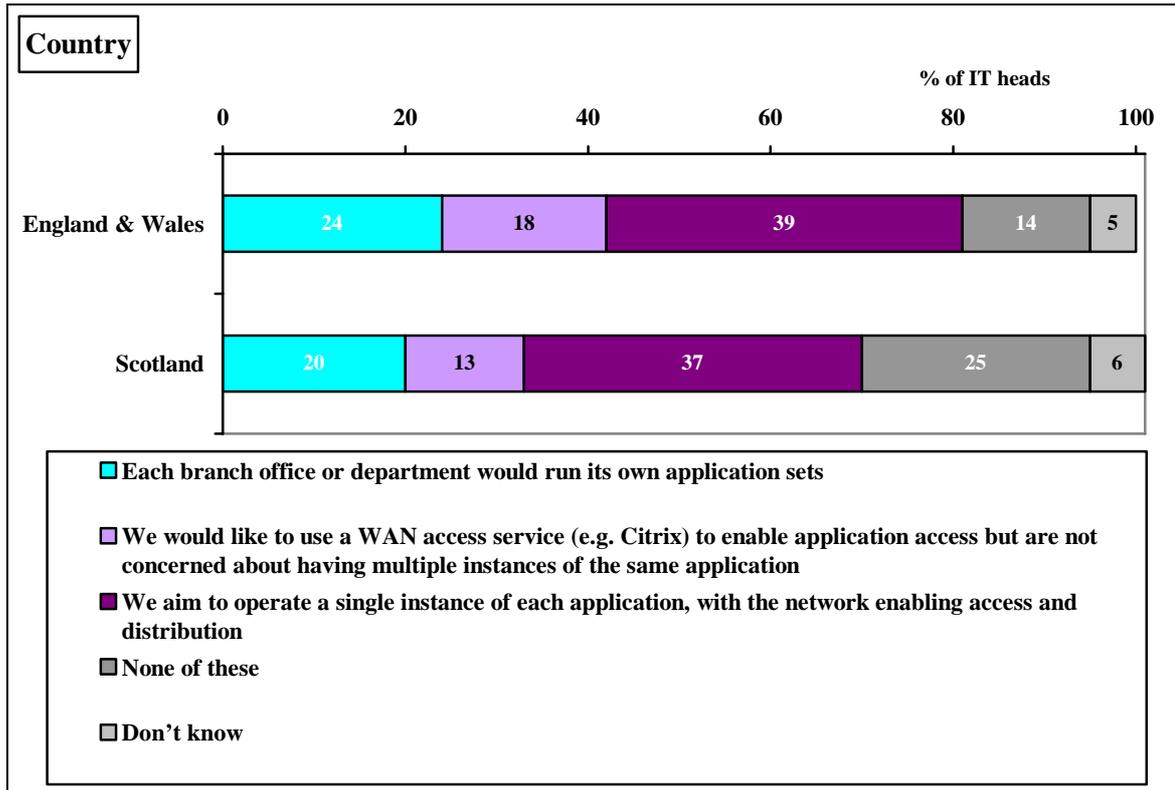
- In terms of enabling access to applications from across the company, 38% of businesses aspire to operate a single instance of each application with network enabling access and distribution – this is the largest group.
- In contrast, 23% only aspire to have each branch office or department running its own applications.
- Fewer (17%) would like to use a WAN access service (e.g. Citrix) to enable application access but are not concerned about having multiple instances of the same application.
- However, 17% say they do not aspire to any of these means of accessing applications across the business.
- Also, 5% are undecided which of these options they aspire to.



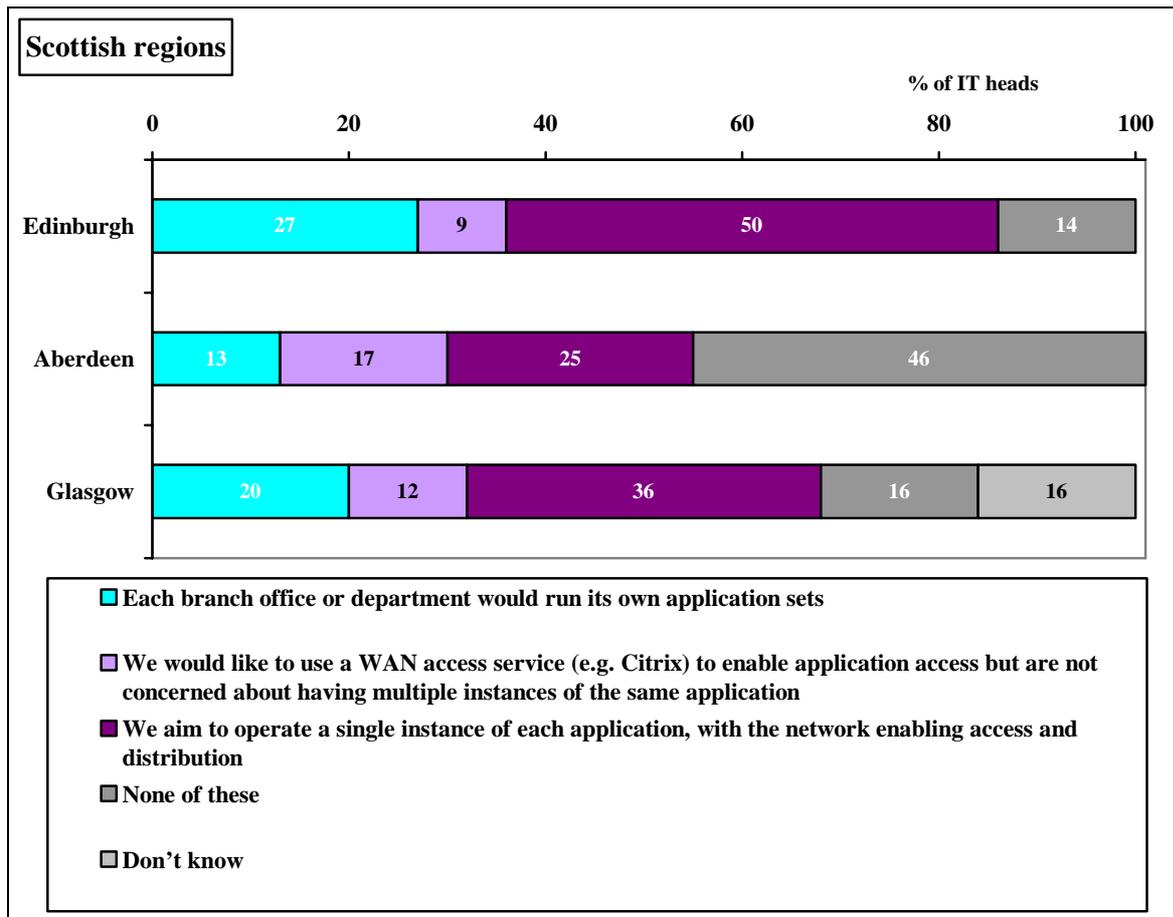
- More small companies (28%) aspire to have each branch office or department running its own applications, compared to large companies (16%).
- Otherwise, statistically, there is no significant difference according to a company's size and which of these models it aspires to.



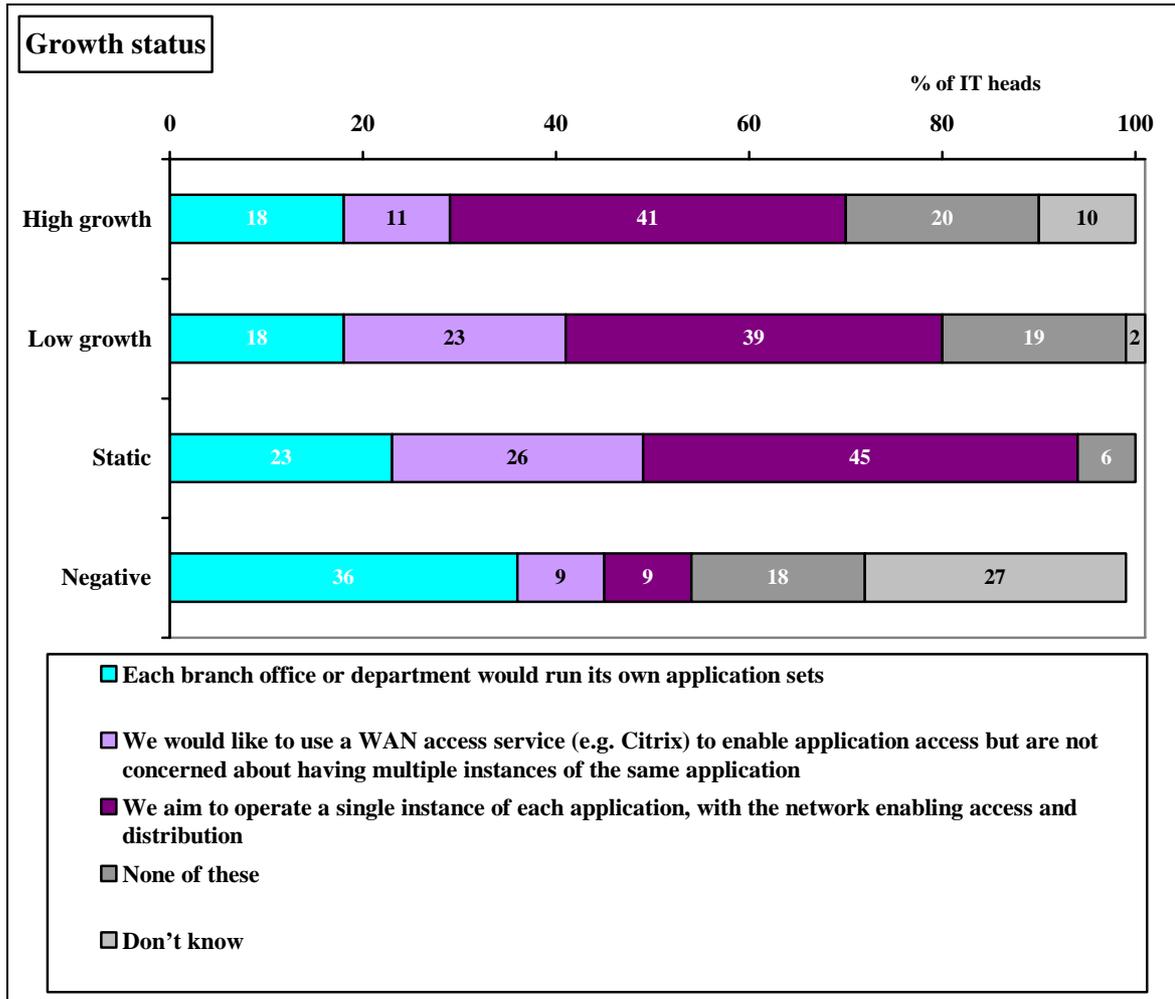
- More manufacturing companies (30%) aspire to have each branch office or department running its own applications, compared to services companies (17%).
- Otherwise, statistically, there is no significant difference according to industry sector and which of these models a company aspires to.



- More companies in Scotland (25%) say they do not aspire to any of these means of accessing applications across the business, compared to those in England & Wales (14%).
- Otherwise, statistically, there is no significant difference according to country and which of these models a company aspires to.

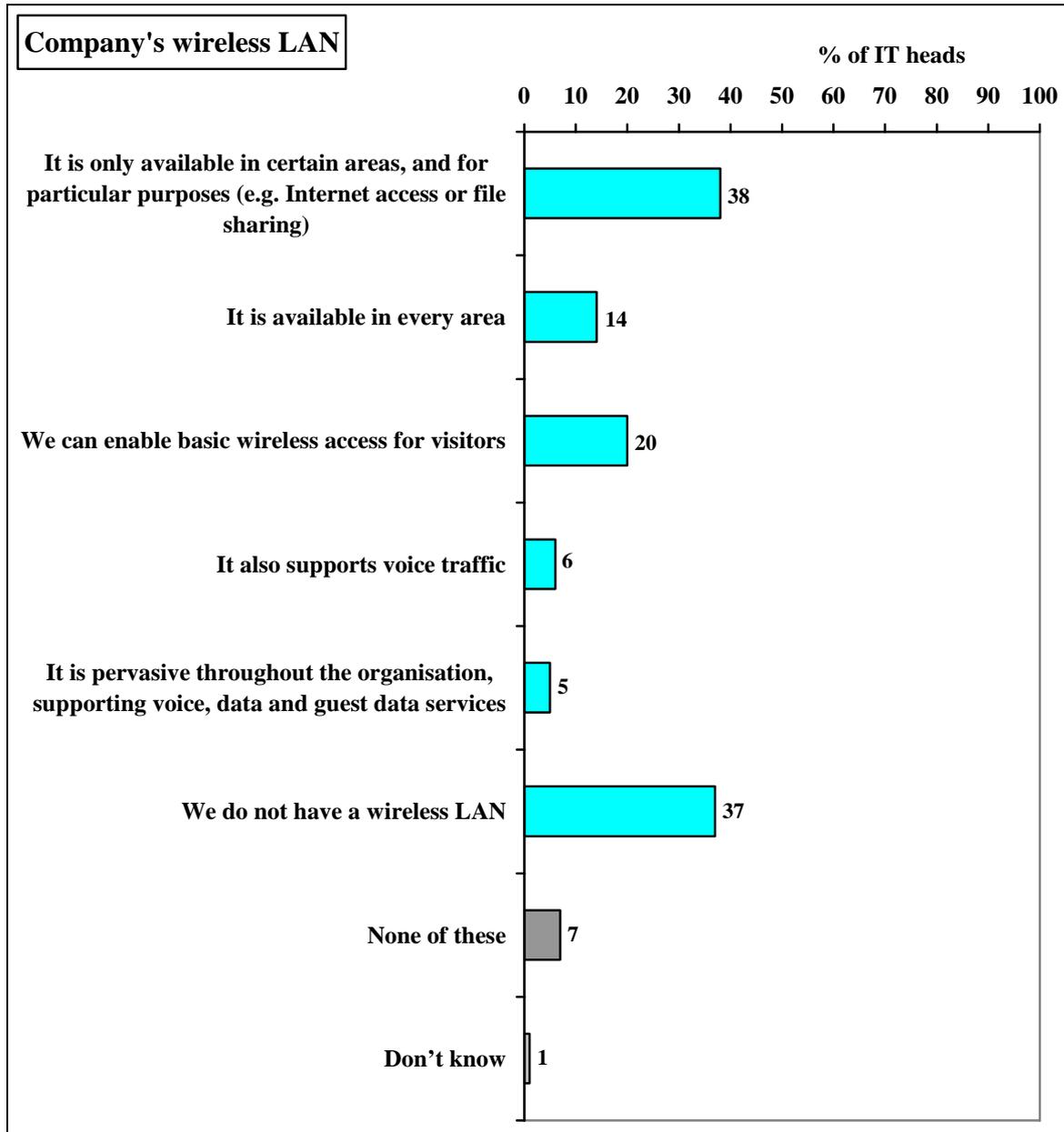


- More companies in the Aberdeen region (46%) say they do not aspire to any of these means of accessing applications across the business, compared to companies in the Edinburgh (14%) and Glasgow (16%) regions.
- But, more companies in the Glasgow region (16%) are undecided which of these options they aspire to, compared to companies in the Edinburgh and Aberdeen regions (both zero).



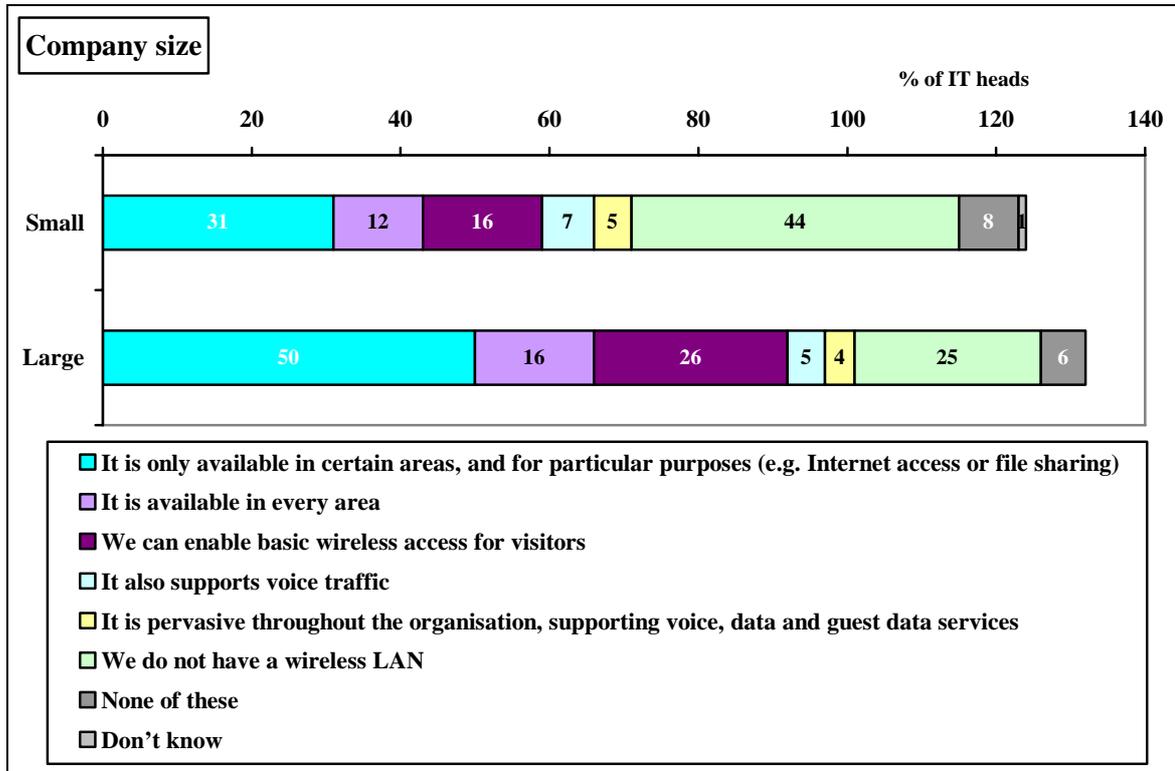
- More companies that have experienced high turnover growth (10%) are undecided which of these options they aspire to, compared to companies with low turnover growth (2%).
- Otherwise, statistically, there is no significant difference according to growth status and which of these models a company aspires to.

4.1.7 Which of the following apply to your organisation’s wireless LAN?

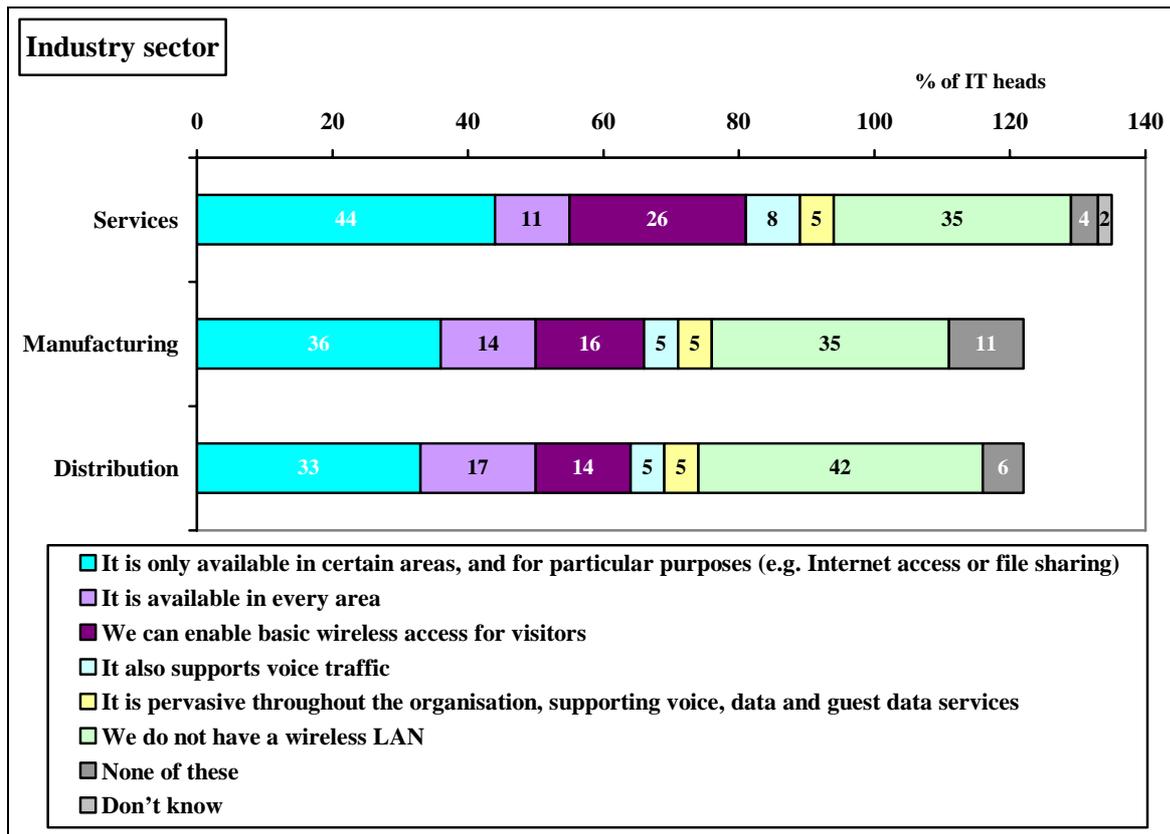


- 63% of organisations have a wireless LAN – but 37% do not have this technology in place.
- However, 38% - the largest proportion – say their wireless LAN is only available in certain areas and for particular purposes (e.g. for Internet access or file sharing).
- In contrast, only 14% say their wireless LAN is available in every area.
- 20% say their wireless LAN technology enables basic wireless access for visitors.
- Only 6% say it supports voice traffic and even fewer (5%) say it is pervasive throughout the organisation, supporting voice, data and guest data services.

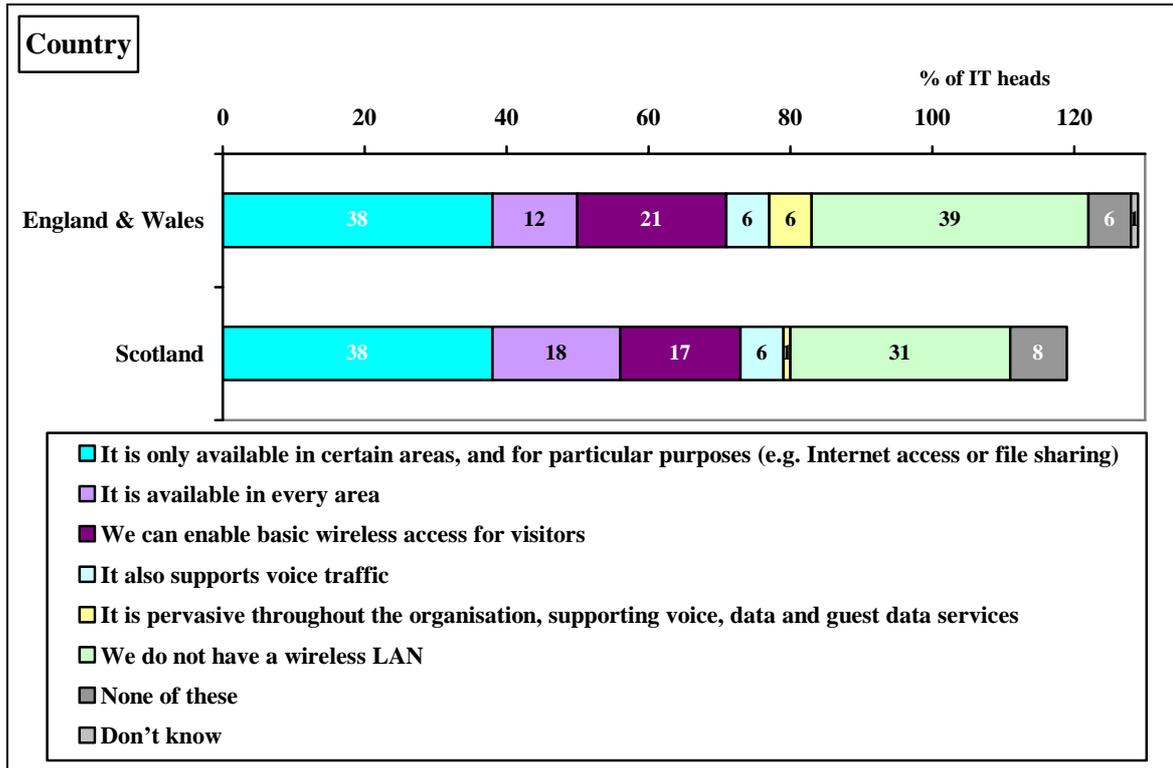
- 7% say none of these apply to their organisation’s wireless LAN and 1% are unsure which apply.



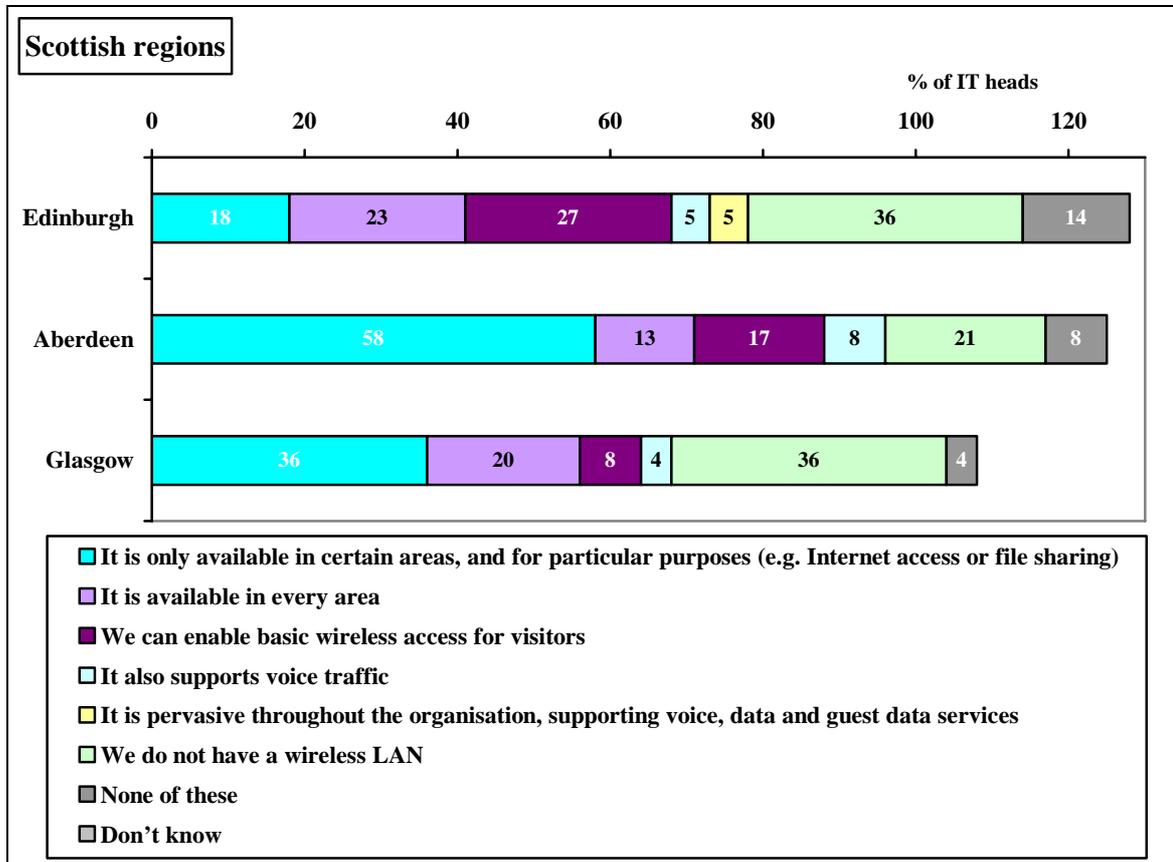
- More large companies (75%) have a wireless LAN, compared to small companies (56%).
- Conversely, more small companies (44%) say they do not have this technology in place, compared to large companies (25%).
- And, more large companies (50%) say their wireless LAN is only available in certain areas and for particular purposes (e.g. for Internet access or file sharing), compared to small companies (31%).
- But, more large companies (26%) say they can enable basic wireless access for visitors, compared to small companies (16%).



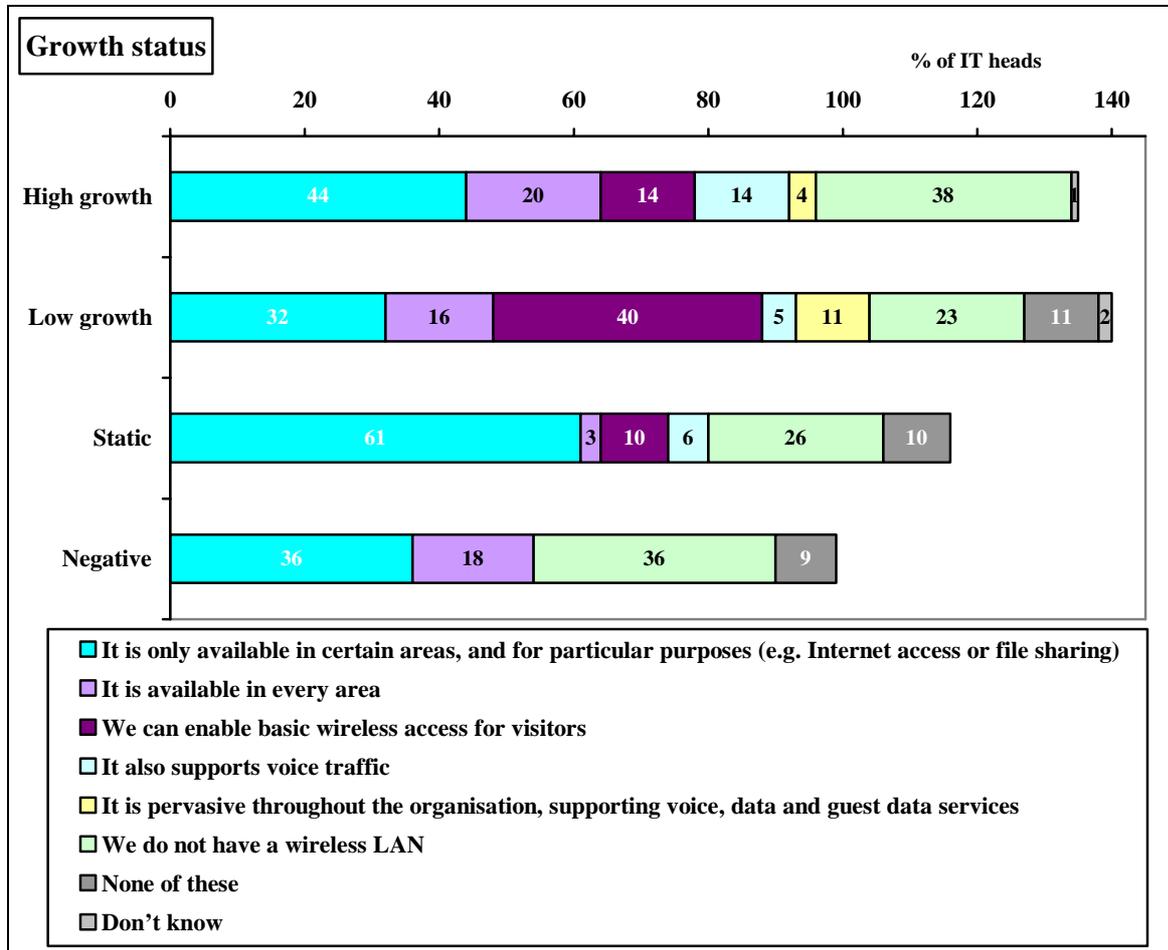
- More services companies (26%) say they can enable basic wireless access for visitors, compared to distribution companies (14%).
- But, more manufacturing companies (11%) say none of these apply to their organisation’s wireless LAN, compared to services companies (4%).



- Statistically, there is no significant difference according to country and which of these features apply to a company's wireless LAN.

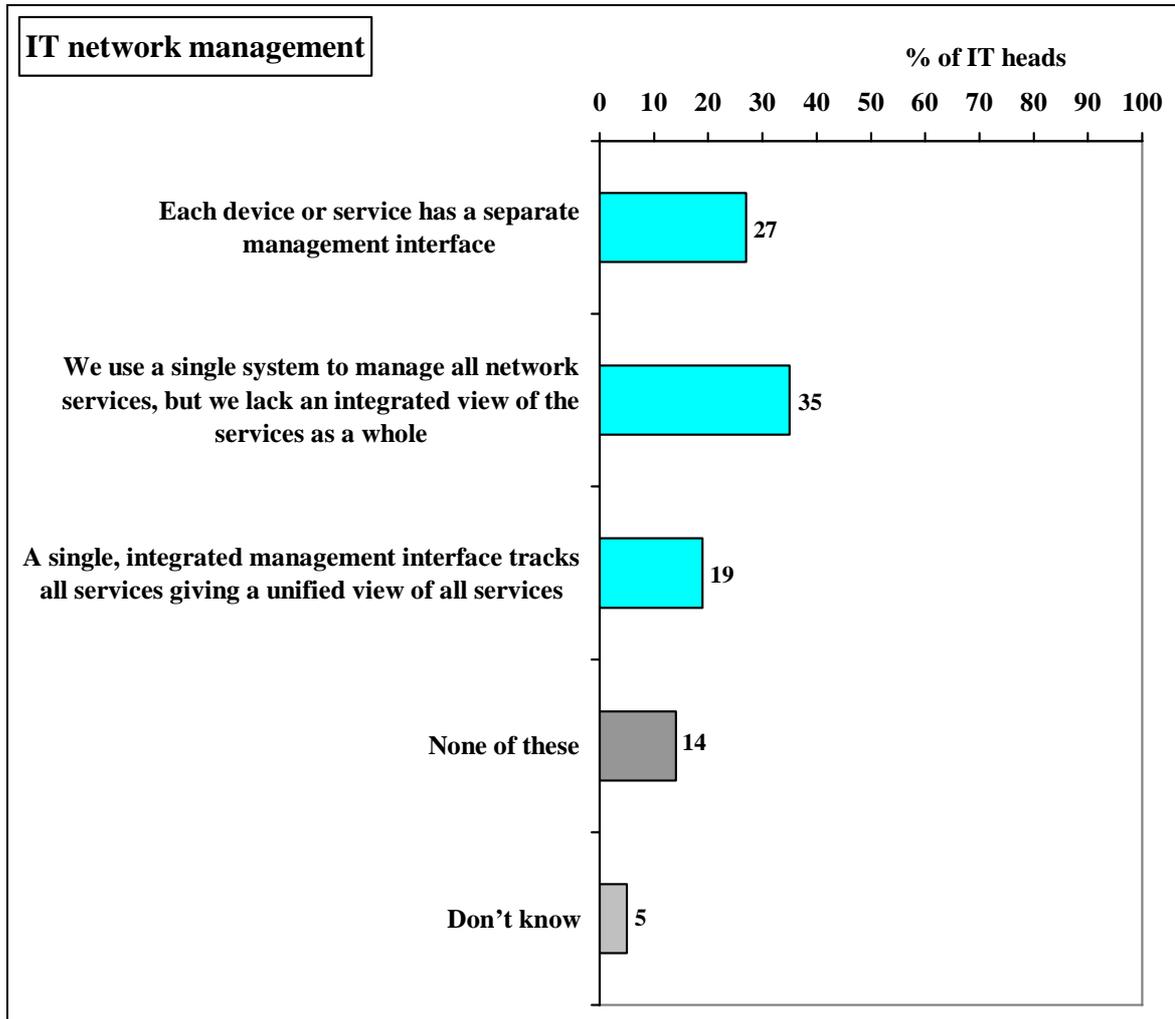


- More companies in the Aberdeen region (58%) say their wireless LAN is only available in certain areas and for particular purposes (e.g. for Internet access or file sharing), compared to companies in the Edinburgh region (18%).
- Otherwise, statistically, there is no significant difference according to Scottish region and which of these features apply to a company’s wireless LAN.

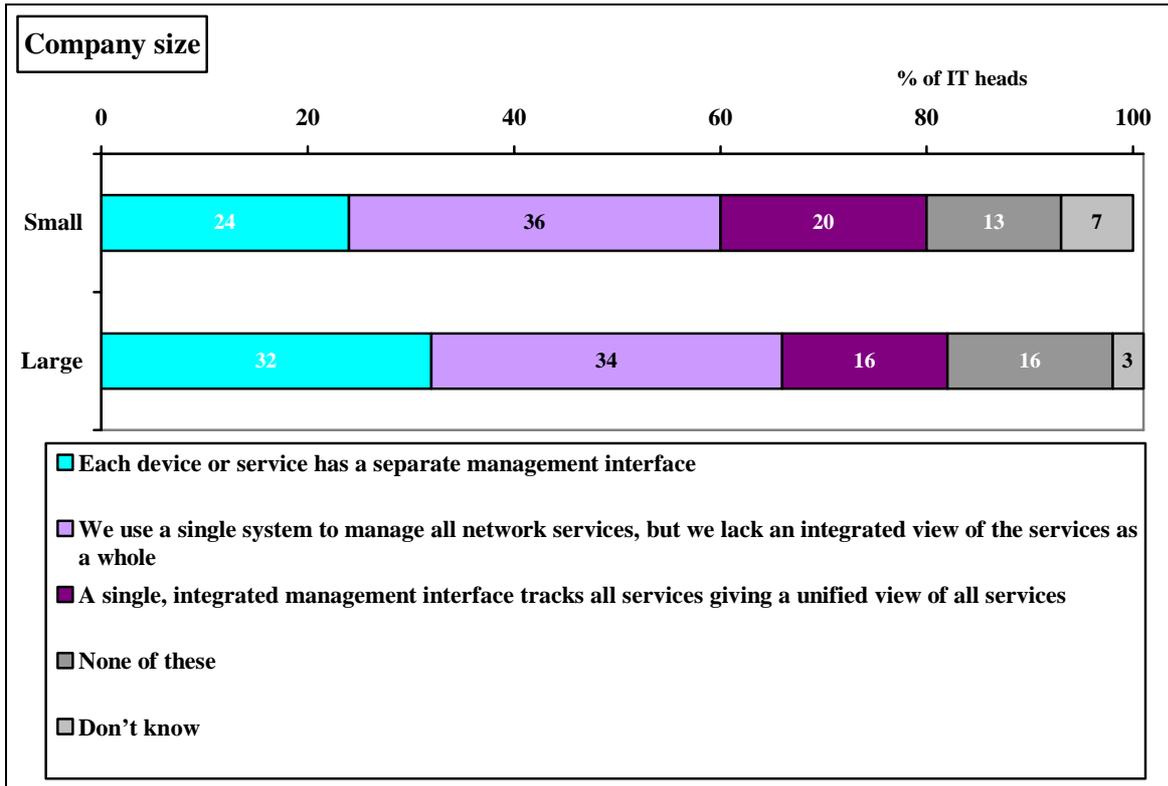


- More companies that have remained static in terms of turnover growth (61%) say their wireless LAN is only available in certain areas and for particular purposes (e.g. for Internet access or file sharing), compared to those with low turnover growth (32%).
- But, more companies with high turnover growth (20%) say their wireless LAN is available in every area, compared to those that have remained static (3%).
- Whereas, more companies with low turnover growth (40%) say they can enable basic wireless access for visitors, compared to those with high turnover growth (14%) and those that have remained static (10%).
- However, more companies with low turnover growth (11%) and those that have remained static (10%) say none of these apply to their organisation’s wireless LAN, compared to those with high turnover growth (zero).

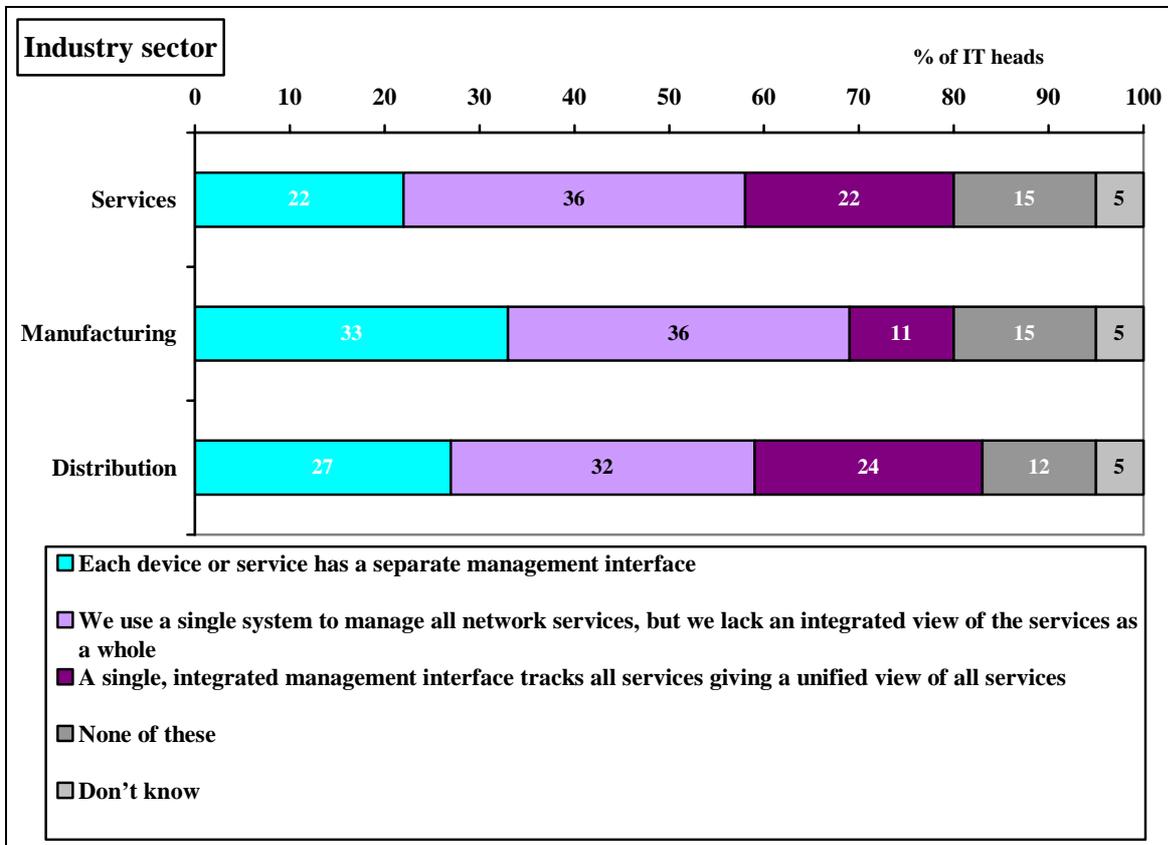
4.1.8 Which of the following best describe how your organisation manages its network?



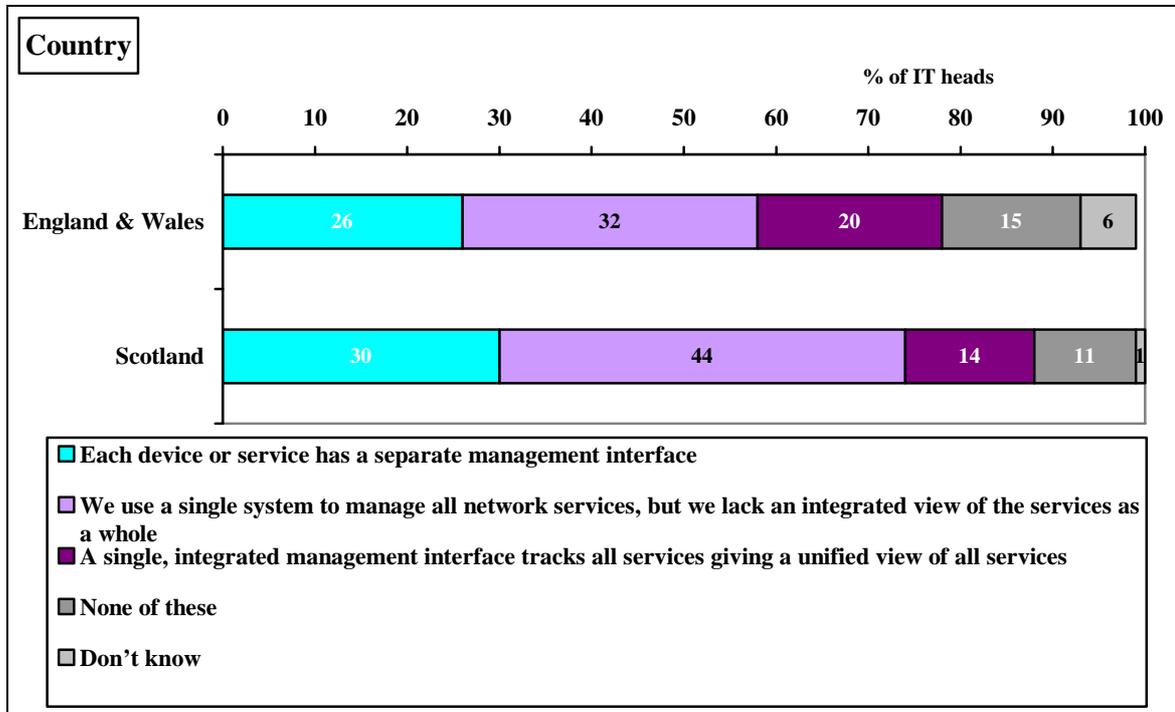
- 27% of companies say that each network device or service has a separate management interface.
- More, and the largest proportion (35%) use a single system to manage all network services, but they lack an integrated view of the services as a whole.
- Only 19% have a single integrated management interface that tracks all services, giving a unified view of them.
- However, 14% say none of these describe how their organisation manages its network, and 5% are unsure which apply to them.



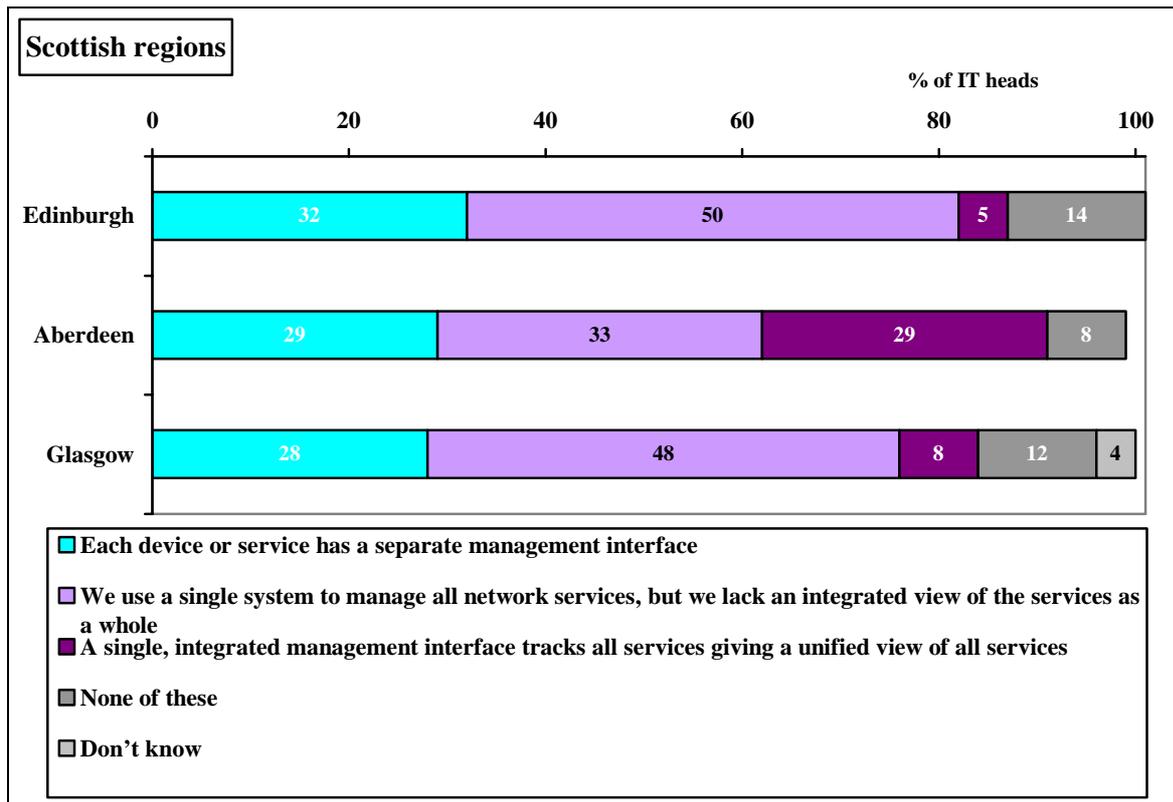
- Statistically, there is no significant difference according to a company's size and the way it manages its network.



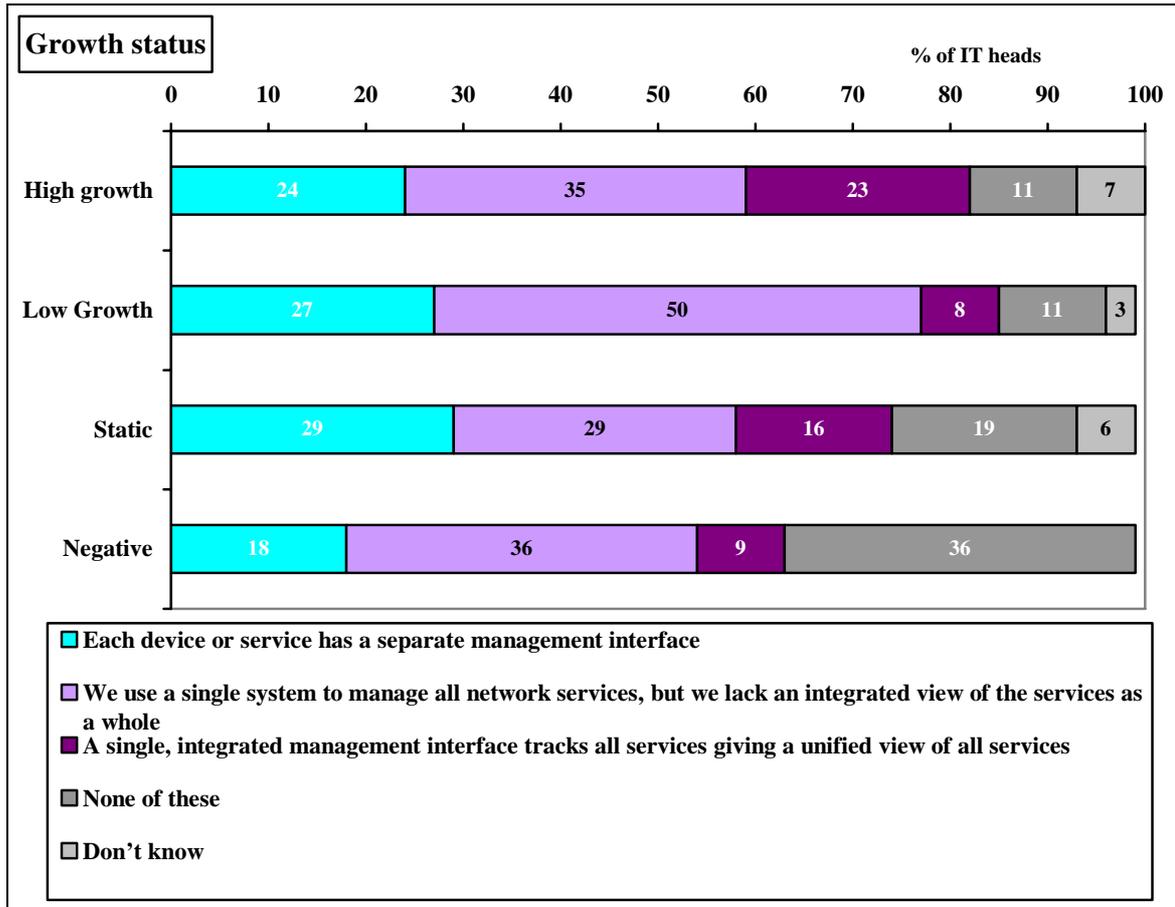
- More services (22%) and distribution (24%) companies have a single integrated management interface that tracks all services, giving a unified view of them, compared to the manufacturing sector (11%).
- Otherwise, statistically, there is no significant difference according to industry sector and the way a company manages its network.



- Statistically, there is no significant difference according to country and the way a company manages its network.

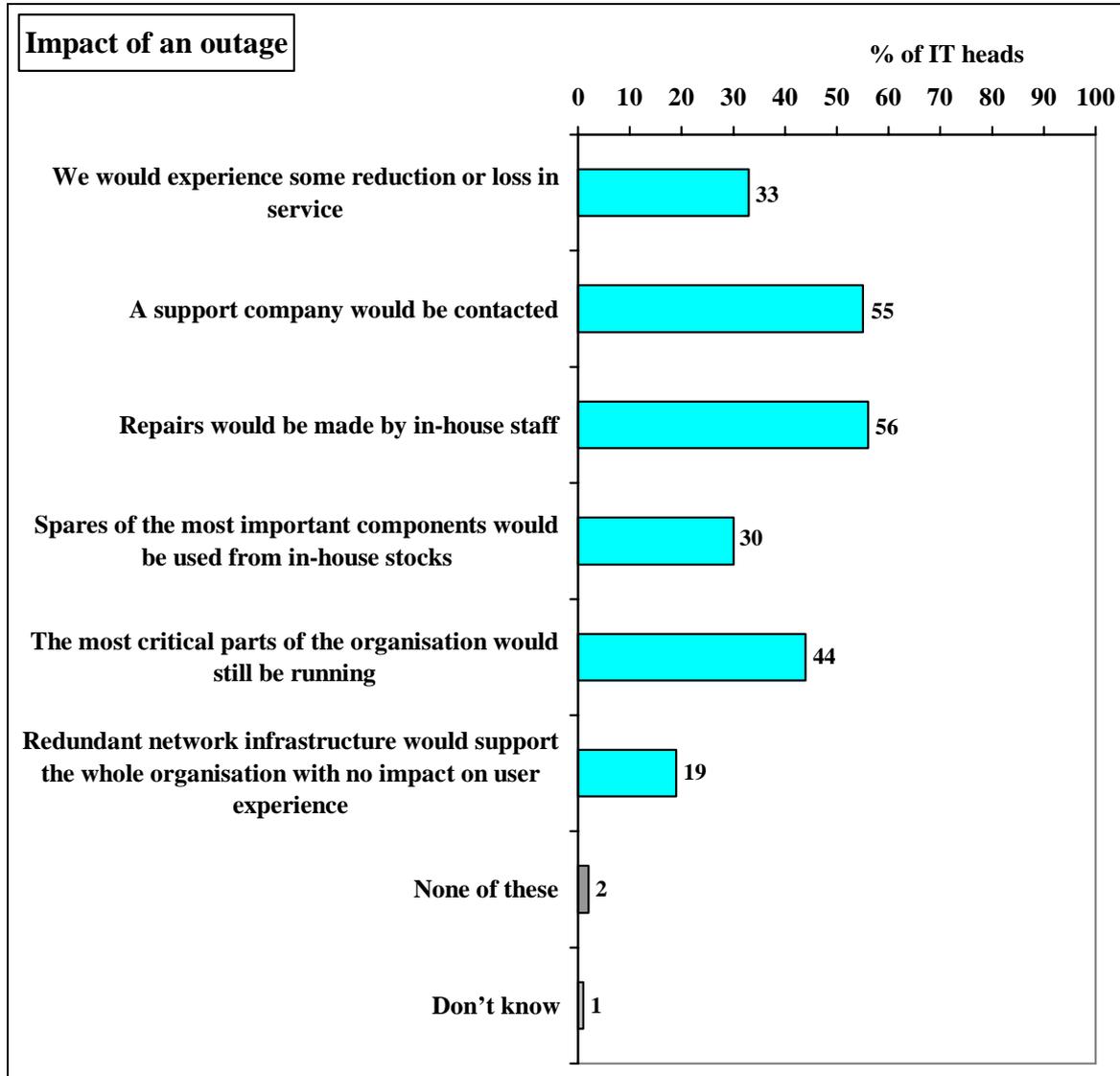


- More companies in the Aberdeen region (29%) have a single integrated management interface that tracks all services, giving a unified view of them, compared to companies in the Edinburgh region (5%).
- Otherwise, statistically, there is no significant difference according to Scottish region and the way a company manages its network.

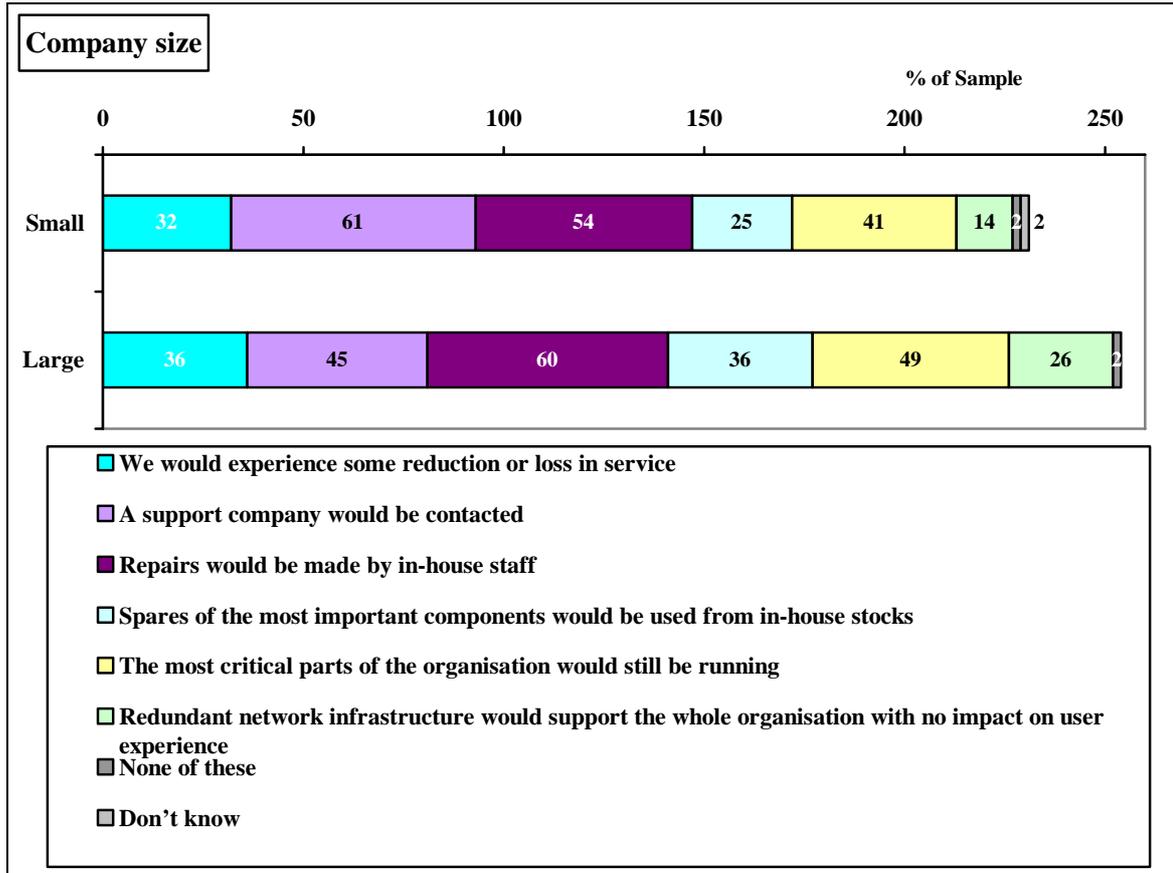


- More companies that have experienced high turnover growth (23%) have a single integrated management interface that tracks all services, giving a unified view of them, compared to those with low turnover growth (8%).
- Otherwise, statistically, there is no significant difference according to growth status and the way a company manages its network.

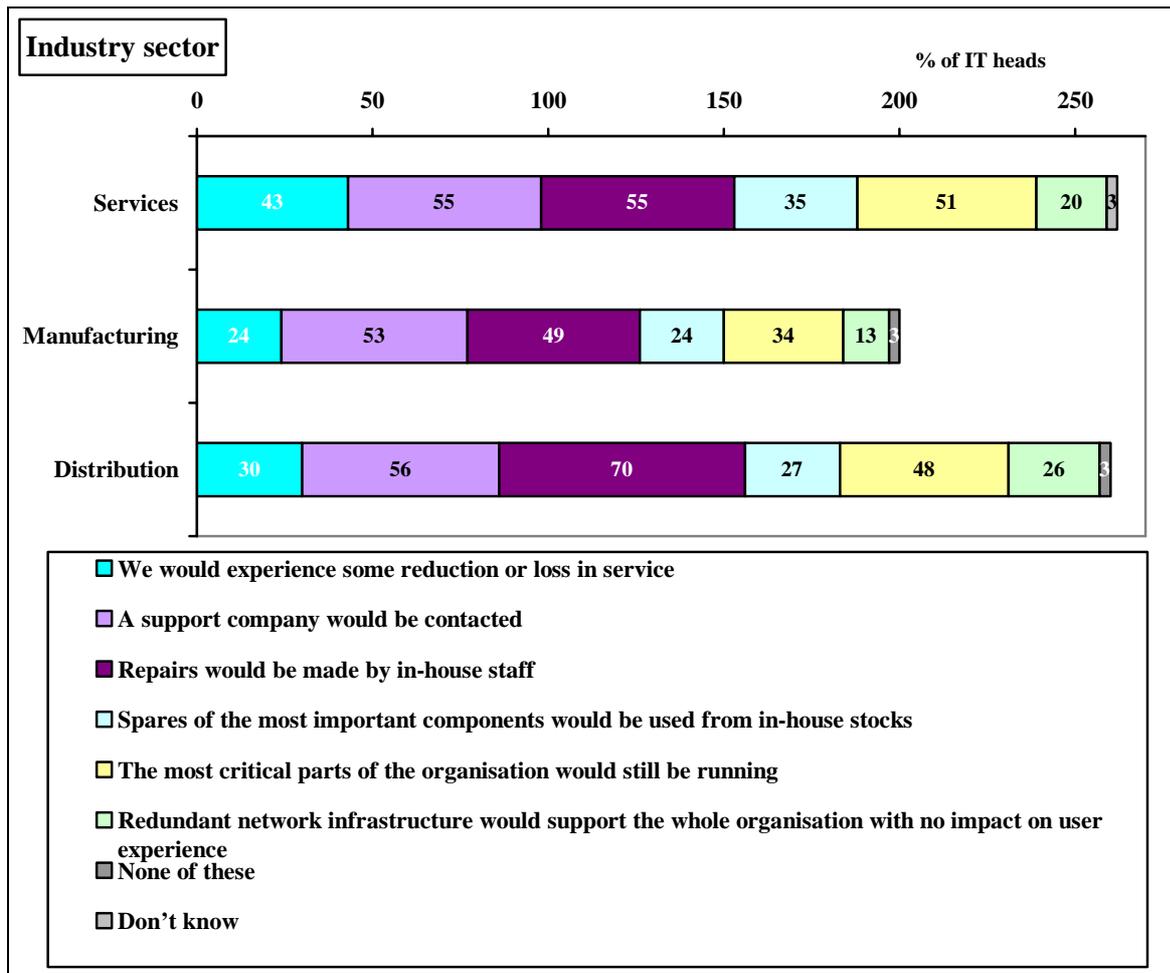
4.1.9 Which of the following has happened or would happen if your organisation were to experience an outage?



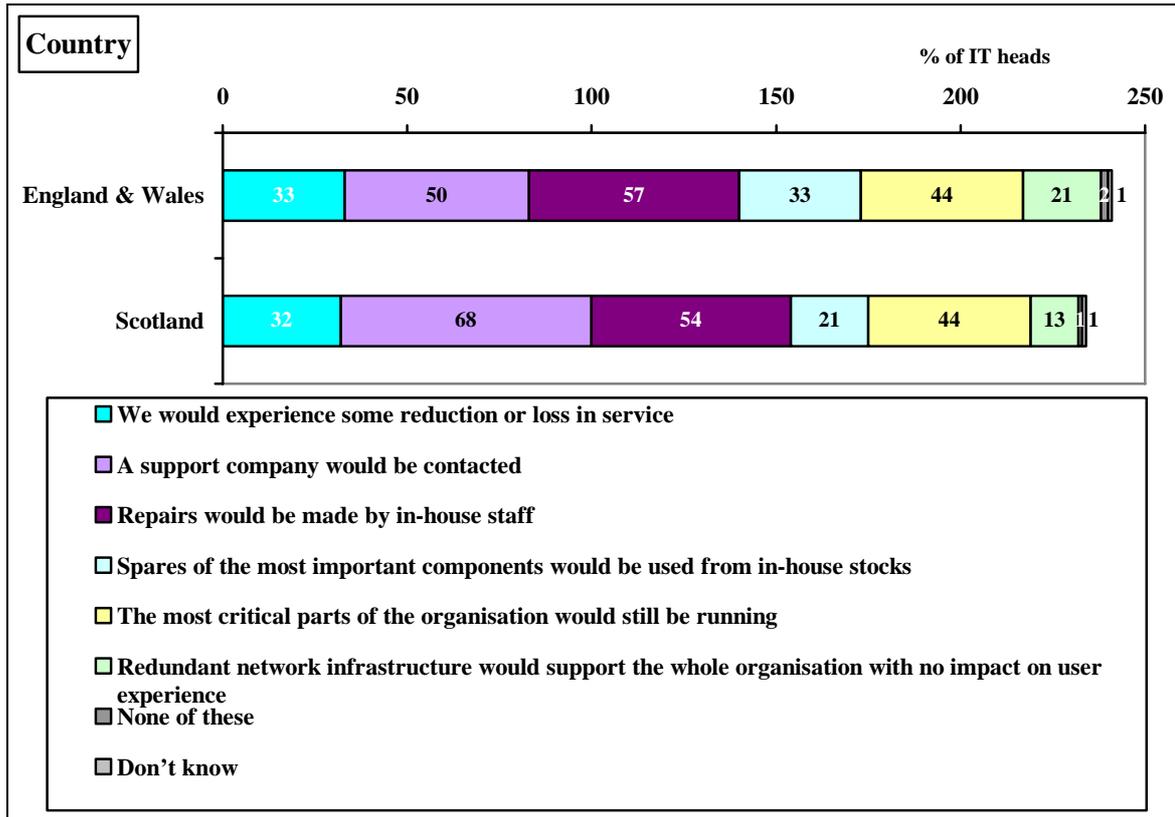
- Only 19% of companies say that, in the event of an outage, a redundant network infrastructure would support the whole organisation and there would be no impact on the users' experience – however, this suggests that 81% of companies do not have this luxury.
- But only 33% admit they would experience some reduction or loss in service if the company experienced an outage.
- This may be because 44% say the most critical parts of the organisation would still be running.
- In terms of dealing with the fault, 55% would call a support company in such an event, 56% say repairs would be carried out by in-house staff and 30% say spares would be used from in-house stocks.
- 2% say none of these would apply to them if their company were to experience an outage and another 1% are unsure what would happen in such an event.



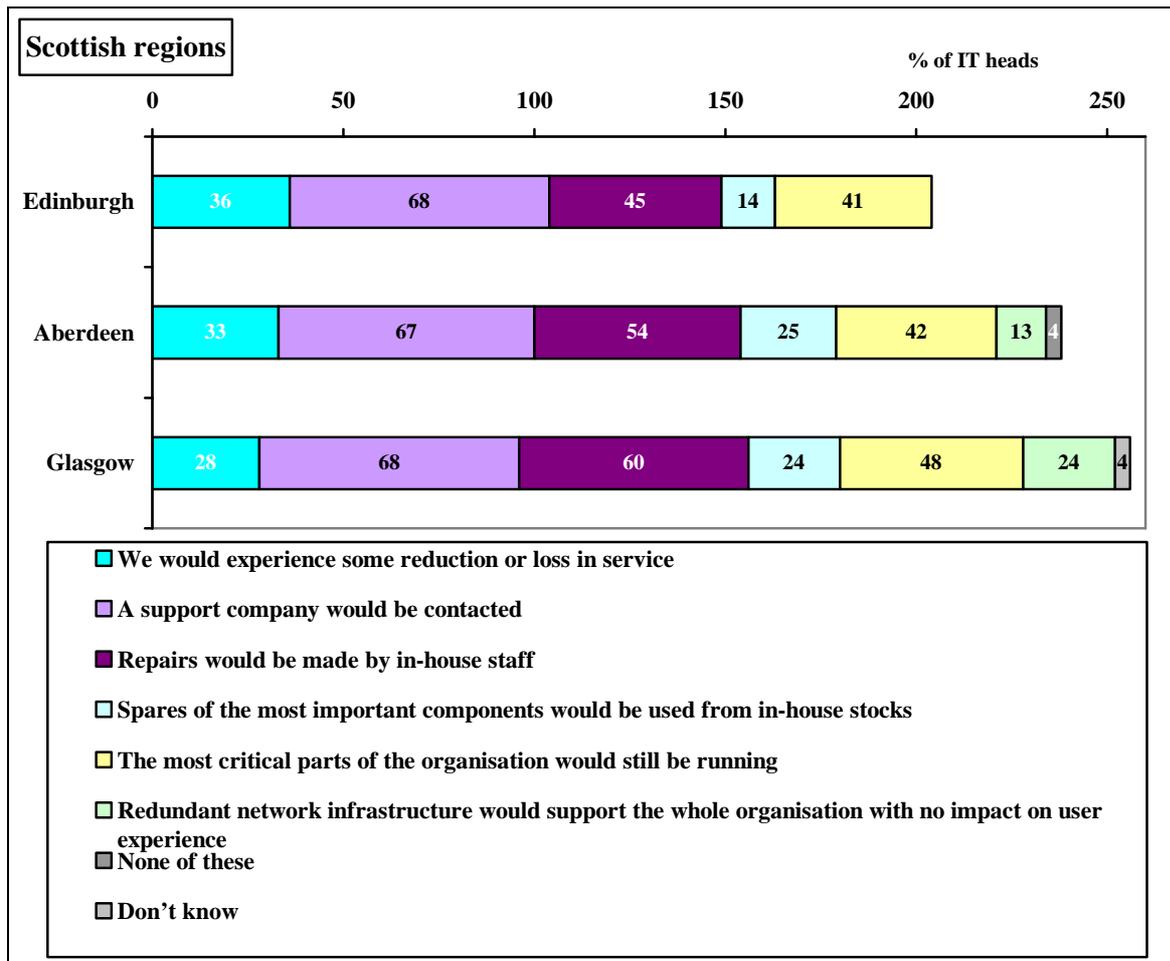
- More small companies (61%) say they would contact a support company in the event of an outage, compared to large companies (45%).
- And, more large companies (36%) say spares would be used from in-house stocks, compared to small companies (25%).
- Similarly, more large companies (26%) say a redundant network infrastructure would support the whole organisation and there would be no impact on the user experience, compared to small companies (14%).
- In contrast, more small companies (86%) do not have a redundant network infrastructure to fall back on for support, compared to large companies (74%).



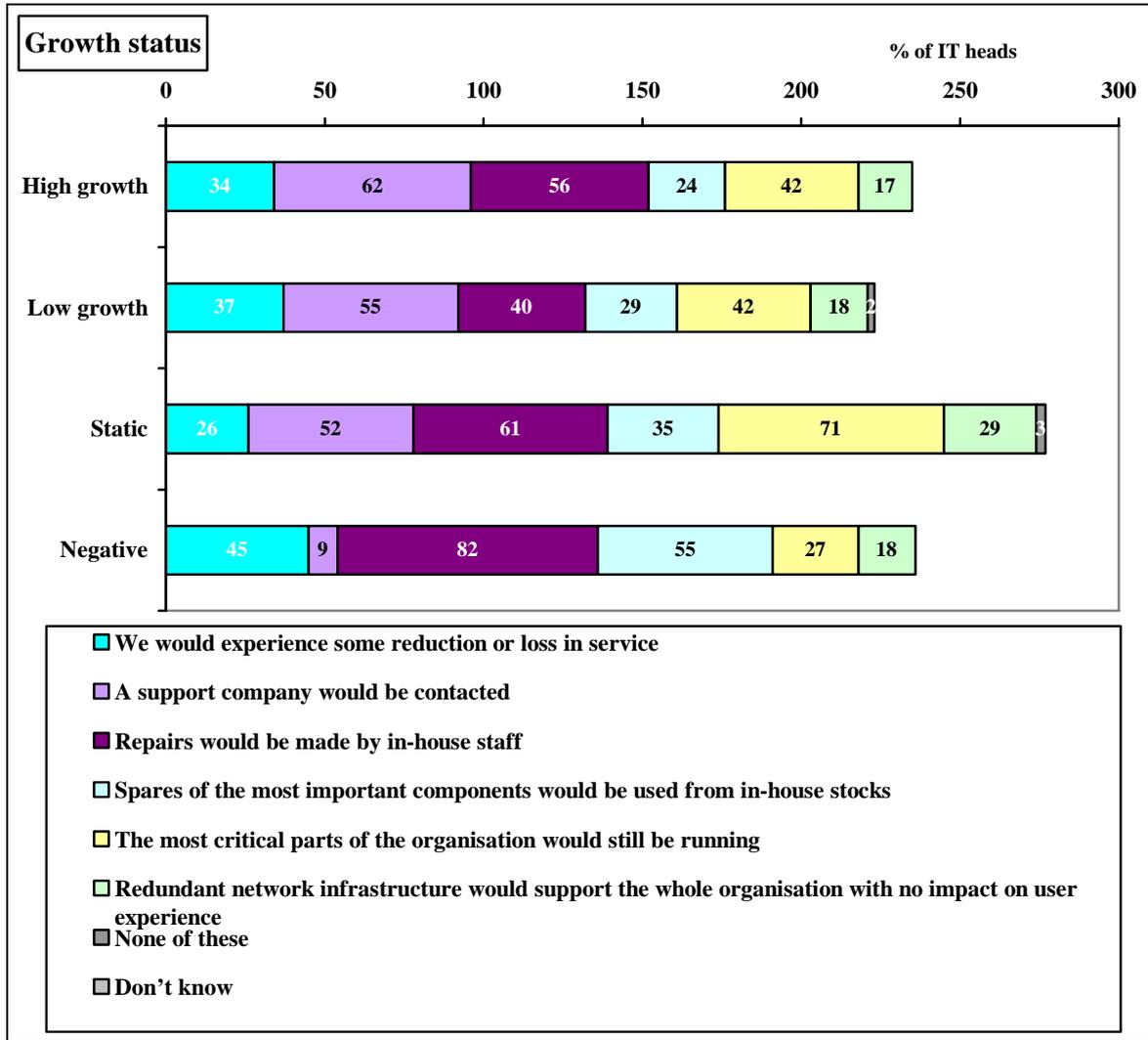
- More services companies (43%) admit they would experience some reduction or loss in service if the company experienced an outage, compared to manufacturing companies (24%).
- Whereas, more distribution companies (70%) say repairs would be carried out by in-house staff, compared to services (55%) and manufacturing (49%) companies.
- And, more services companies (51%) say the most critical parts of the organisation would still be running, compared to manufacturing companies (34%).
- But, more distribution companies (26%) say a redundant network infrastructure would support the whole organisation and there would be no impact on the user experience, compared to manufacturing companies (13%).
- Conversely, more manufacturing companies (87%) do not have a redundant network infrastructure to fall back on, compared to distribution companies (74%).



- More companies in Scotland (68%) say they would contact a support company in the event of an outage, compared to companies in England & Wales (50%).
- Otherwise, statistically, there is no significant difference according to country and what actions companies would take in the event of an outage.

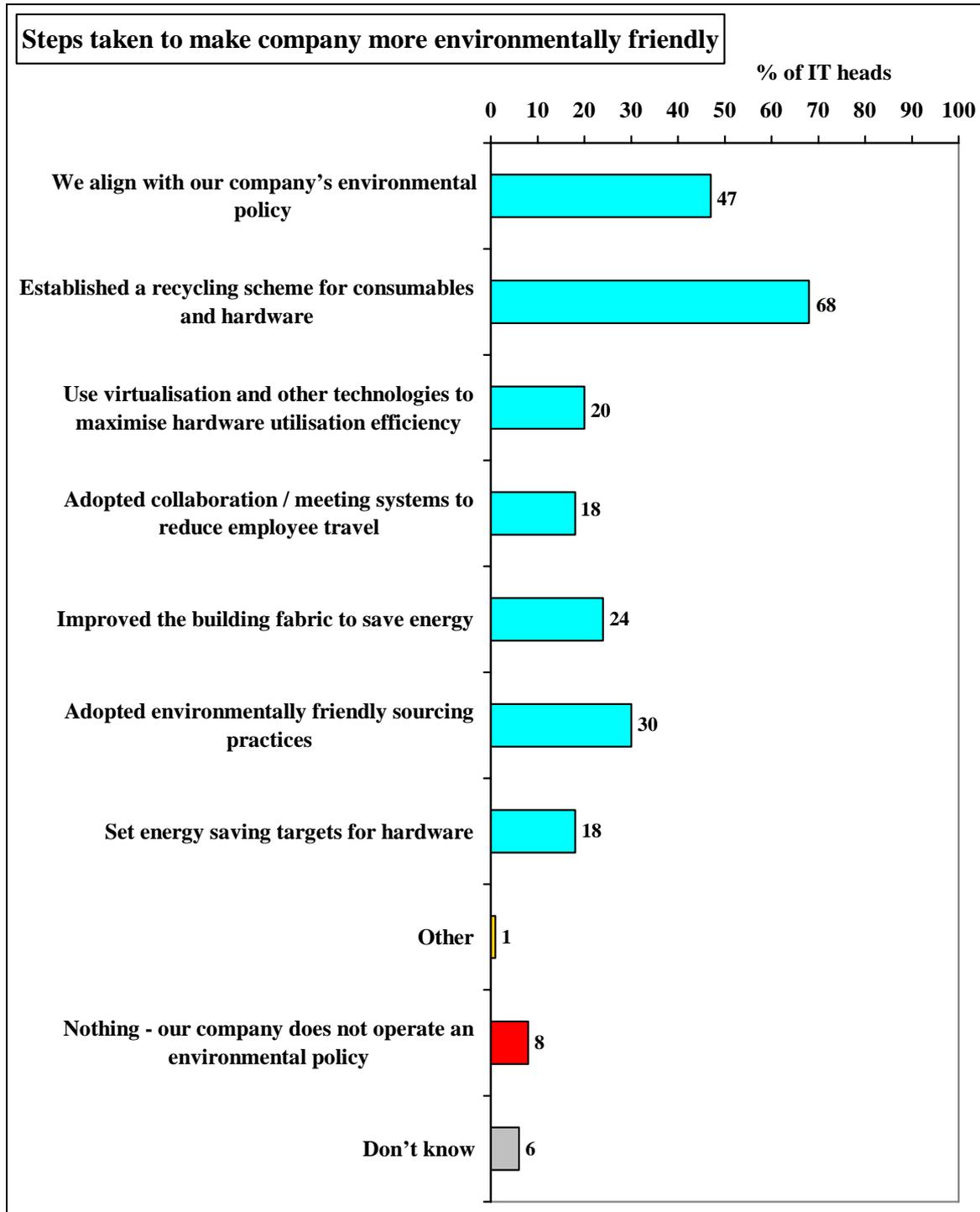


- More companies in the Glasgow region (24%) say a redundant network infrastructure would support the whole organisation and there would be no impact on the user experience, compared to companies in the Edinburgh region (zero).
- Conversely, more companies in the Edinburgh region (100%) do not have a redundant network infrastructure, compared to companies in the Glasgow region (76%).



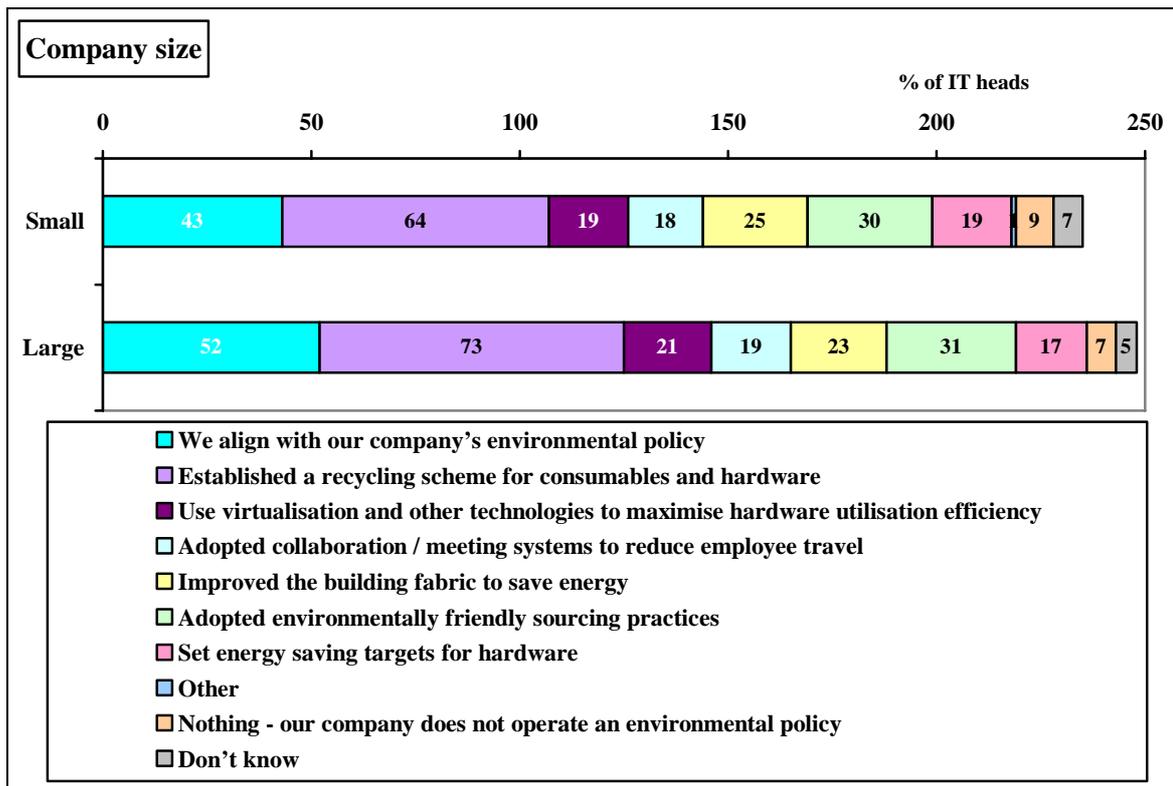
- More companies whose turnover has remained static (71%) say the most critical parts of the organisation would still be running in the event of an outage, compared to those with high or low turnover growth (both 42%).
- Otherwise, statistically, there is no significant difference according to growth status and what actions companies would take in the event of an outage.

4.1.10 Which of the following steps has your organisation taken to be more environmentally friendly?

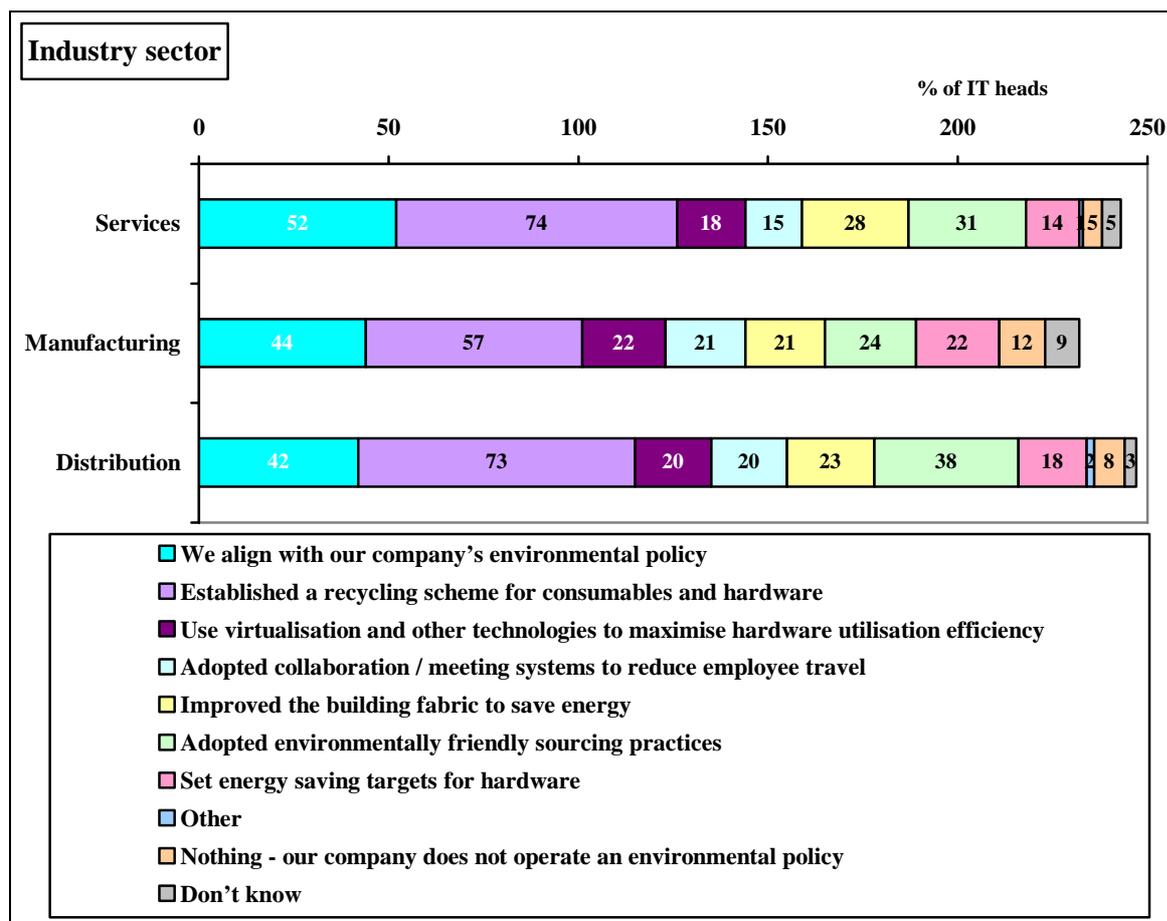


- Among these IT heads, 92% say their company has taken some steps to be more environmentally friendly.
- Indeed, 60% of companies have taken multiple steps towards this aim; 35% have taken 3 or more and 13% have taken 5 or more [not shown].

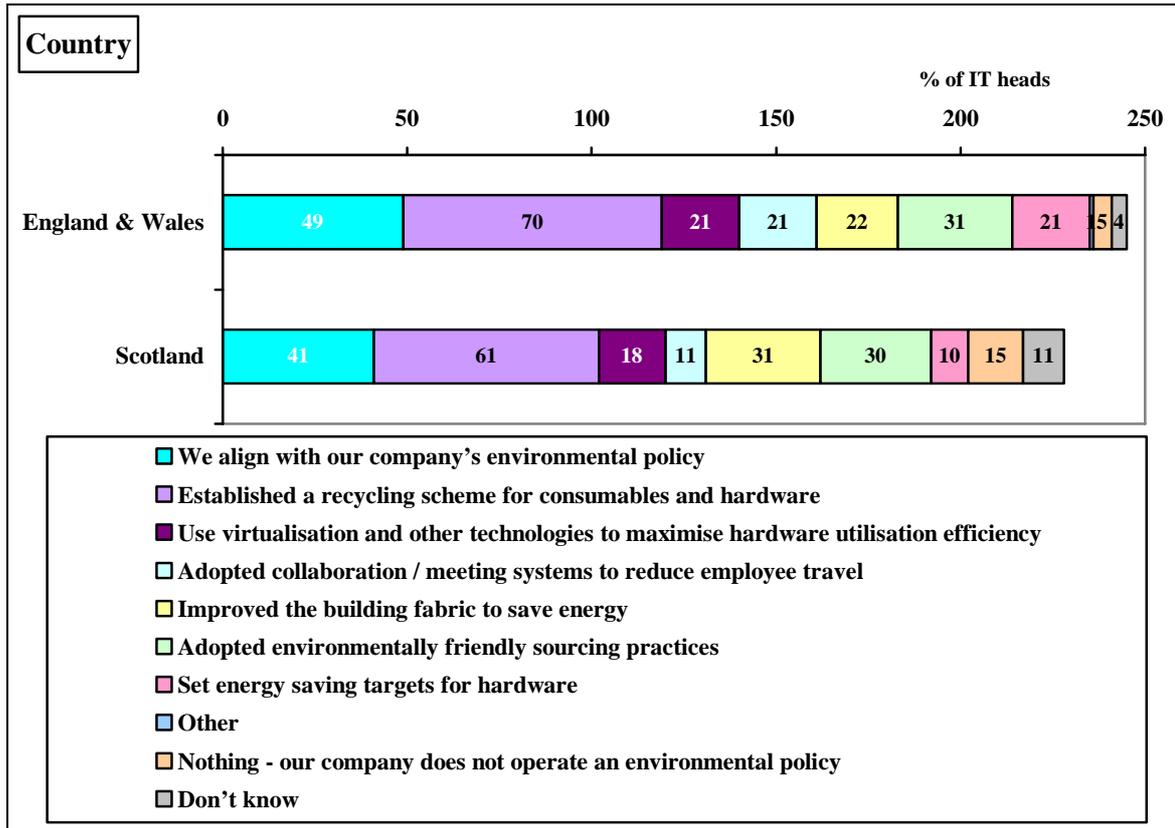
- But 8% say their company has not taken any steps and does not operate an environmental policy.
- However, the single biggest initiative that IT heads say their company has taken is to establish a recycling scheme for consumables and hardware (68%).
- This is followed by 47% who say they align themselves with their company’s environmental policy.
- But only 30% have adopted environmentally friendly sourcing practices.
- Less than 1 in 4 (24%) have improved the building fabric to save energy.
- Fewer, 1 in 5 (20%), use virtualisation and other technologies to maximise hardware utilisation efficiency.
- But only 18% have adopted the widely available collaboration / meeting systems to reduce employee travel.
- The same amount (18%) have set energy saving targets for hardware.
- The ‘Other’ category (1%) includes adoptions of bio-diesel fuel and wind-power.
- 6% of IT heads are unsure what their company has done to be more environmentally friendly.



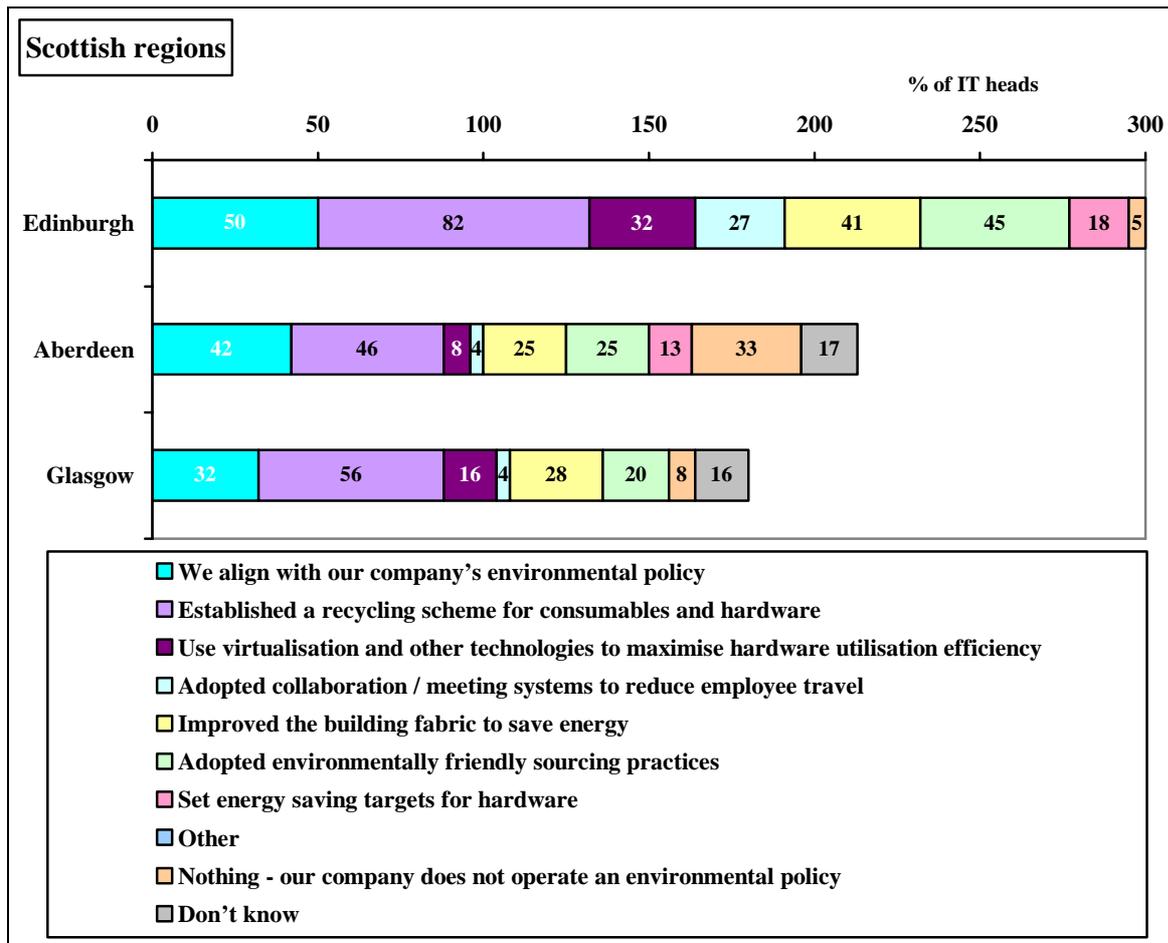
- Statistically, there is no significant difference according to a company’s size and the steps it has taken to become more environmentally friendly.



- More services companies (95%) say their company has taken some steps to be more environmentally friendly, compared to manufacturing companies (88%).
- And, more services (74%) and distribution (73%) companies say they have established a recycling scheme for consumables and hardware, compared to manufacturing companies (57%).
- But, more manufacturing companies (12%) say their company has not taken any steps and does not operate an environmental policy, compared to services companies (5%).

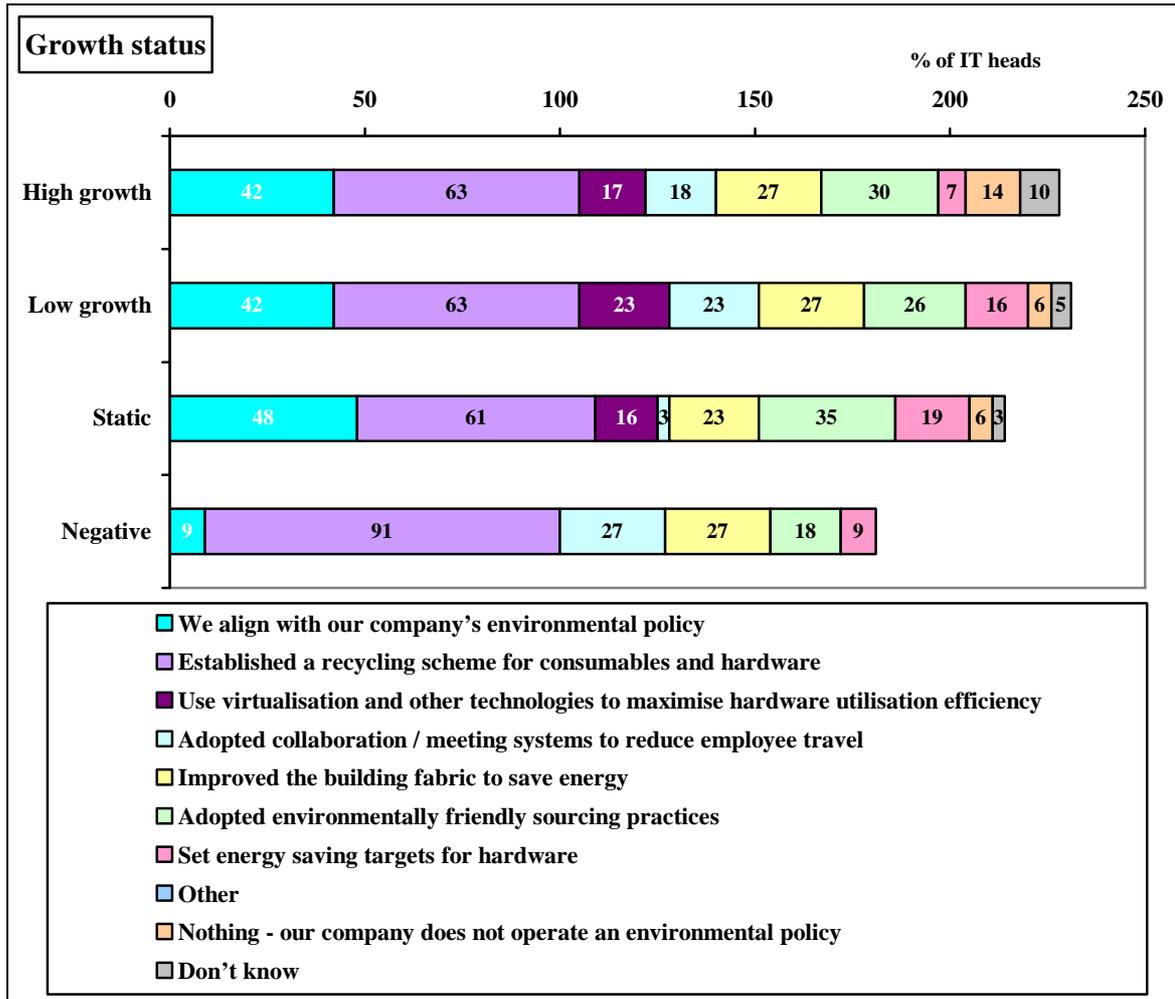


- More companies in England & Wales (95%) say their company has taken some steps to be more environmentally friendly, compared to companies in Scotland (85%).
- And, more companies in England & Wales (21%) have set energy saving targets for hardware, compared to companies in Scotland (10%).
- But, more companies in Scotland (15%) say their company has not taken any steps and does not operate an environmental policy, compared to companies in England & Wales (5%).
- Also, more companies in Scotland (11%) are unsure what their company has done to be more environmentally friendly, compared to companies in England & Wales (4%).



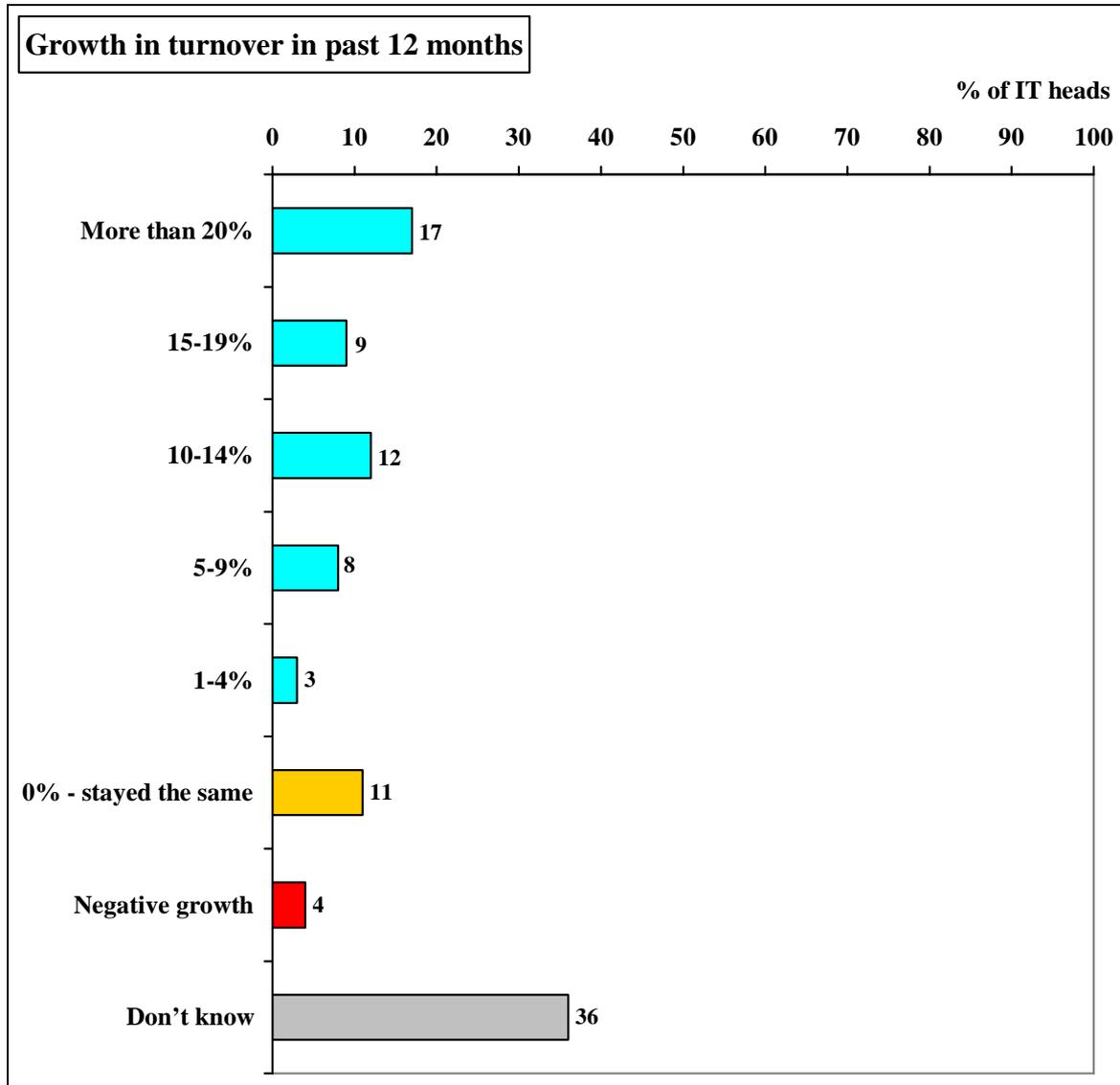
- Overall, companies in the Edinburgh region have taken more of these steps to be environmentally friendly, compared to the Aberdeen and Glasgow regions (i.e. length of bars in the above chart).
- But, more companies in the Edinburgh (95%) and Glasgow (92%) regions say their company has taken at least some steps to be more environmentally friendly, compared to companies in the Aberdeen region (67%).
- Yet, more companies in the Edinburgh region (73%) say their company has taken multiple steps, compared to companies in the Aberdeen (42%) and Glasgow (44%) regions [not shown].
- Also, more companies in the Edinburgh region (50%) say their company has taken 3 or more steps, compared to companies in the Glasgow region (16%) [not shown].
- In more detail, more companies in the Edinburgh region (82%) have established a recycling scheme for consumables and hardware, compared to companies in the Aberdeen region (46%).
- In addition, more companies in the Edinburgh region (32%) use virtualisation and other technologies to maximise hardware utilisation efficiency, compared to companies in the Aberdeen region (8%).
- Furthermore, more companies in the Edinburgh region (27%) have adopted the widely available collaboration / meeting systems to reduce employee travel, compared to companies in the Aberdeen and Glasgow regions (both 4%).

- Similarly, more companies in the Edinburgh region (18%) have set energy saving targets for hardware, compared to companies in the Glasgow region (zero).
- In fact, more companies in the Aberdeen region (33%) say their company has not taken any steps and does not operate an environmental policy, compared to companies in the Edinburgh region (5%).
- And, more companies in the Aberdeen (17%) and Glasgow (16%) regions are unsure what their company has done to be more environmentally friendly, compared to companies in the Edinburgh region (zero).

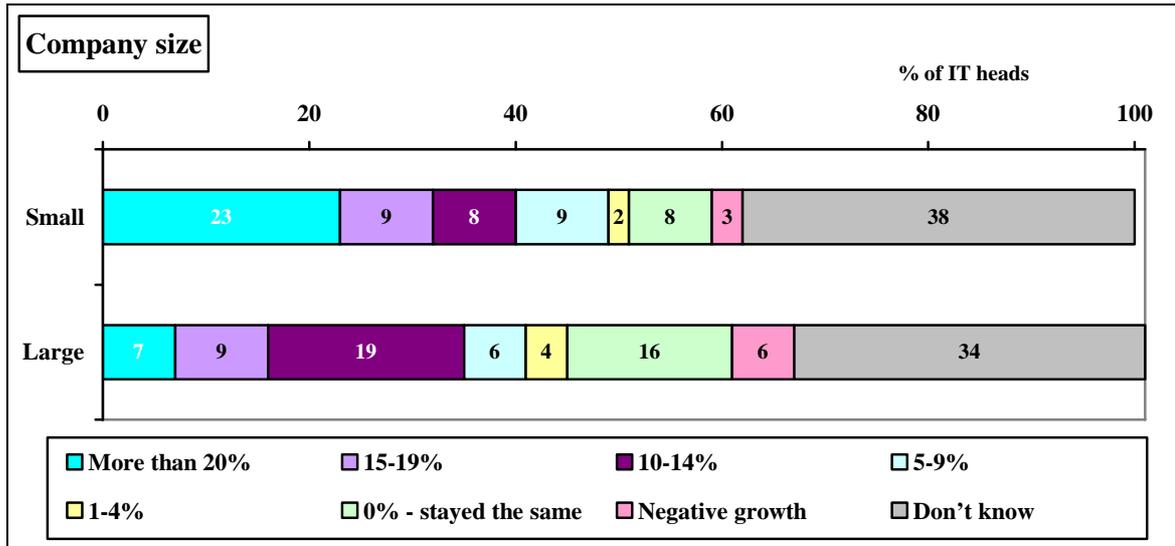


- More companies that have experienced high (18%) or low (23%) turnover growth have adopted the widely available collaboration / meeting systems to reduce employee travel, compared to those who have remained static (3%).
- Otherwise, statistically, there is no significant difference according to a company's growth status and the steps it has taken to become more environmentally friendly.

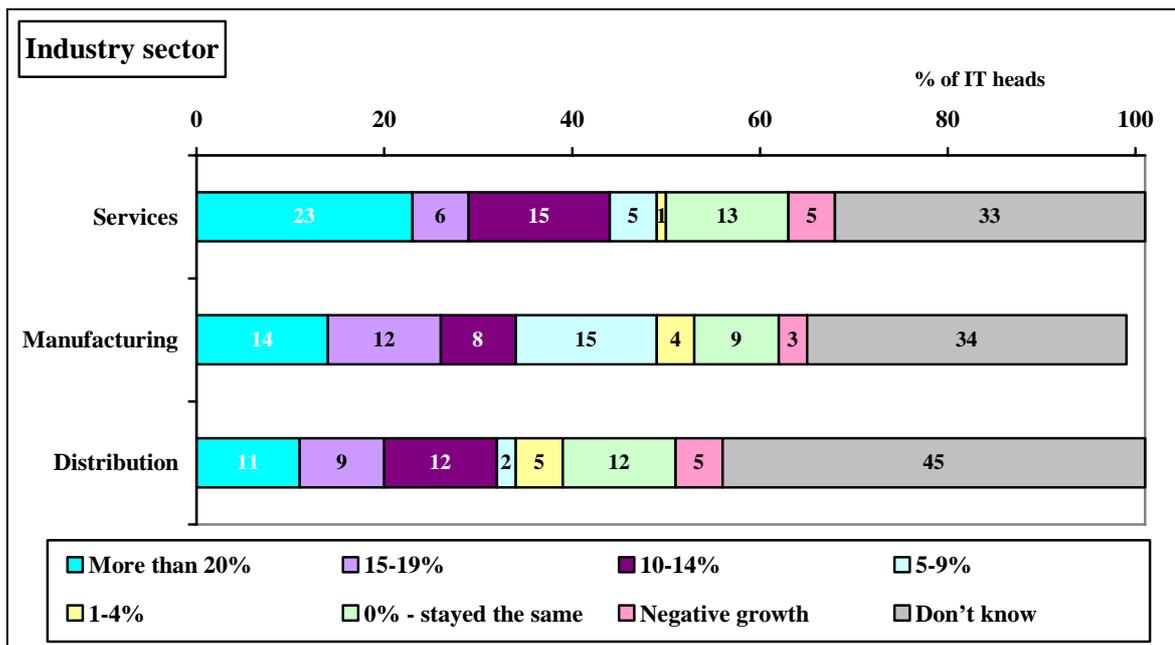
4.1.11 In percentage terms, please indicate approximately how much your organisation’s turnover has grown in the past 12 months?



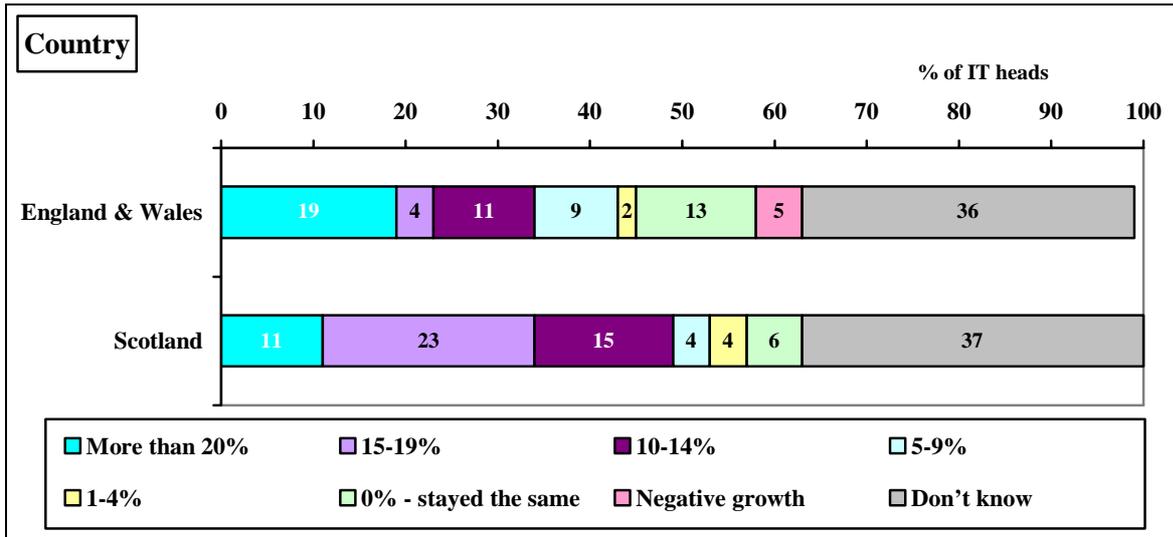
- 64% of these IT heads were able to cite a figure in terms of how much their organisation’s turnover has grown in the last 12 months.
- Collectively, 49% of companies say their turnover has grown in the last 12 months – 11% say it has remained static, and 4% say it has decreased.
- The average amount of growth in turnover in the last 12 months is 14.4%.
- Indeed, 17% claim their organisation’s turnover has grown more than 20% in the last 12 months.
- And 38% say it has grown by 10% or more.



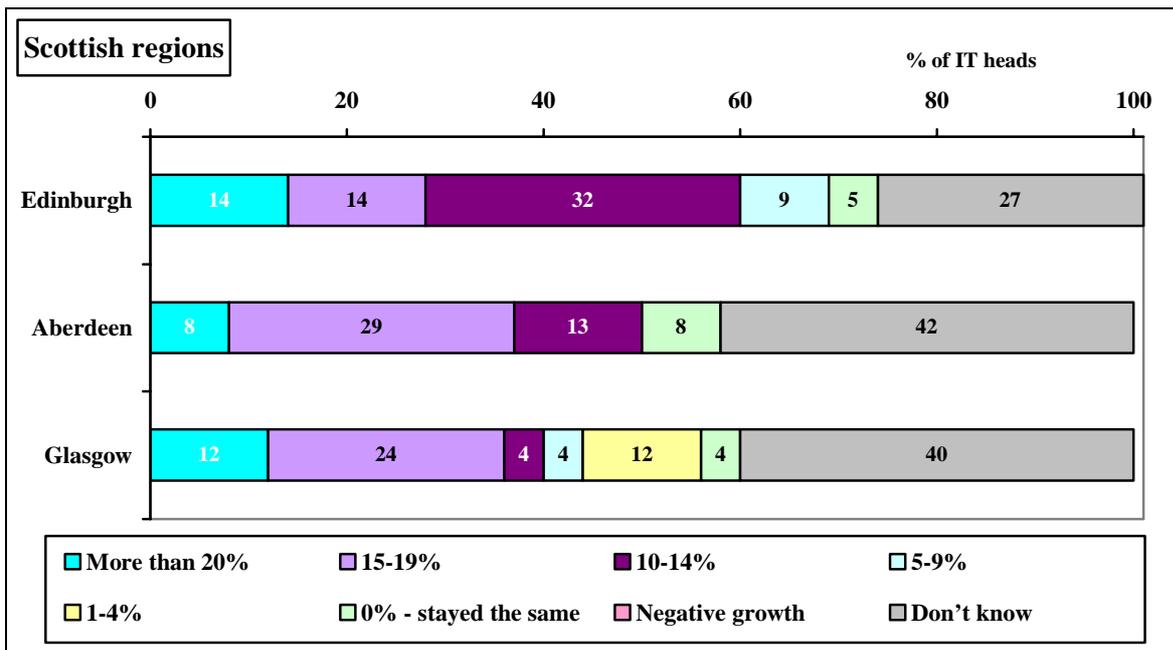
- On average, large companies have seen a higher growth in turnover in the last 12 months (16.8%), compared to small companies (10.8%).
- And more small companies (23%) claim their organisation's turnover has grown by more than 20% in the last 12 months, compared to large companies (7%).



- More manufacturing companies (54%) say their turnover has grown in the last 12 months, compared to distribution companies (38%).
- But, more services companies (23%) claim their organisation's turnover has grown by more than 20%, compared to distribution companies (11%).

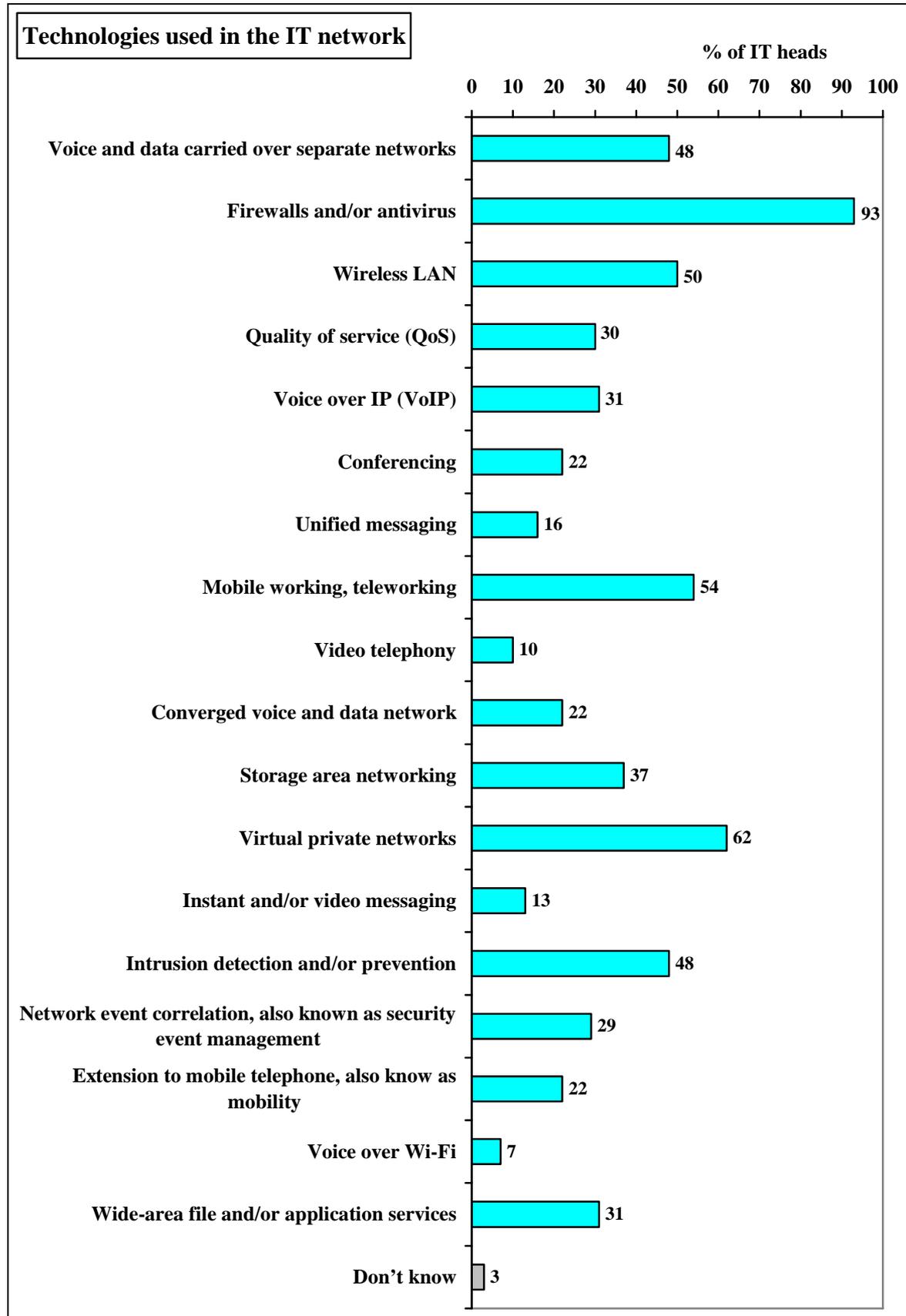


- More companies in England & Wales (5%) say their turnover has decreased in the last 12 months, compared to companies in Scotland (zero).
- But, more companies in Scotland (49%) claim their organisation’s turnover has grown by 10% or more, compared to companies in England & Wales (34%).

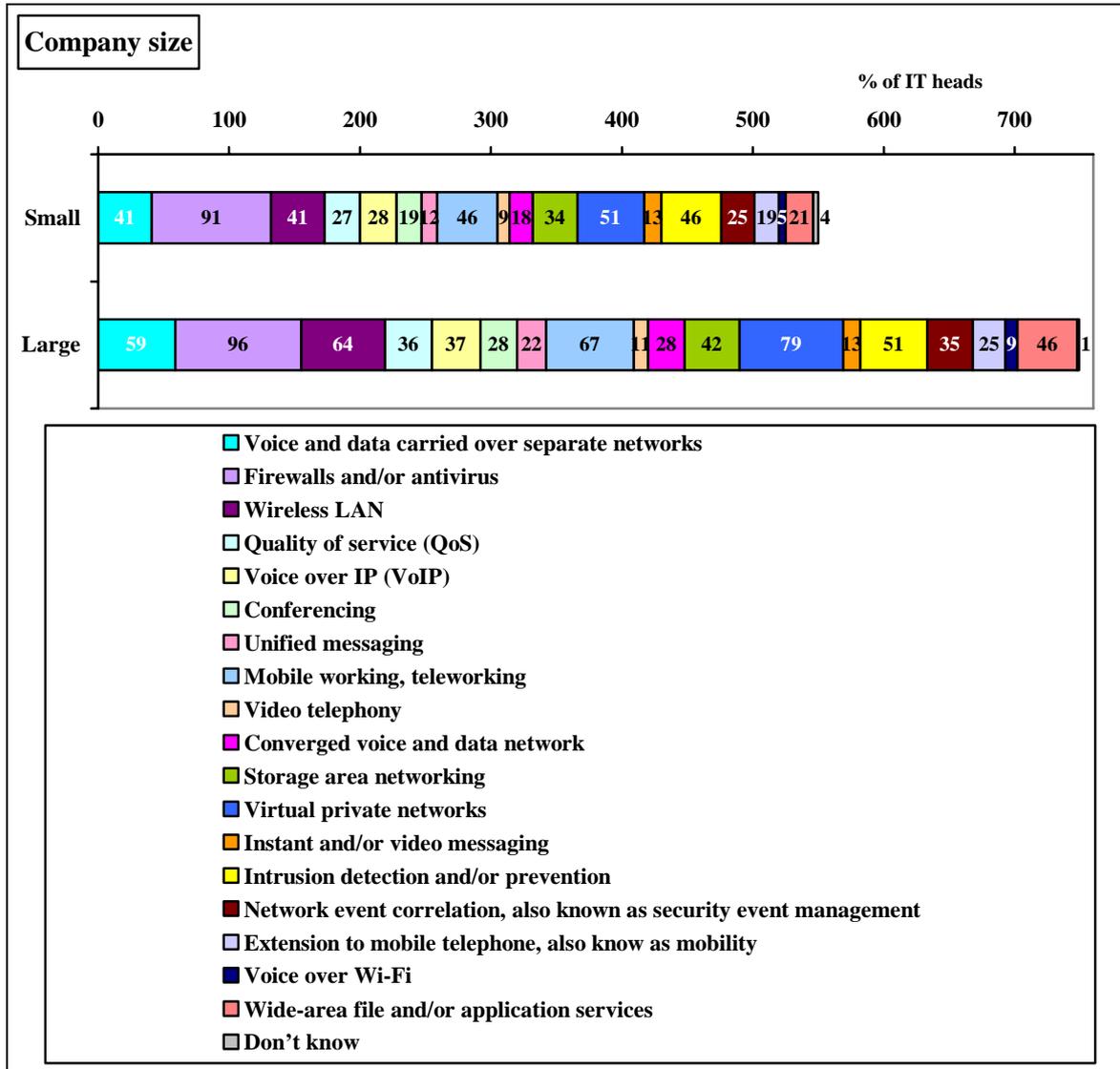


- Statistically, there is no significant difference according to Scottish region and how much company turnover has grown in the last 12 months.

4.1.12 Which of the following technologies does your organisation use in its IT network?

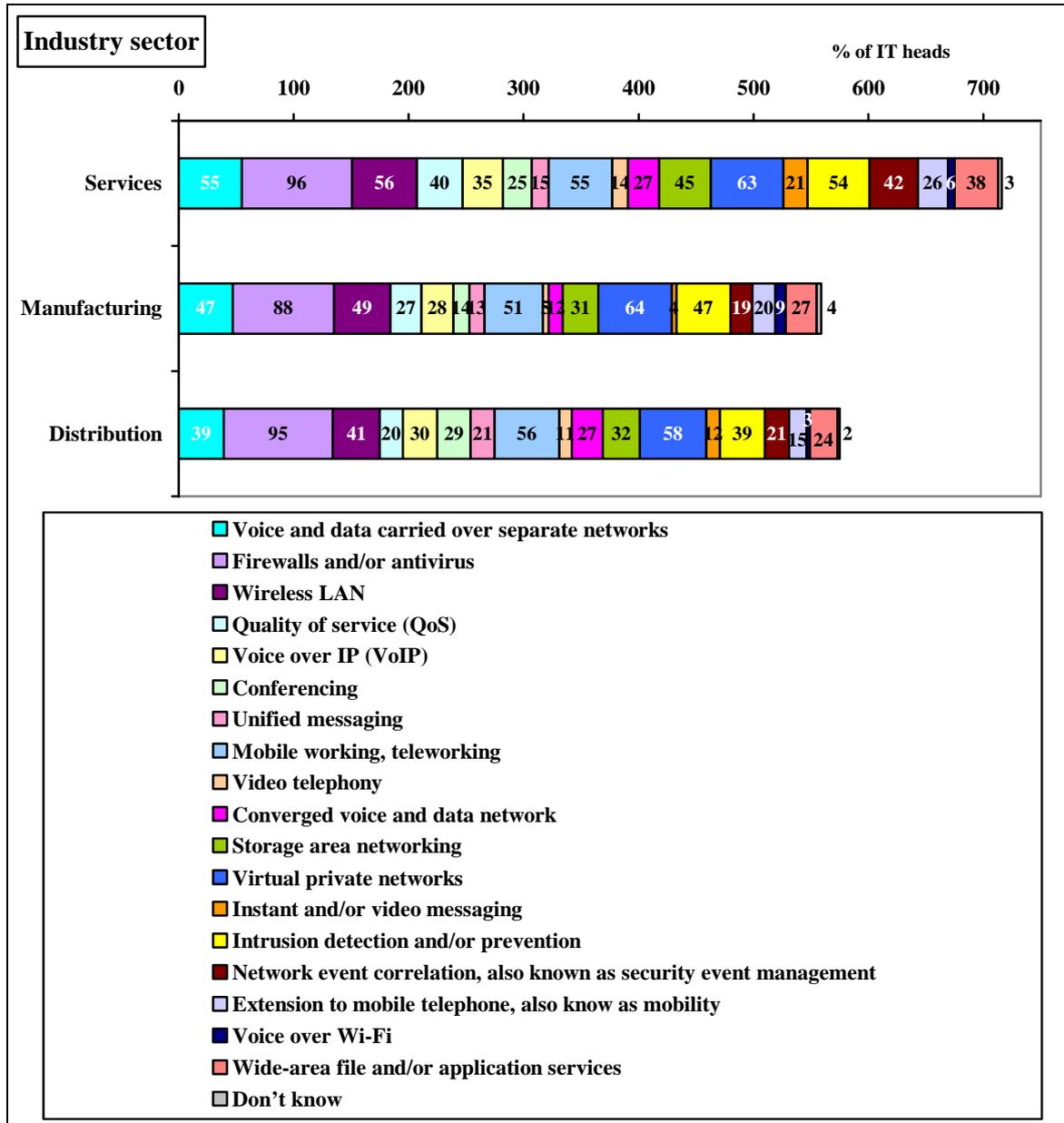


- On average, companies use 6 of these different technologies in their IT networks [not shown].
- The frontrunner is firewalls and / or antivirus protection (93%).
- This is followed by a virtual private network (VPN) (62%).
- About 1 in 2 companies have mobile and / or teleworking (54%), wireless LAN (50%), voice and data carried over separate networks (48%) and intrusion detection and / or prevention (48%) technologies in place.
- About 1 in 3 have storage area networking (37%), Voice over IP (VoIP) (31%), wide-area file and/ or application services (31%), quality of service (QoS) (30%) and network event correlation, also known as security event management (29%).
- Fewer (22%, about 1 in 5) have conferencing, a converged voice and data network and extension to mobile telephone, also known as mobility.
- In more detail, 19% have conferencing by phone, 8% by web and 8% by video; furthermore, 22% have just 1 of these, 8% have 2; and only 5% have all 3 [not shown].
- Bottom of the IT network technology list is voice over Wi-Fi (7%), video telephony (10%), instant and / or video messaging (13%) and unified messaging (16%).
- 3% are unsure which of these technologies their company uses in its IT network.



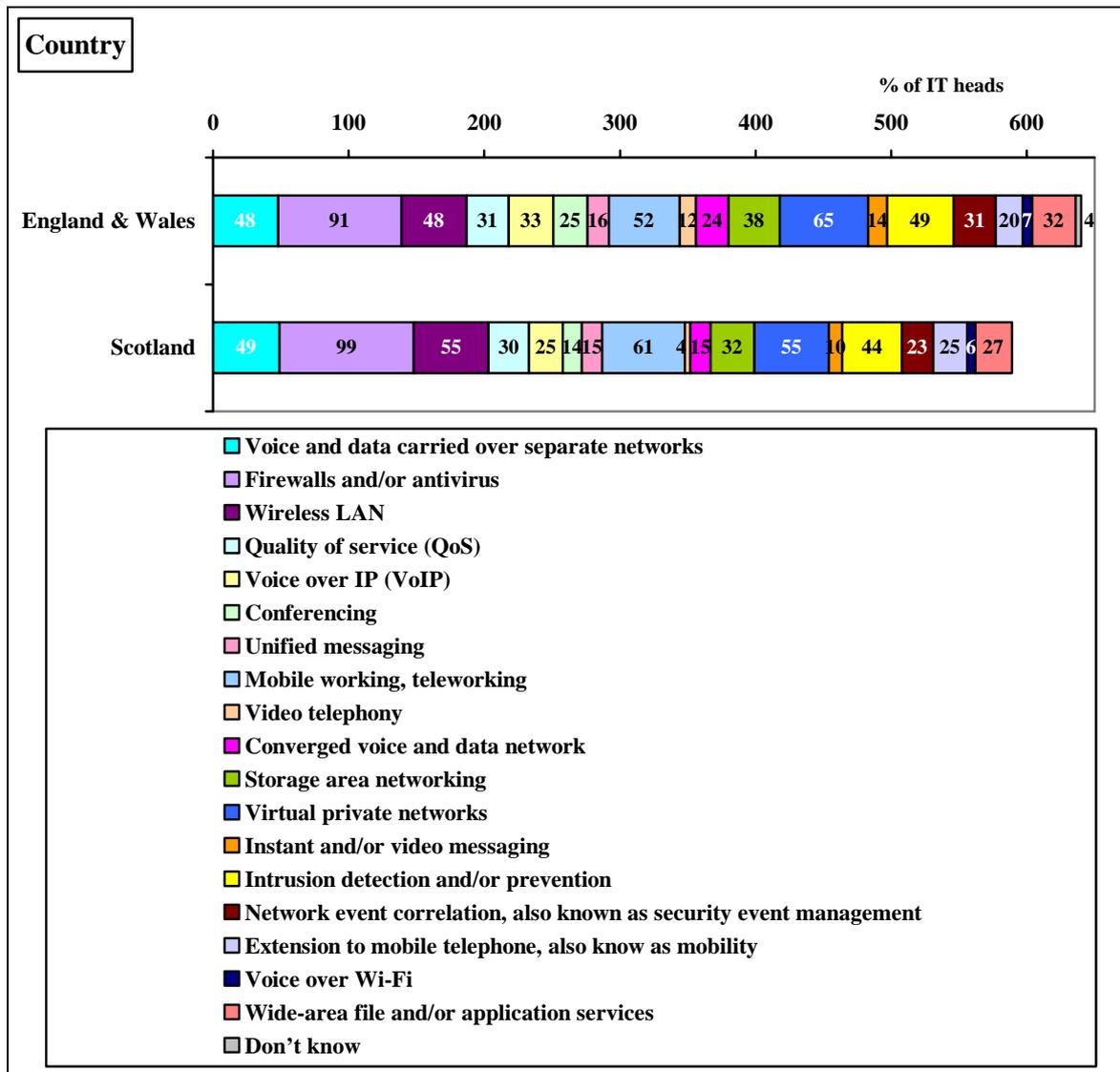
- On average, large companies use more of these technologies (7.5), compared to small companies (5.4) [not shown].
- In detail, more large companies (59%) have voice and data carried over separate networks, compared to small companies (41%).
- And, more large companies (64%) have wireless LAN, compared to small companies (41%).
- Indeed, more large companies (28%) say they have at least 1 conferencing option (phone, web or video), compared to small companies (17%) [not shown].
- In addition, more large companies (22%) have unified messaging, compared to small companies (12%).
- Also, more large companies (67%) have mobile and / or teleworking, compared to small companies (46%).
- More large companies (28%) have a converged voice and data network, compared to small companies (18%).

- Furthermore, more large companies (79%) have virtual private networks, compared to small companies (51%).
- Finally, more large companies (46%) have wide-area file and/ or application services, compared to small companies (21%).

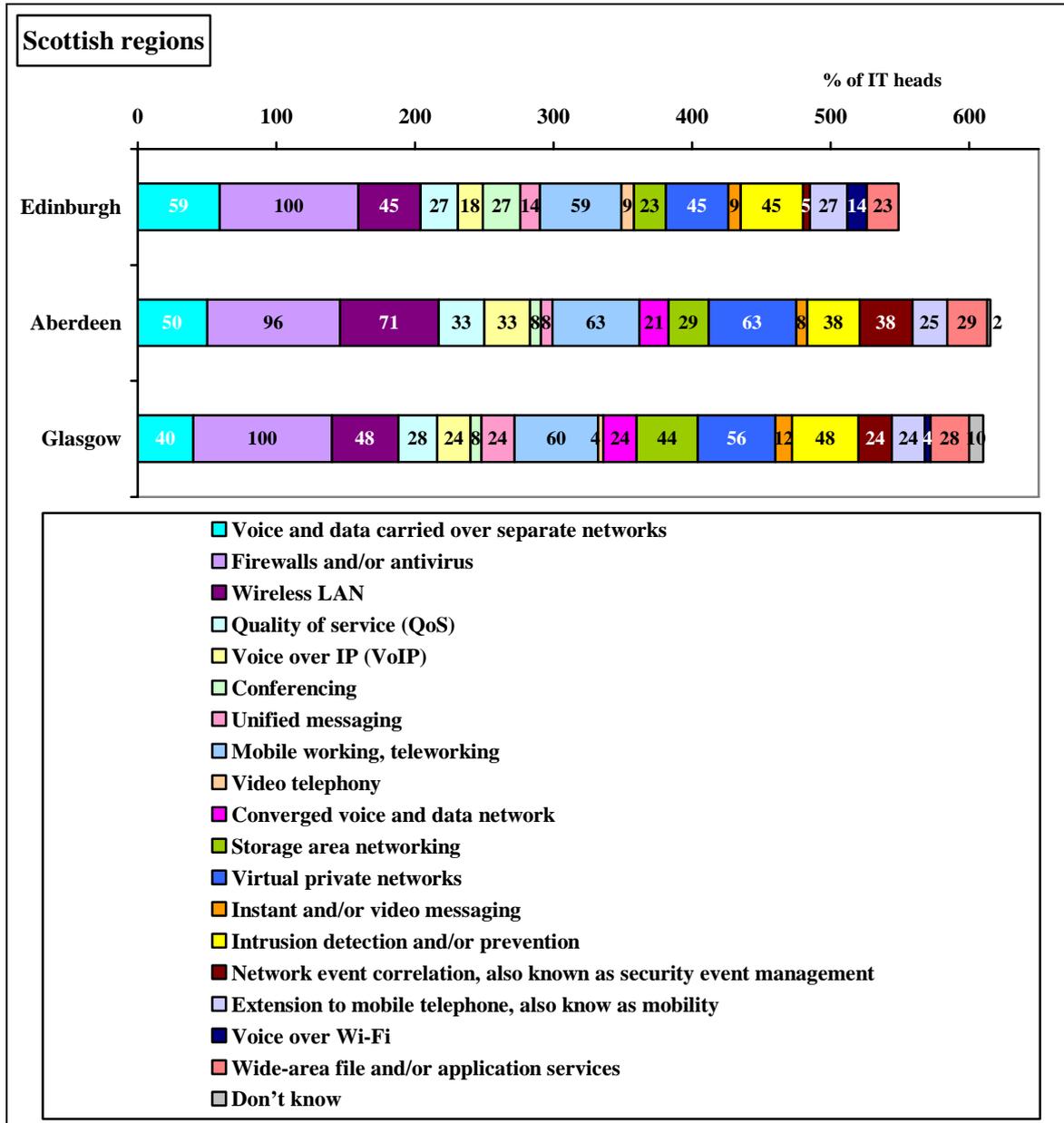


- On average, services companies use more of these technologies (7.2), compared to manufacturing (5.6) and distribution (5.7) companies [not shown].
- In detail, more services companies (96%) have firewalls and / or antivirus protection, compared to manufacturing companies (88%).
- And, more services companies (56%) have wireless LAN, compared to distribution companies (41%).
- Also, more services companies (40%) have quality of service (QoS), compared to manufacturing (27%) and distribution (20%) companies.

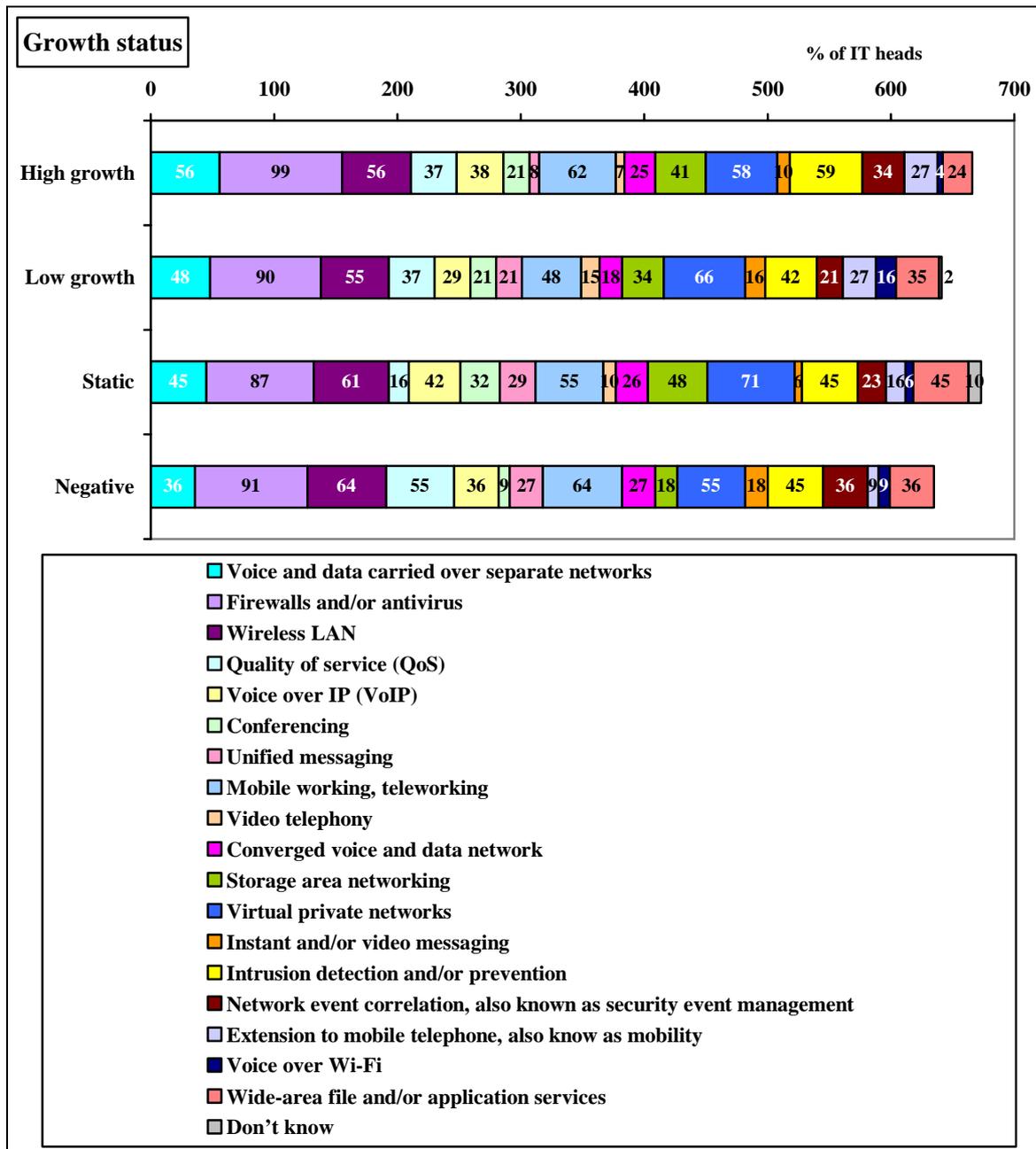
- Whereas, more services (25%) and distribution (29%) companies have conferencing (by phone, web and / or video), compared to manufacturing companies (14%).
- In more detail, more distribution companies (27%) say they have at least 1 conferencing option (phone, web or video), compared to manufacturing companies (14%) [not shown].
- And more services companies (8%) say they have all 3 conferencing options (phone, web or video), compared to distribution companies (zero) [not shown].
- More services companies (14%) have video telephony, compared to manufacturing companies (5%).
- And, more services (27%) and distribution (27%) companies have a converged voice and data network, compared to manufacturing companies (12%).
- Furthermore, more services companies (45%) have storage area networking, compared to manufacturing companies (31%).
- In addition, more services companies (21%) have instant and / or video messaging, compared to manufacturing companies (4%).
- Finally, more services companies (42%) have network event correlation, also known as security event management, compared to manufacturing (19%) and distribution (21%) companies.



- More companies in Scotland (99%) have firewalls and / or antivirus protection, compared to companies in England & Wales (91%).
- But more companies in England & Wales (11%) have conferencing by web, compared to companies in Scotland (1%) [not shown].
- Also, more companies in England & Wales (10%) have 2 conferencing options in place (phone, web or video), compared to companies in Scotland (3%) [not shown].



- More companies in the Aberdeen (21%) and Glasgow (24%) regions have a converged voice and data network, compared to companies in the Edinburgh region (zero).
- But, more companies in the Aberdeen region (38%) have network event correlation, also known as security event management, compared to companies in the Edinburgh region (5%).



- More companies that have experienced high turnover growth (99%) have firewalls and / or antivirus protection, compared to those with low turnover growth (90%) and those that have remained static (87%).
- And, more companies with high or low turnover growth (both 37%) have quality of service (QoS), compared to those that have remained static (16%).
- However, more companies with low turnover growth (21%) and those that have remained static (29%) have unified messaging, compared to those with high turnover growth (8%).
- But, more companies with high turnover growth (59%) have intrusion detection and / or prevention, compared to those with low turnover growth (42%).
- In contrast, more companies with low turnover growth (16%) have voice over Wi-Fi, compared to those with high turnover growth (4%).

- More companies whose turnover has remained static (45%) have wide-area file and/ or application services, compared to those with high turnover growth (24%).
- Finally, more companies whose turnover has remained static (10%) are unsure which of these technologies their company uses in its IT network, compared to those with high turnover growth (zero).

4.2 IT Network IQ

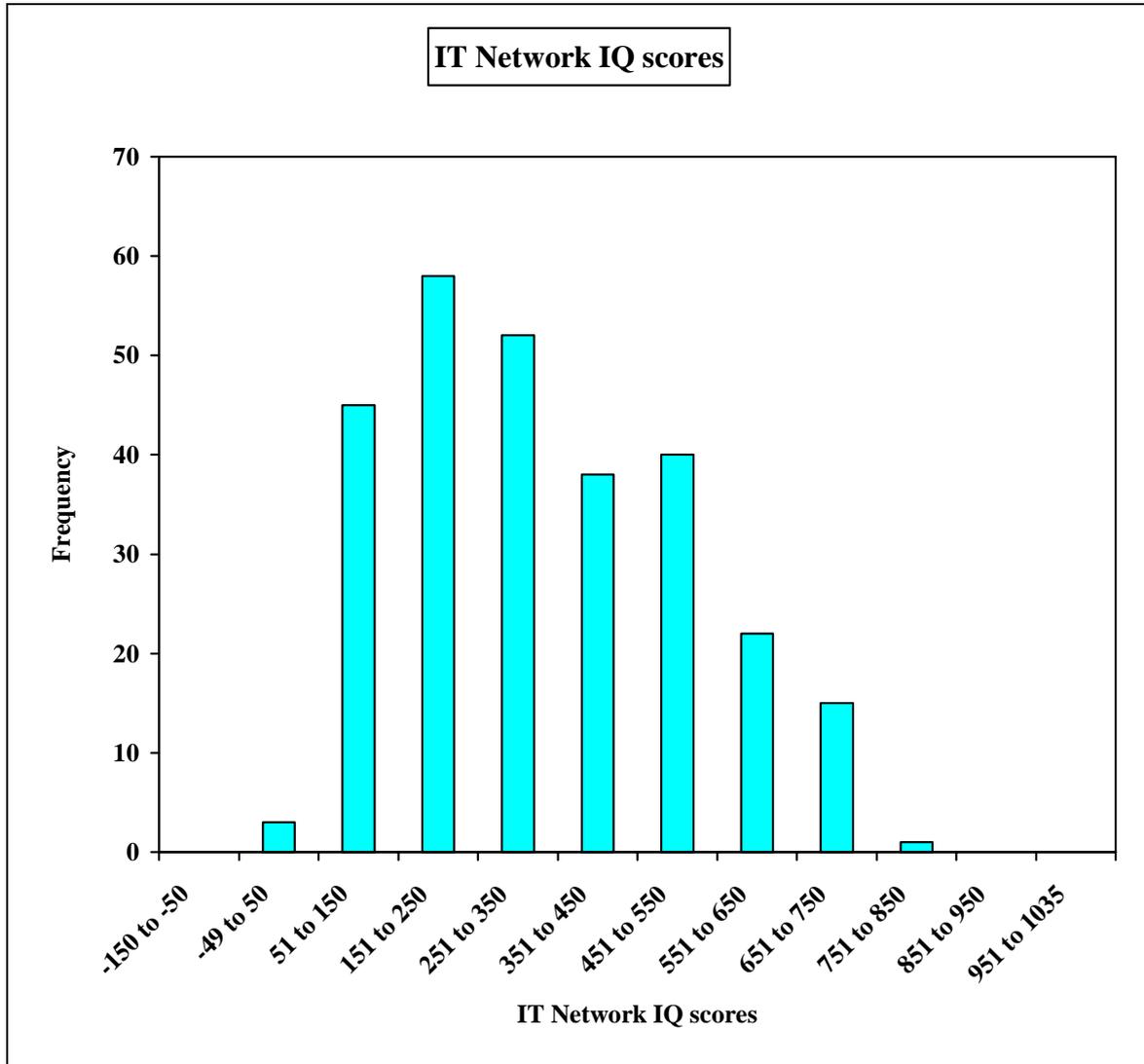


Table 4.2.1. IT Network IQ Scores

Average	334
Median	310
Range	45-760

- For the IT respondents, the minimum IT Network IQ score a company can achieve is -150 and the maximum is +1035.
- However, the average IT Network IQ score for the IT sample is 334, but this ranges from +45 to +760.
- 63% of companies that scored very highly (i.e. above a score of 551) are in the services sector, 21% are in manufacturing and only 16% are in the distribution sector.
- But they are split evenly across the two company size bands of large and small (50:50 exactly).
- While 11% of these high scoring companies are in Scotland, none of them are based in Edinburgh, but 8% are in Aberdeen and 3% are in Glasgow.

- 34% are high turnover growth companies, 24% are low growth companies, 11% have been static and 4% have had negative turnover growth in the last 12 months.
- Two IT heads among Cisco’s customers were also interviewed in this project and both achieved very high scores (560 and 710).

Table 4.2.2. IT Network IQ scores by company size

	20-250	251-1000
Average	309	373
Median	265	340
Range	50-760	45-745

- Large companies (373) have a higher average IT Network IQ score, compared to small companies (309).

Table 4.2.3. IT Network IQ scores by industry sector

	Services	Manufacturing	Distribution
Average	380	292	320
Median	358	260	290
Range	45-760	50-670	65-745

- Services companies (380) have a higher average IT Network IQ score, compared to manufacturing (292) and distribution (320) companies.

Table 4.2.4. IT Network IQ scores by country

	England & Wales	Scotland
Average	341	313
Median	315	295
Range	50-760	45-635

- Statistically, there is no difference according to country and the average IT Network IQ score.

Table 4.2.5. IT Network IQ scores by Scottish regions

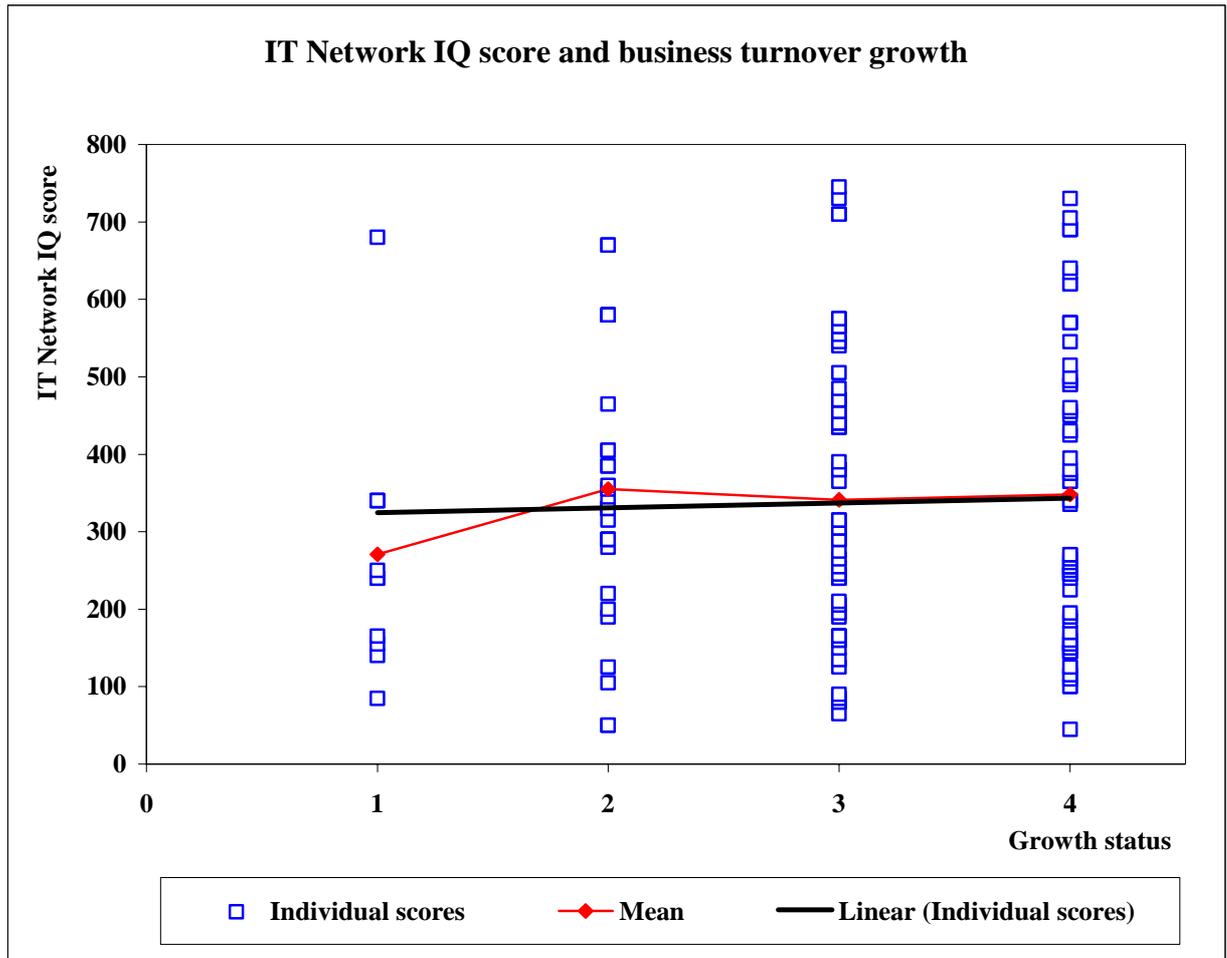
	Edinburgh	Aberdeen	Glasgow
Average	310	314	315
Median	302	250	330
Range	70-545	100-635	45-610

- Statistically, there is no difference according to Scottish region and the average IT Network IQ score.

Table 4.2.6. IT Network IQ scores by growth status

	High growth	Low growth	Static	Negative
Average	348	341	355	270
Median	335	305	330	240
Range	45-730	65-745	50-670	85-680

- Statistically, there is no difference according to turnover growth status and the average IT Network IQ score.



Where:

1= Negative

2= Static

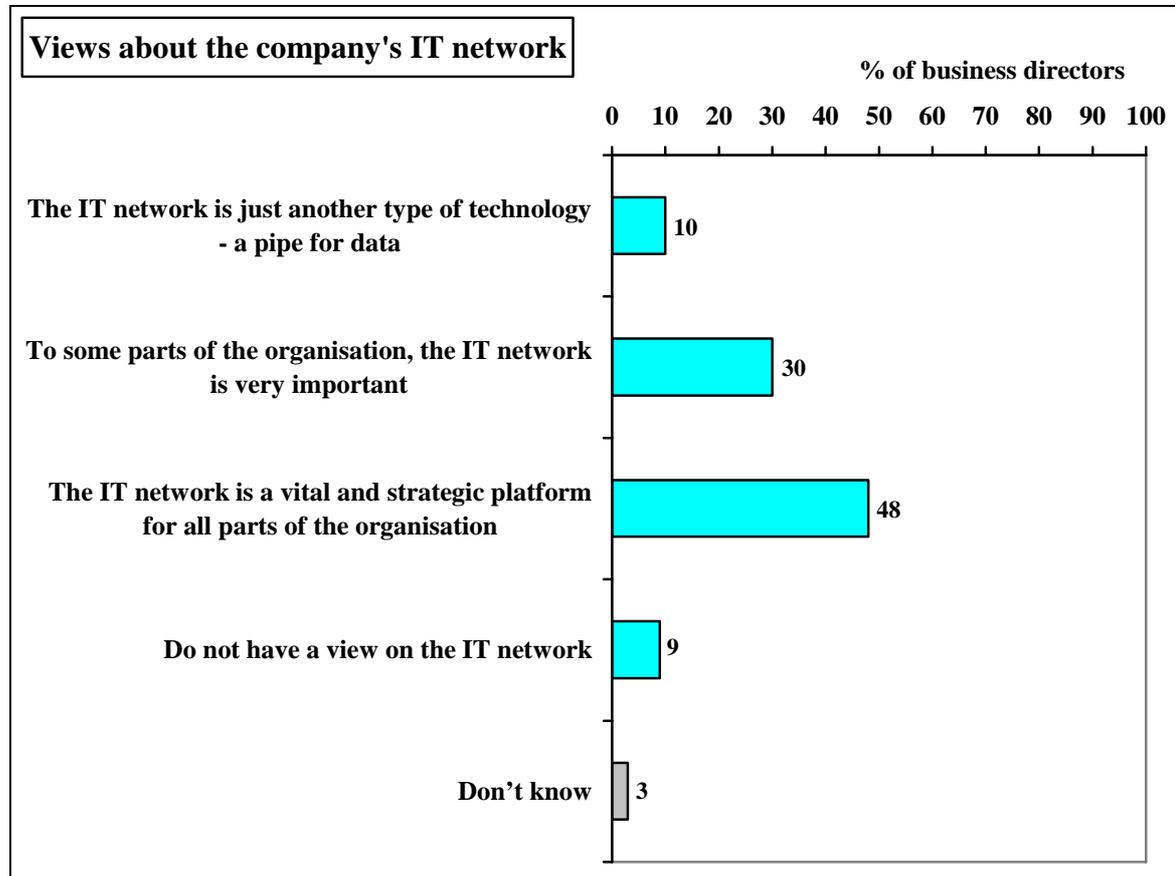
3= Low turnover growth (1-14%)

4= High turnover growth (15% or more)

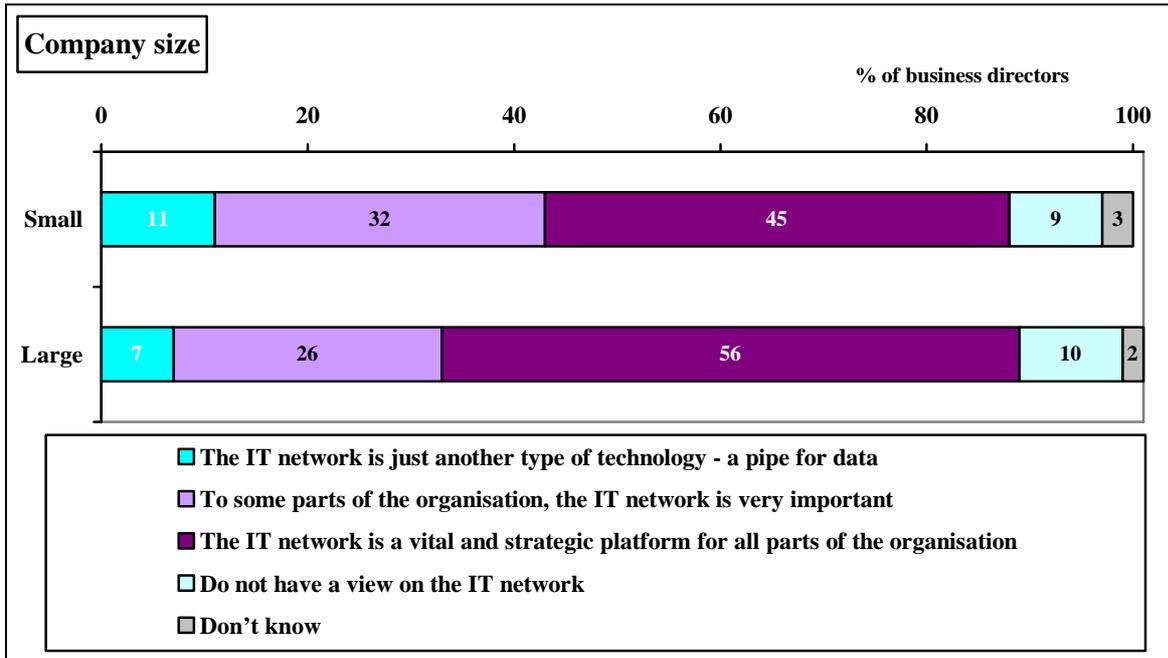
- There is clearly a wide array of IT Network IQ scores for companies with a particular turnover growth status.
- Indeed, the linear relationship between the IT Network IQ score and business turnover growth status is almost flat, suggesting there is no correlation among the IT respondents' IT Network IQ score and the success of their company.

4.3 Business Directors

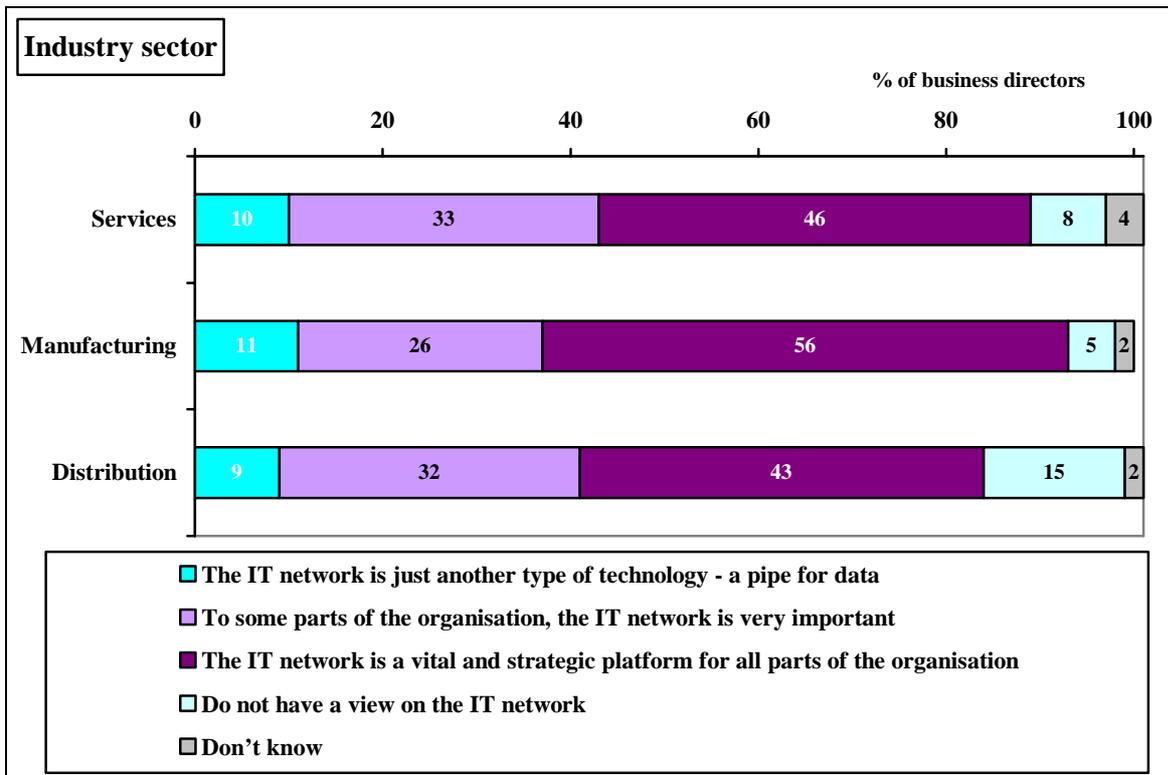
4.3.1 Which of the following sum up your view of your organisation's IT network?



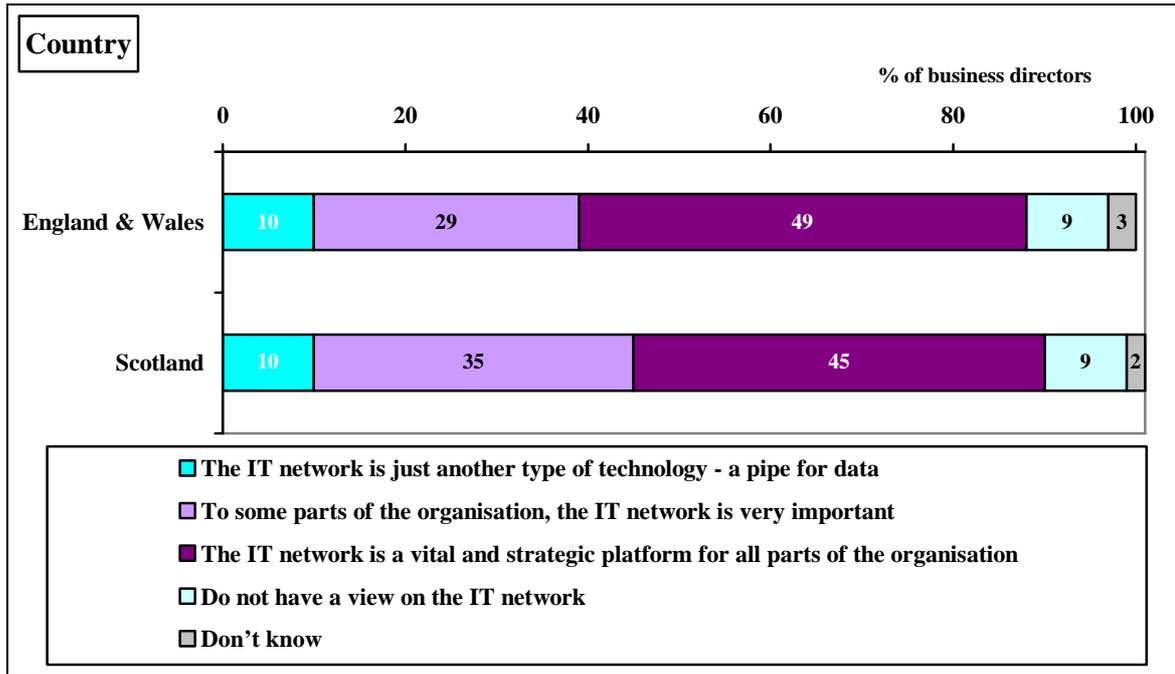
- Most business directors (78%) agree that their organisation's IT network is very important or vital to the business.
- But 30% think it is very important to only some parts of the business.
- However, 48%, the largest fraction, think the IT network is a vital and strategic platform for all parts of the organisation.
- In contrast, 10% think the IT network is just another type of technology – a pipe for data.
- Worse still, 9% do not have a view one way or the other about their organisation's IT network.
- And 3% are unsure how they view their company's IT network.



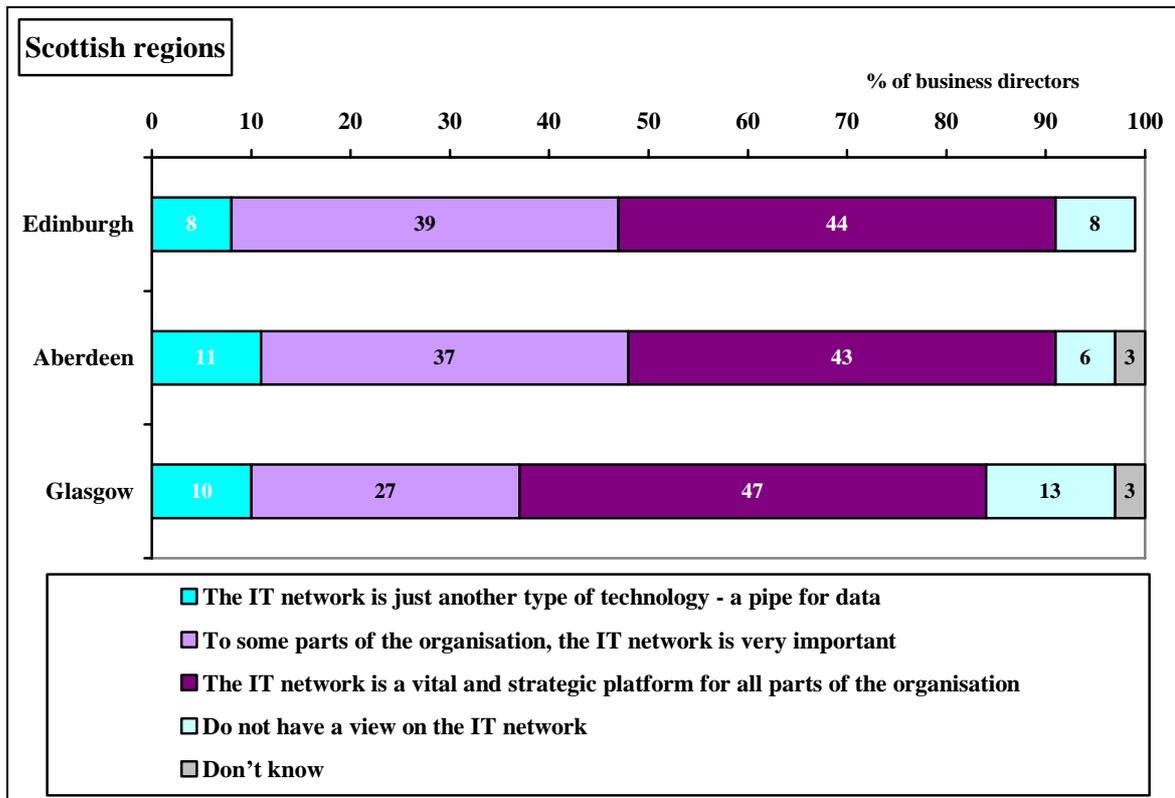
- More business directors in large companies (56%) think their company's IT network is a vital and strategic platform for all parts of the organisation, compared to small companies (45%).



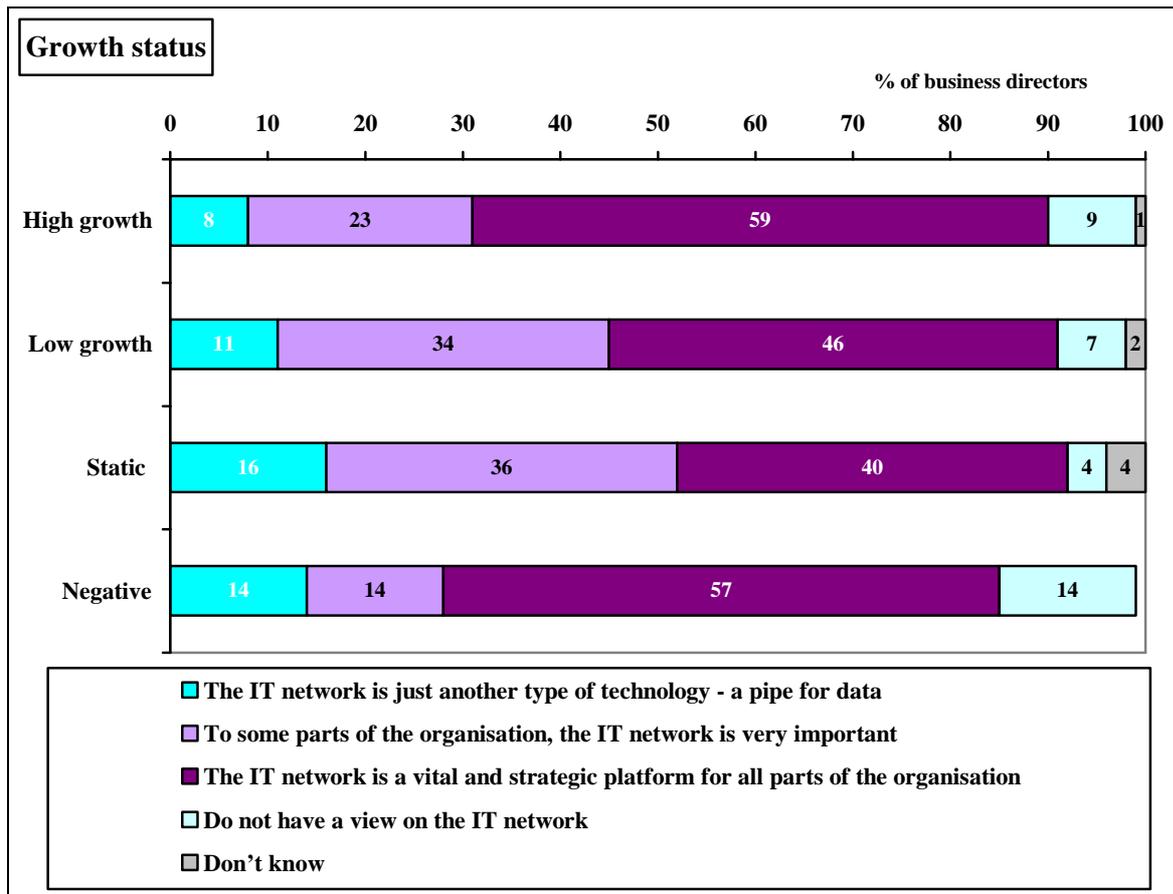
- More business directors in the distribution sector (15%) do not have a view on their company's IT network, compared to those in manufacturing companies (5%).



- Statistically, there is no difference according to country and the views of these business directors on their organisation's IT network.

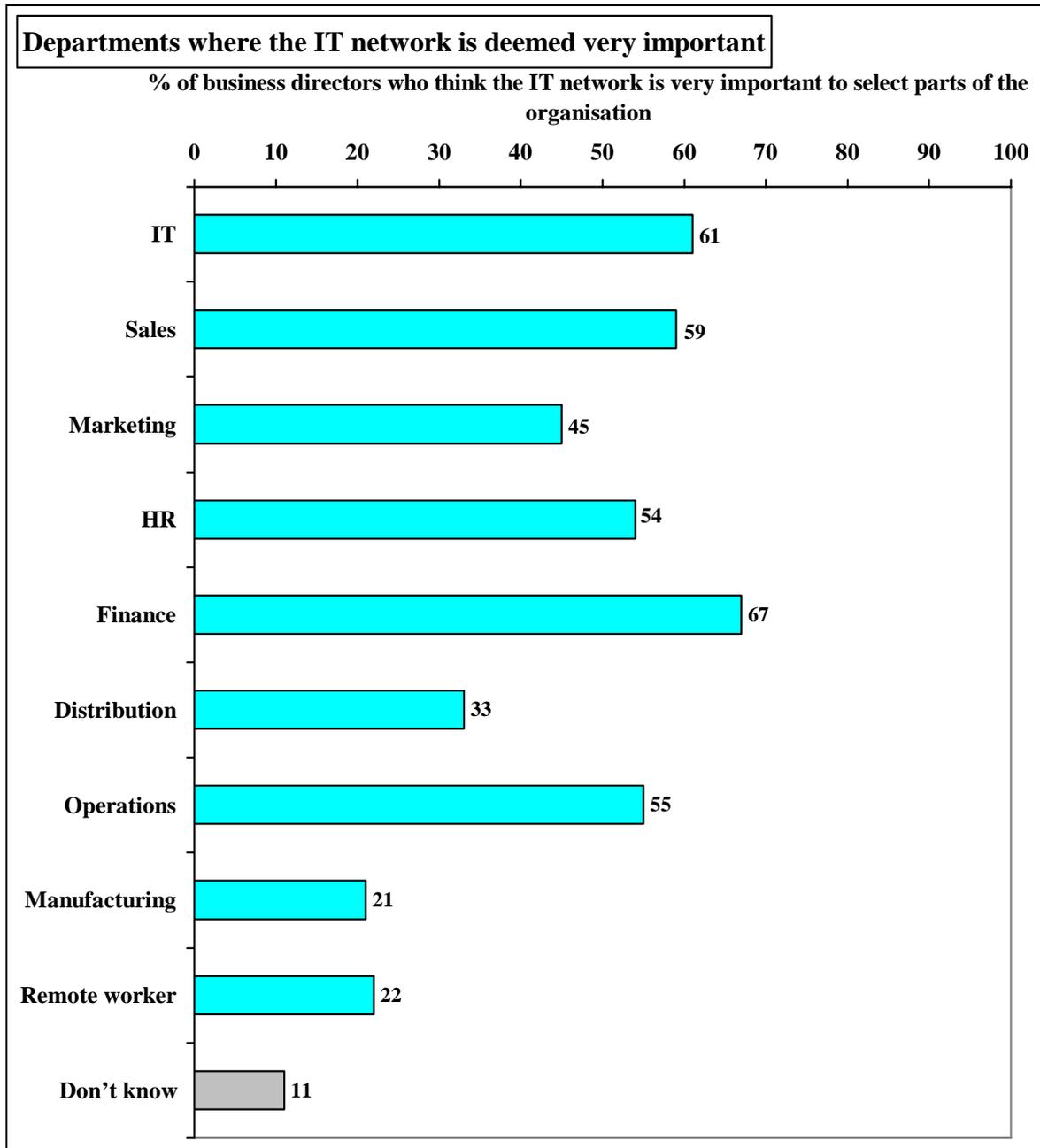


- Statistically, there is no difference according to Scottish region and the views of these business directors on their organisation's IT network.



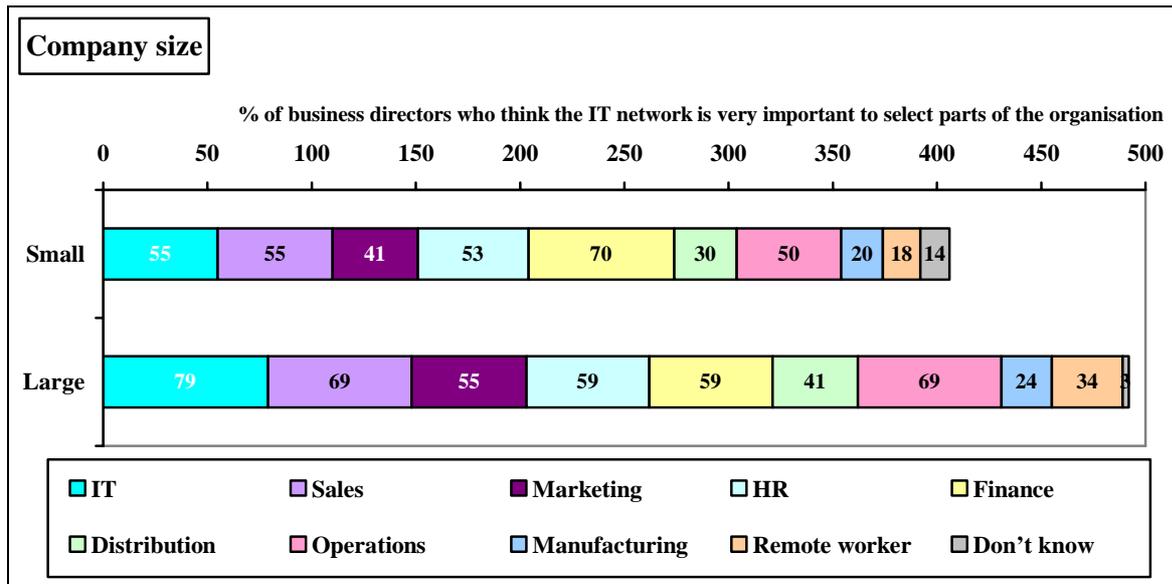
- More business directors in companies with high turnover growth (59%) think their company's IT network is a vital and strategic platform for all parts of the organisation, compared to companies whose turnover has remained static (40%).

4.3.2 [Just to those who view the IT network as very important to select parts of the organisations] In which parts of the organisation is the IT network deemed to be very important?

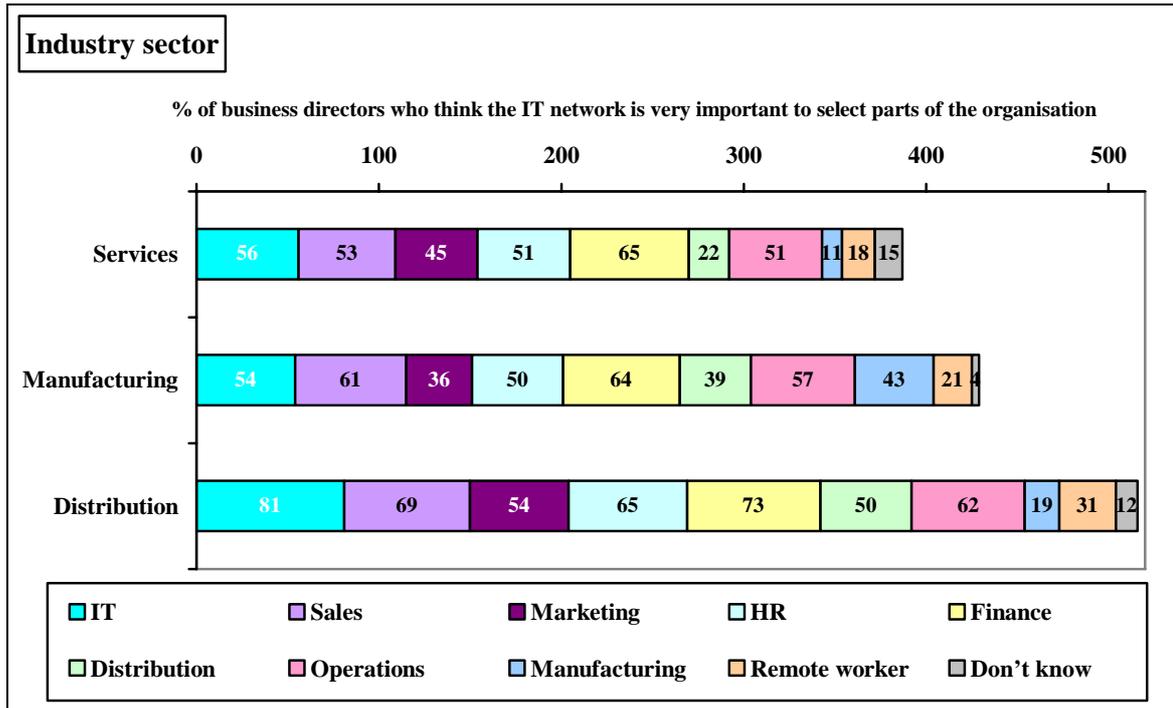


- On average, among those who think the IT network is very important to select parts of the organisation, 4 different departments were cited.
- Top of the list, 67% say finance is where the IT network is very important.
- The IT network is also deemed to be very important to 54% of HR departments.
- 45% say marketing is where the IT network is very important, but more (59%) say it is the sales department.

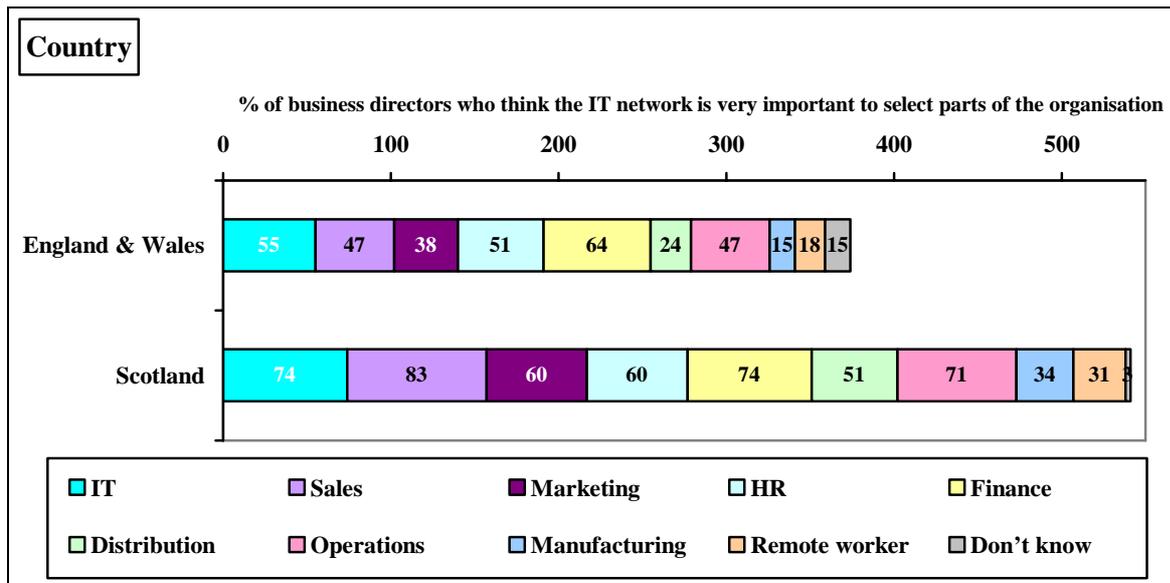
- More industry-specific departments or functions where the IT network is deemed very important include operations (55%), distribution (33%), remote workers (22%) and manufacturing (21%).
- Interestingly, 61% of these non-IT, business directors say that the IT network is deemed very important for the IT department – this is second after finance and above HR, sales and marketing.
- However, 11% of business directors are unsure in which departments or parts of the organisation the IT network is deemed very important.



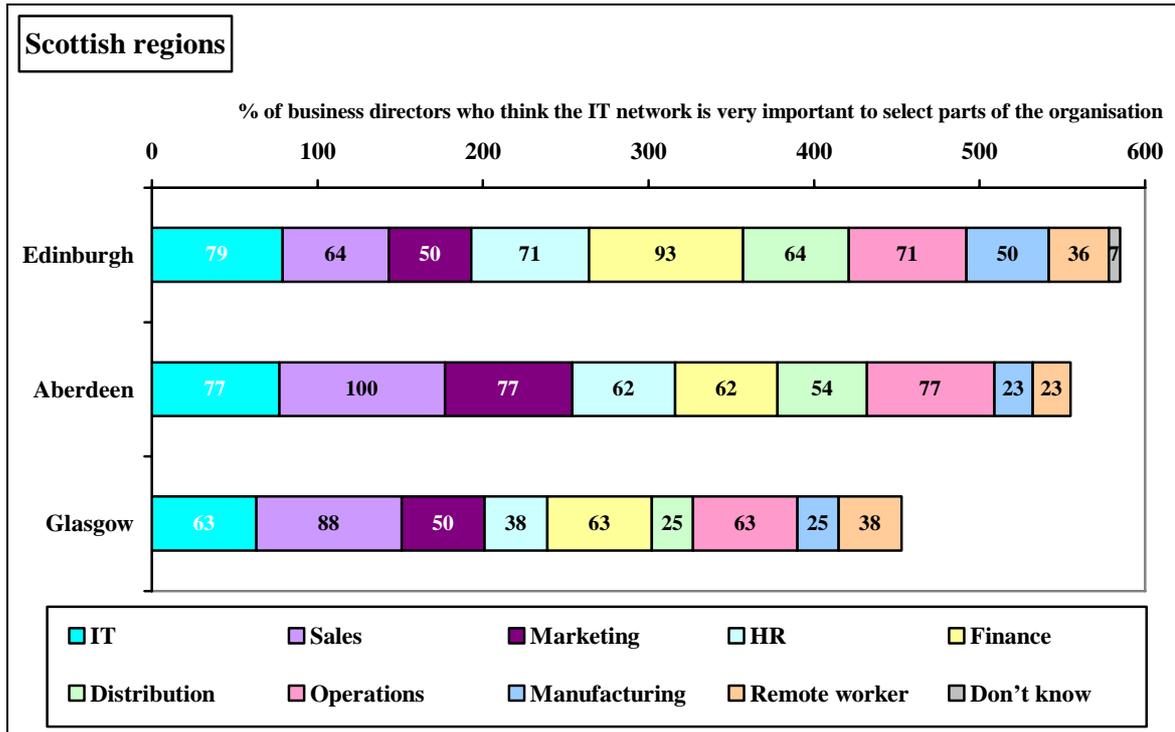
- Overall, among those companies that think the IT network is very important to select parts of the organisation, large companies think the network is very important to more of these functions and departments, compared to small companies (i.e. length of bars in the above chart).
- Indeed, more large companies (79%) say the IT network is deemed very important to the IT department, compared to small companies (55%).



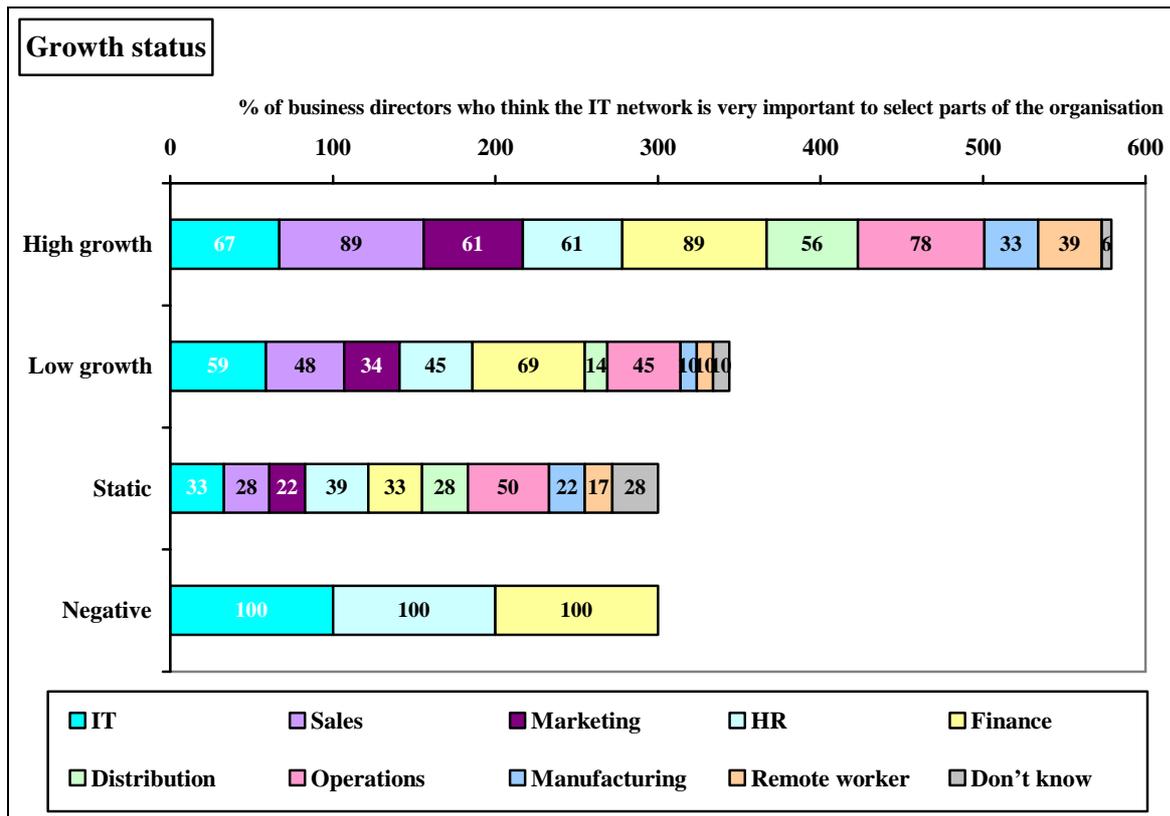
- Overall, among those companies that think the IT network is very important to select parts of the organisation, distribution companies think the network is very important to more of these functions and departments, compared to services and manufacturing companies (i.e. length of bars in the above chart).
- Indeed, more business directors in distribution companies (81%) say the IT network is deemed very important to the IT department, compared to those in services (59%) and manufacturing (54%) companies.
- Also, perhaps not surprisingly, more distribution companies (50%) say the IT network is deemed very important to the distribution department, compared to services companies (22%).
- Similarly, more manufacturing companies (43%) say the IT network is deemed very important to the manufacturing department, compared to services companies (11%).



- Overall, among those companies that think the IT network is very important to select parts of the organisation, Scottish companies think the network is very important to more of these functions and departments, compared to companies in England & Wales (i.e. length of bars in the above chart).
- Indeed, on average, Scottish business directors think the IT network is deemed to be very important in more of these departments (5.4), compared to England & Wales (3.6).
- In detail, more Scottish companies (83%) say the IT network is deemed very important to the sales department, compared to companies in England & Wales (47%).
- And more Scottish companies (60%) say the IT network is deemed very important to the marketing department, compared to companies in England & Wales (38%).
- Furthermore, more Scottish companies (51%) say this technology is deemed very important to the distribution department, compared to companies in England & Wales (24%).
- Also, more Scottish companies (71%) say the IT network has this status for the operations department, compared to companies in England & Wales (47%).
- Finally, more Scottish companies (34%) say the IT network is deemed very important to the manufacturing department, compared to companies in England & Wales (15%).

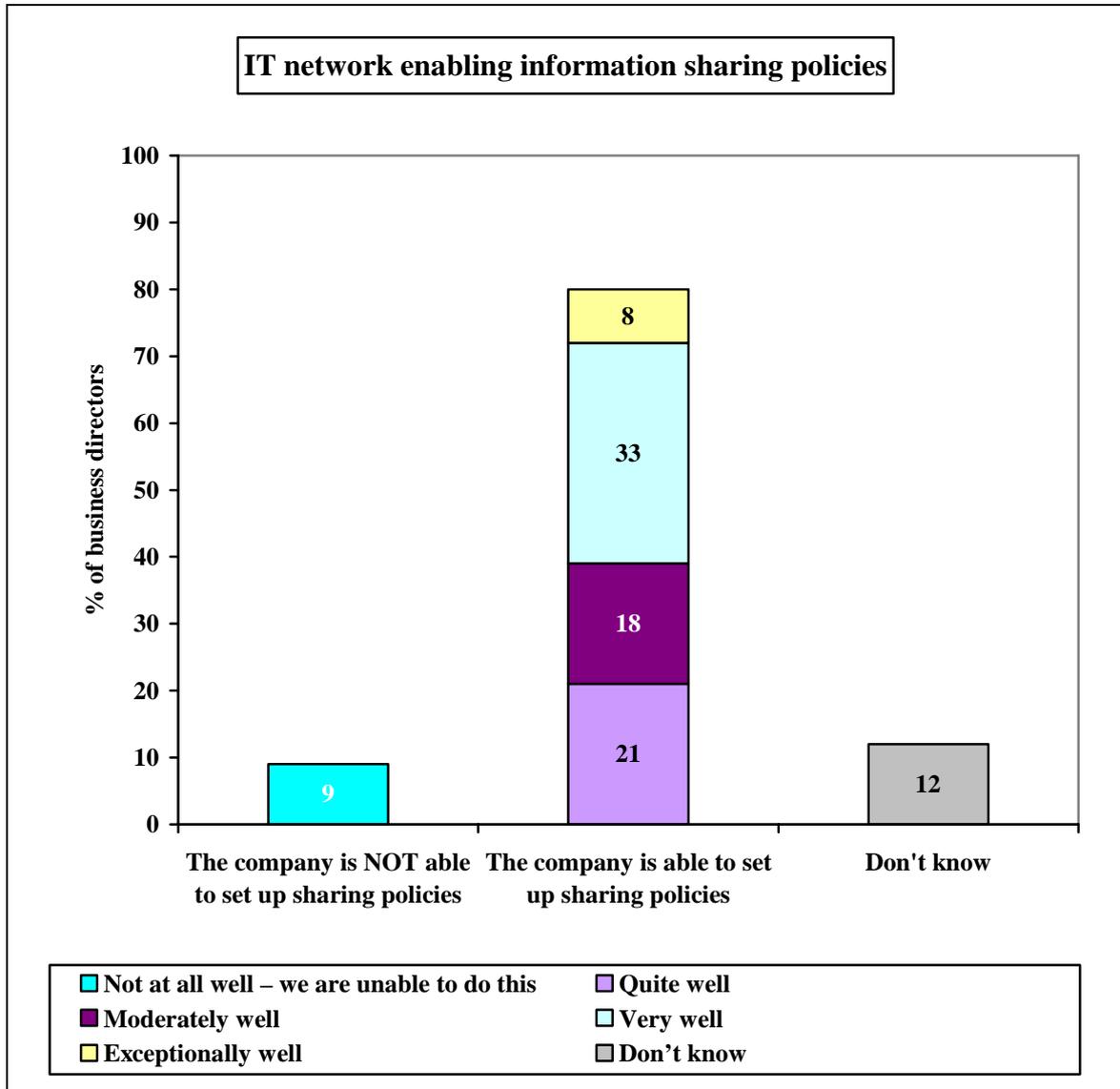


- Overall, business directors in the Edinburgh and Aberdeen regions think the IT network is very important to more of these departments, compared to those in the Glasgow region (i.e. length of bars in above chart).
- However, otherwise statistically there is no significant difference according to Scottish region and in which departments these Scottish business directors think the IT network is deemed to be very important.

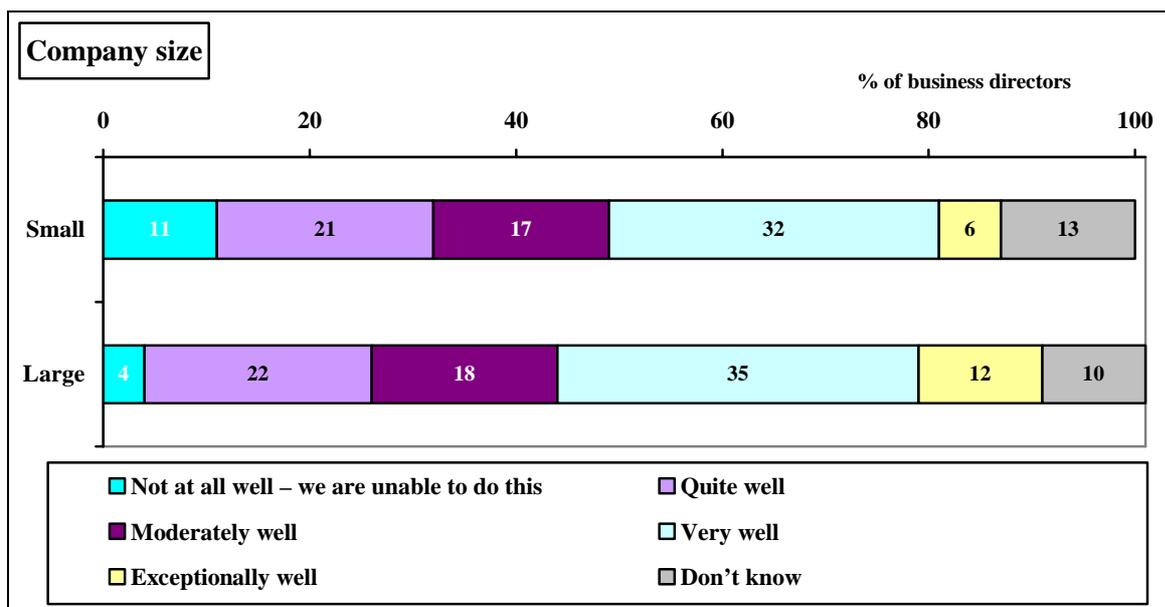


- On average, business managers in companies with high turnover growth think the IT network is deemed to be very important in more of these departments (5.7), compared to companies with low turnover growth (3.3) or those which have remained static (2.7) [not shown].
- Otherwise, statistically, there is no significant difference according to a company's growth status and in which departments the business directors think the IT network is deemed to be very important.

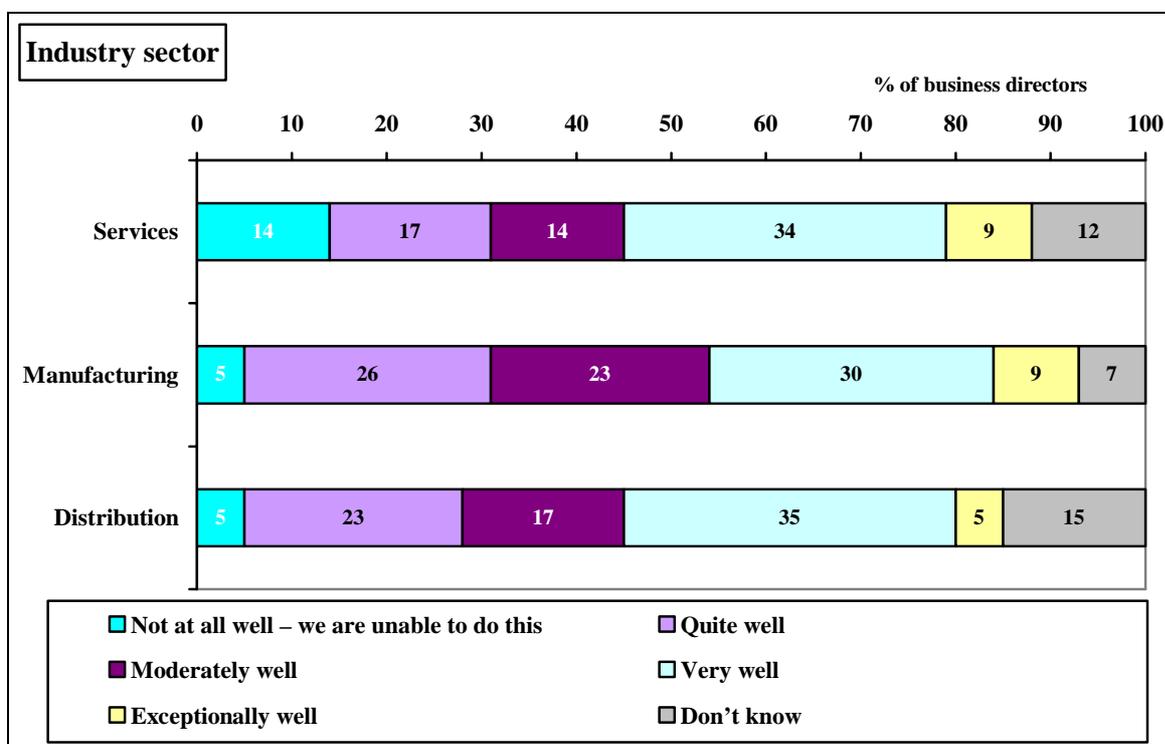
4.3.3 To what degree does your company’s IT network enable the company to set up and manage information sharing policies?



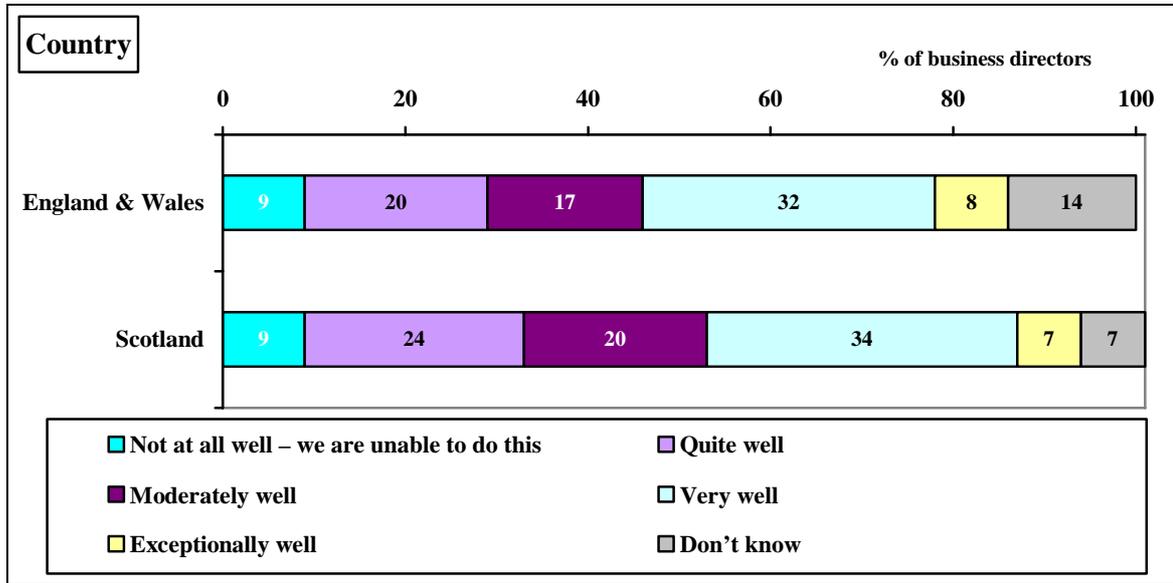
- Collectively, 80% of business directors say their IT network enables the company to set up and manage information sharing policies.
- However, only 8% think it does this exceptionally well.
- Another 33% think it does this very well, whereas 18% think it does it moderately successfully.
- But 21% think the IT network enables the setting up and management of information sharing policies only quite well.
- In contrast, 9% have networks that are unable to do this.
- Another 12% are unsure if their IT network can do this or not.



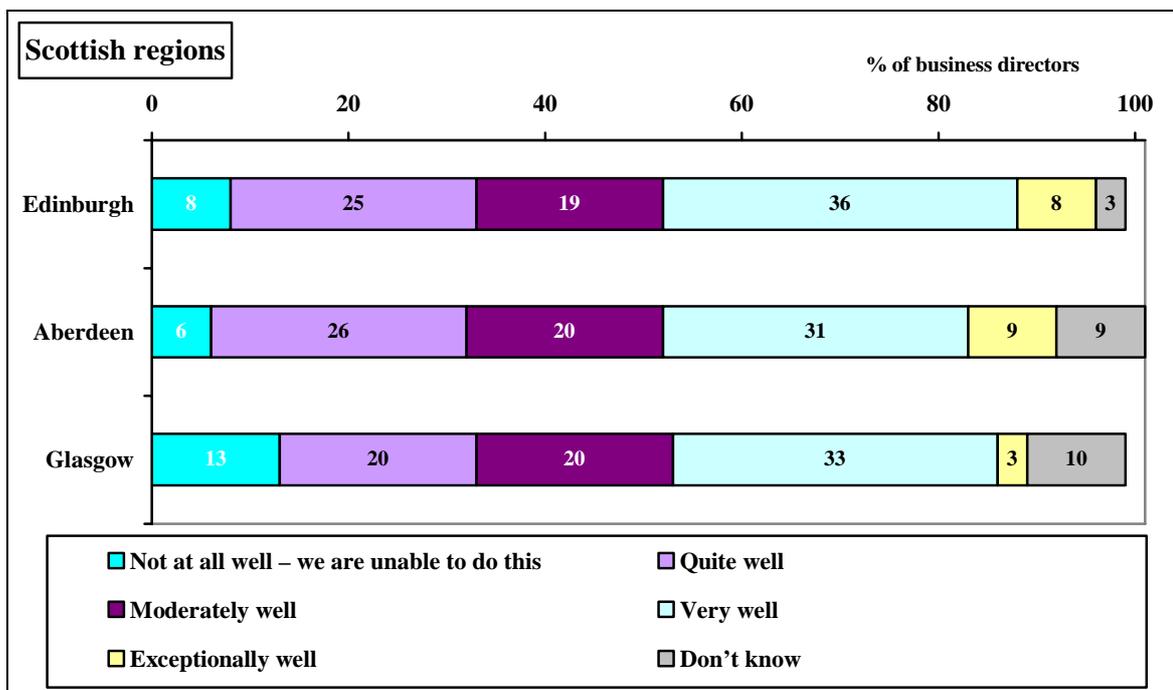
- More business directors in large companies (87%) think their IT network enables the company to set up and manage information sharing policies, compared to small companies (76%).
- Indeed, more business directors in large companies (12%) think their IT network does this exceptionally well, compared to small companies (6%) – twice as many.
- In contrast, more business directors in small companies (11%) have IT networks that are unable to set up and manage information sharing policies, compared to large companies (4%).



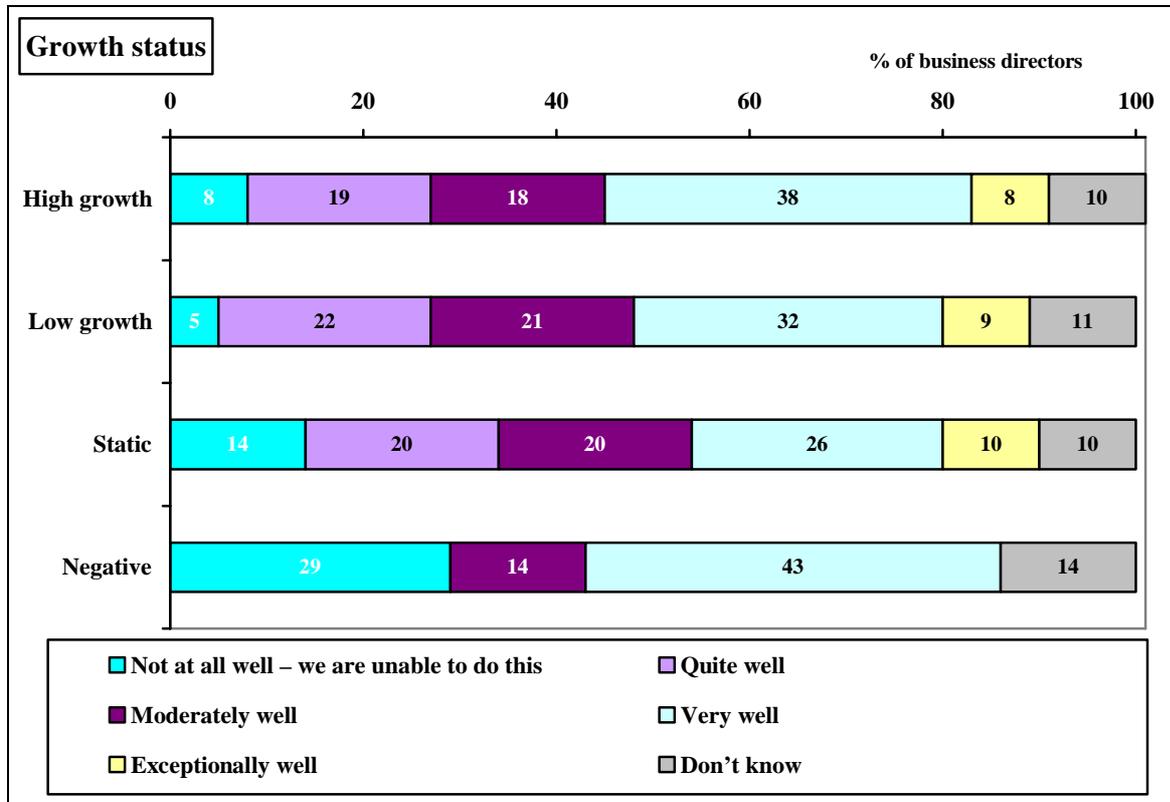
- More business directors in manufacturing companies (88%) think their IT network enables the company to set up and manage information sharing policies, compared to services companies (74%).
- In contrast, more business directors in services companies (14%) have IT networks that are unable to set up and manage information sharing policies, compared to manufacturing and distribution companies (both 5%).



- Statistically, there is no significant difference according to country and how well these business directors think their IT network enables the company to set up and manage information sharing policies.

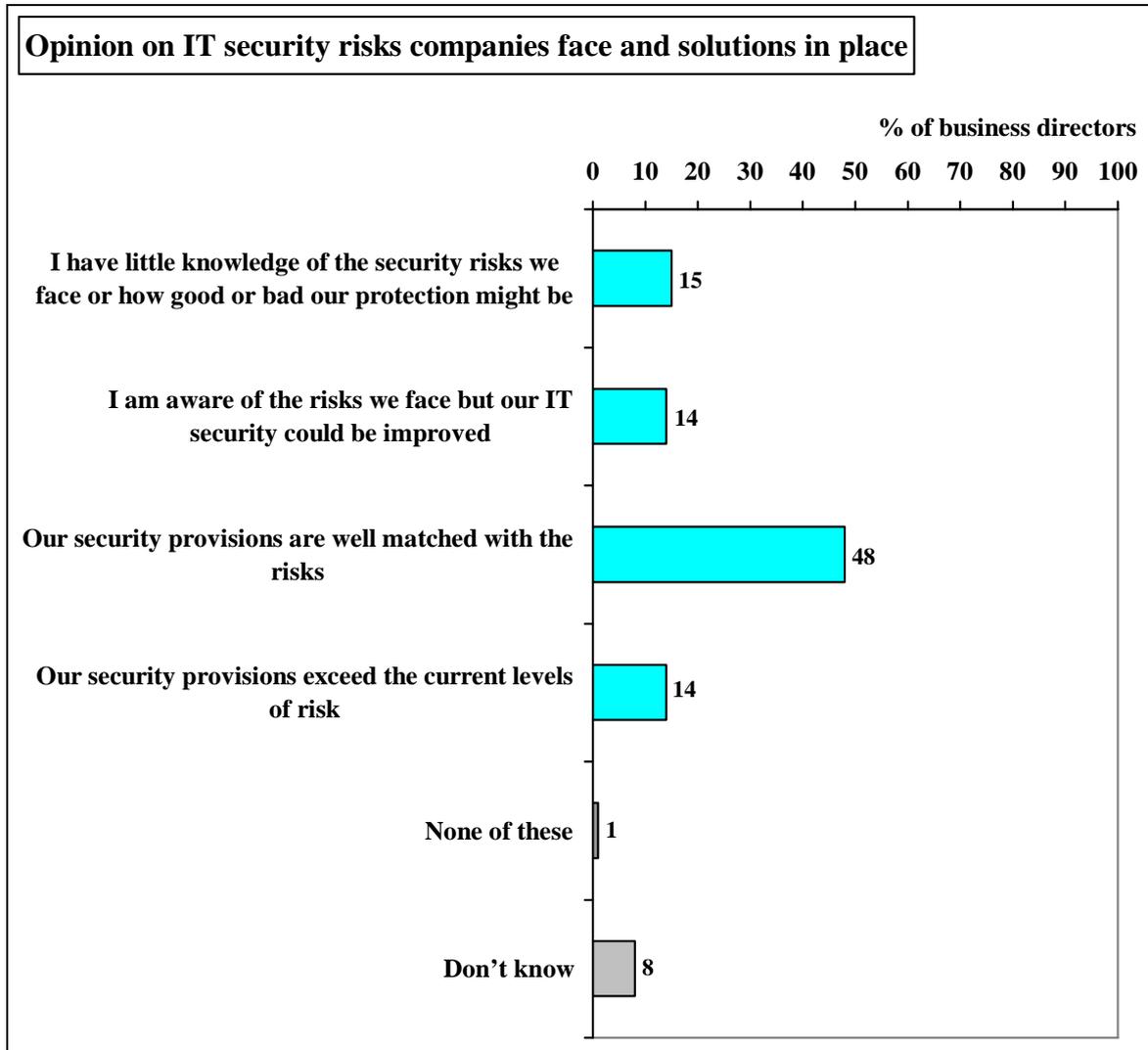


- Statistically, there is no significant difference according to Scottish region and how well these business directors think their IT network enables the company to set up and manage information sharing policies.

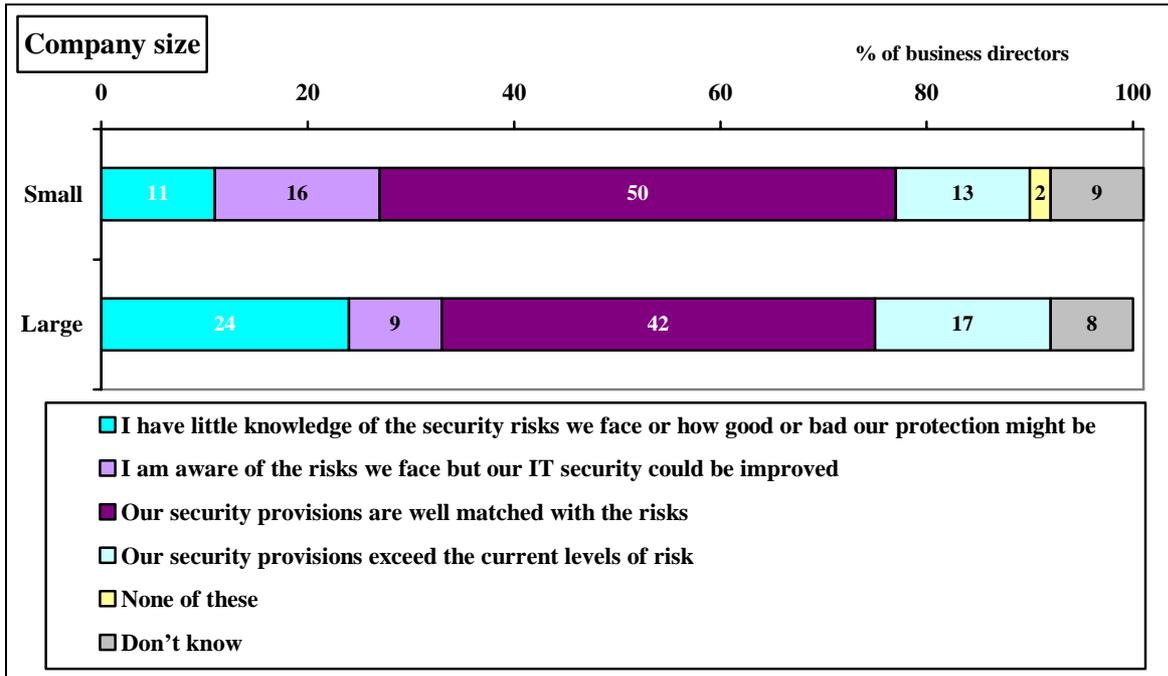


- Statistically, there is no difference according to a company's turnover growth status and how well these business directors think their IT network enables the company to set up and manage information sharing policies.

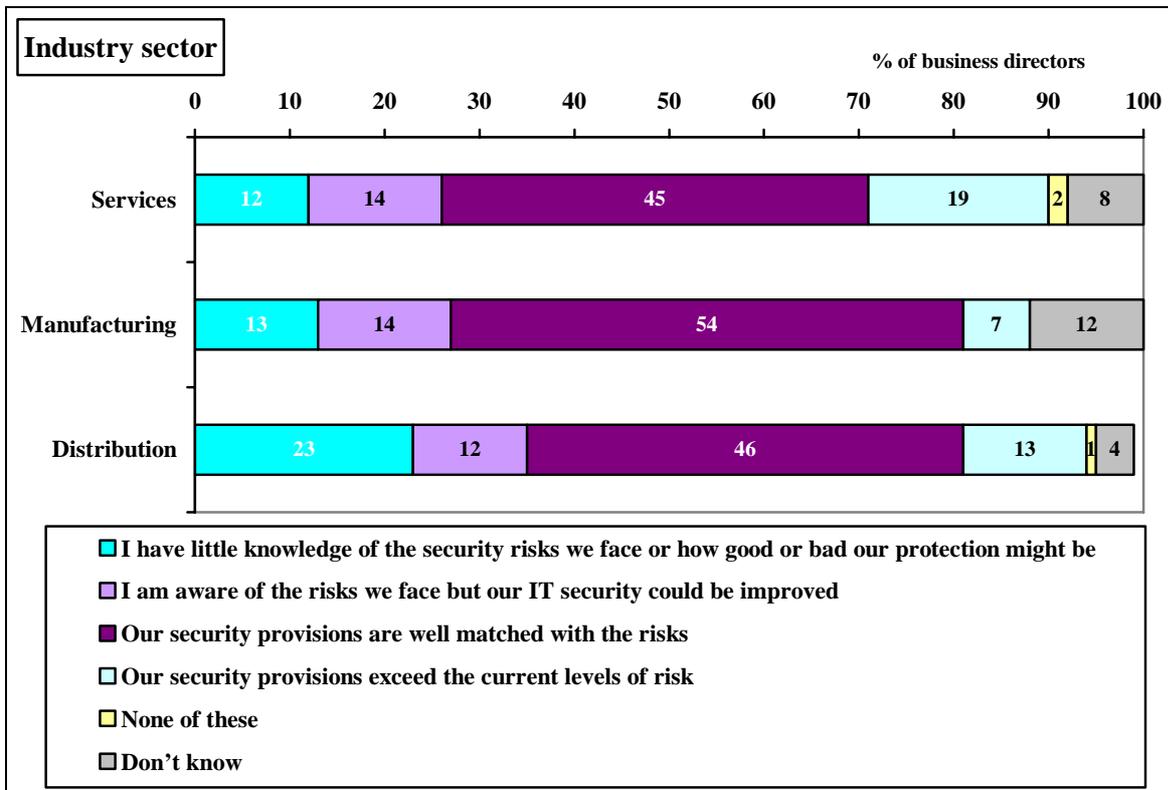
4.3.4 Which of the following sum up your opinion on the IT security risks your organisation faces and the solutions it has in place?



- The largest proportion of business directors (48%) are of the opinion that the IT security provisions that their company has in place are well matched with the levels of risk.
- But only 14% go as far as saying their IT security provisions exceed the current levels of risk.
- In contrast, 15% admit they have little knowledge of the security risks they face or how good or bad their protection might be.
- Another 14% are aware of the risks they face but acknowledge that their IT security could be improved.
- 1% say none of these scenarios sums up their opinion on the IT security risks they face and the solutions they have in place.
- Another 8% are unsure about the risks or the level of protection they have in place.

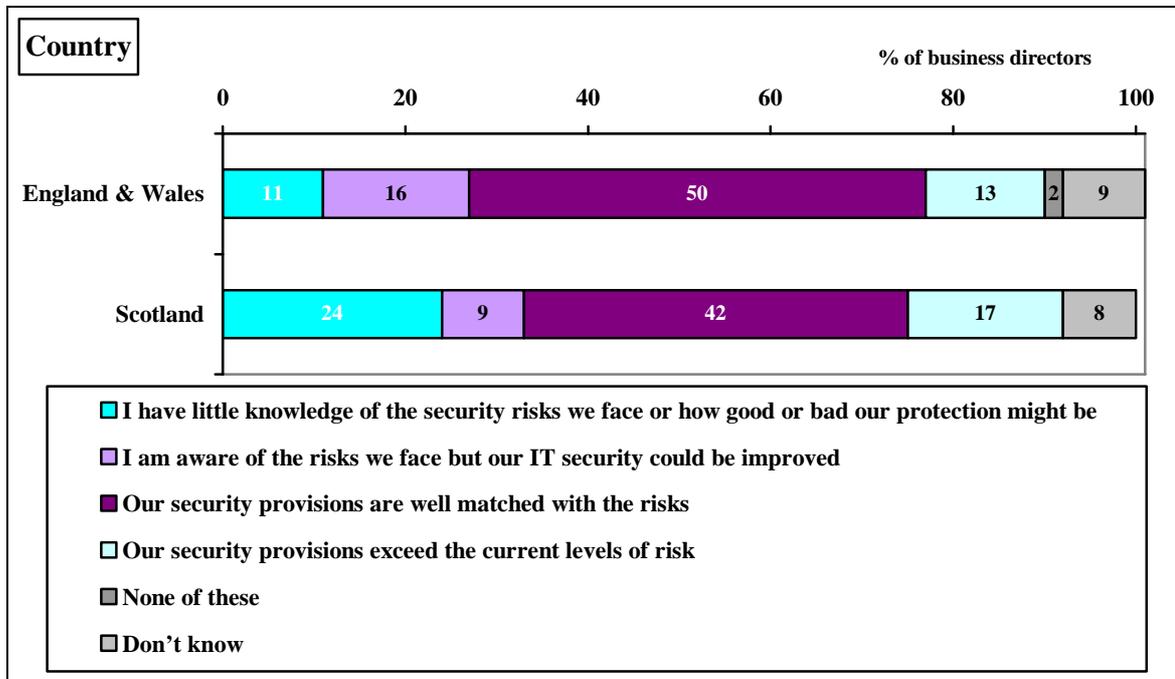


- More business directors in large companies (24%) say they have little knowledge of the IT security risks their company faces or how good or bad their company's protection might be, compared to small companies (11%).

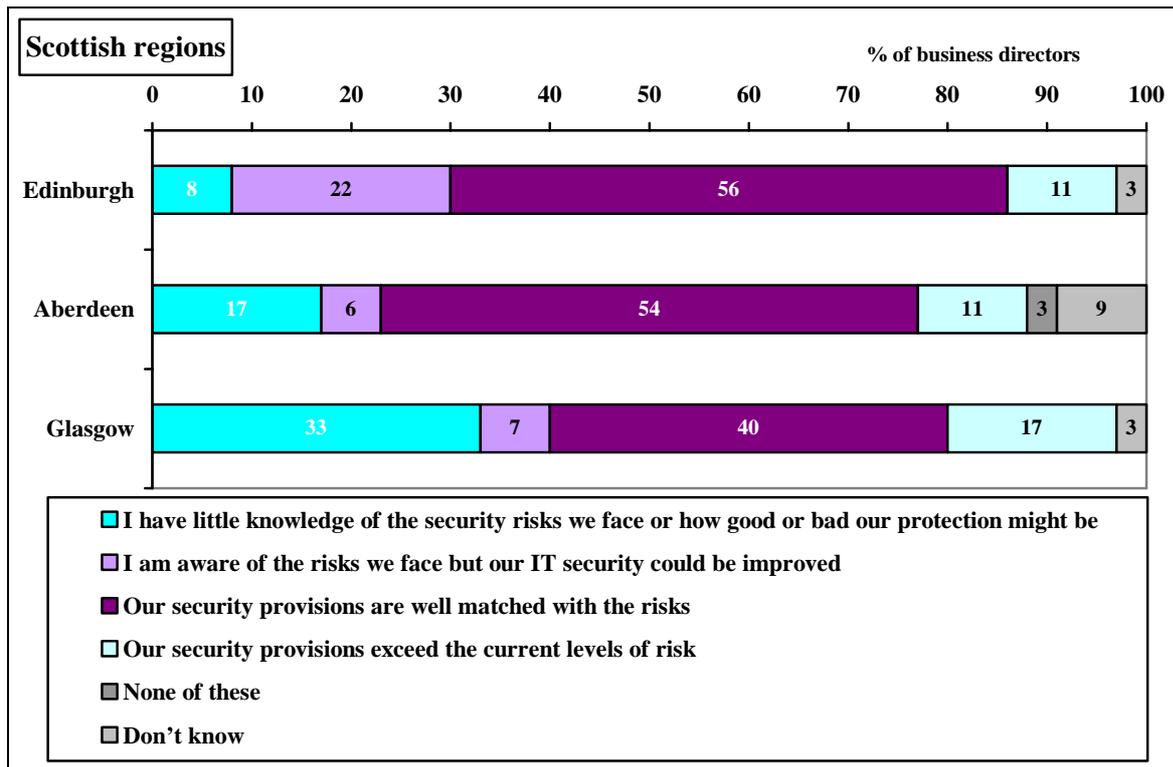


- More business directors in distribution companies (23%) say they have little knowledge of the IT security risks their company faces or how good or bad their company's protection might be, compared to services companies (12%).

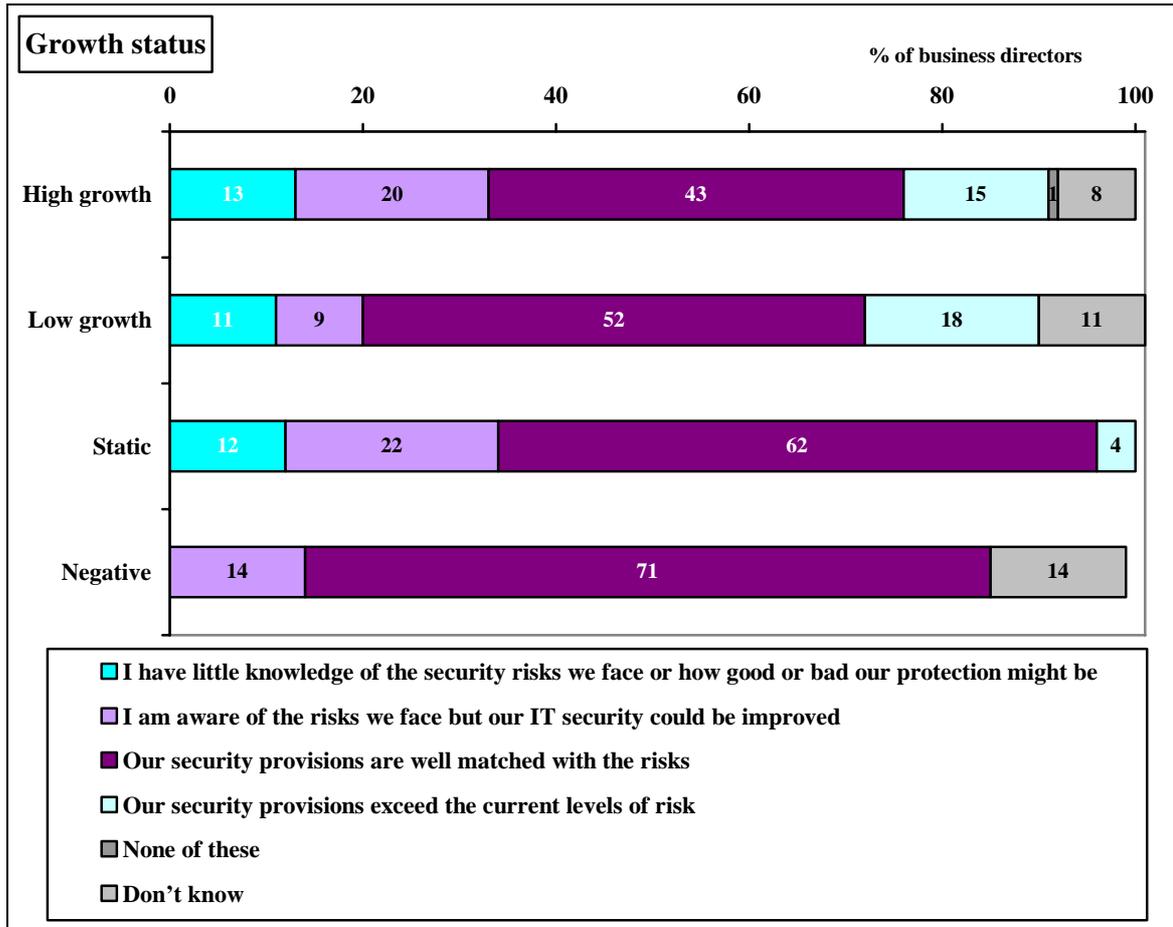
- In contrast, more business directors in services companies (19%) say their IT security provisions exceed the current levels of risk, compared to manufacturing companies (7%).
- However, more business directors in manufacturing companies (12%) admit they are unsure about the IT security risks their organisation faces and the solutions it has in place, compared to the distribution sector (4%).



- Statistically, there is no significant difference according to country and business directors’ opinions on the IT security risks and solutions in place.

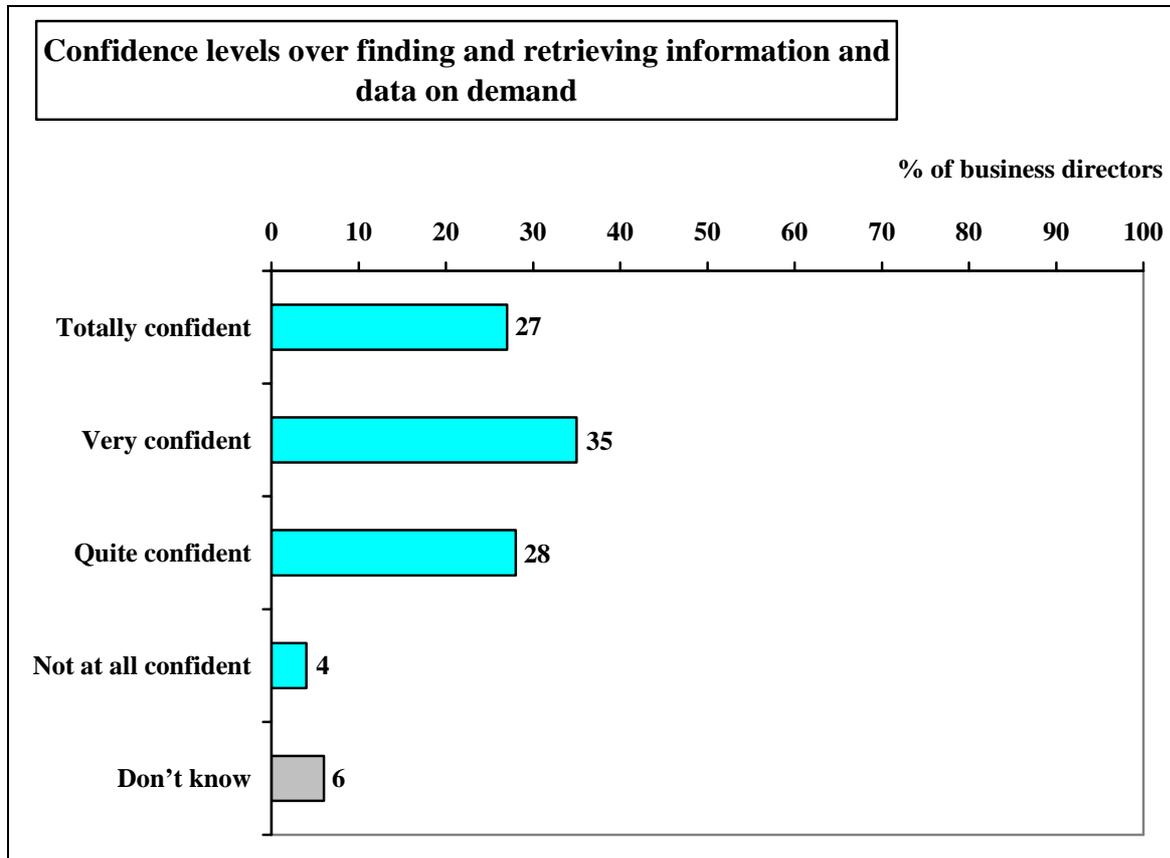


- More business directors in the Glasgow region (33%) say they have little knowledge of the IT security risks their company faces or how good or bad their company's protection might be, compared to companies in the Edinburgh region (8%).
- However, more business directors in the Edinburgh region (22%) say they are aware of the risks they face, but admit their IT security could be improved, compared to companies in the Aberdeen region (6%).

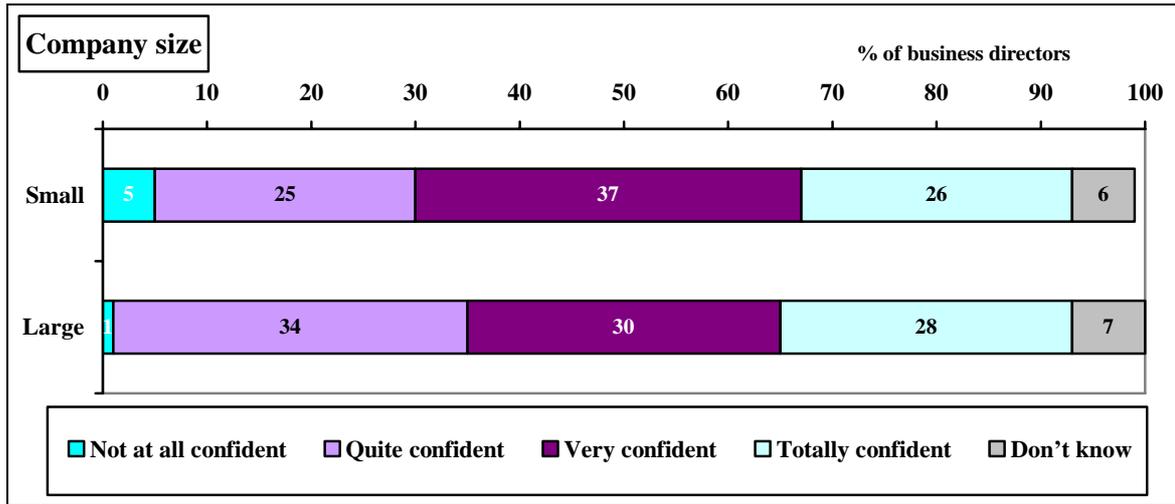


- More business directors in companies with high turnover growth (20%) and those which have remained static (22%) say they are aware of the risks they face, but admit their IT security could be improved, compared to companies with low turnover growth (9%).
- Also, more business directors in companies that have maintained a static turnover (62%) say their IT security provisions are well matched with the risks, compared to companies with high turnover growth (43%).
- In contrast, more business directors in companies with high (15%) or low (18%) turnover growth say their IT security provisions exceed the current levels of risk, compared to companies that have maintained a static turnover (4%).
- However, more business directors in companies with high (8%) or low (11%) turnover growth admit they are unsure about the IT security risks their organisation faces and the solutions it has in place, compared to companies that have maintained a static turnover (zero).

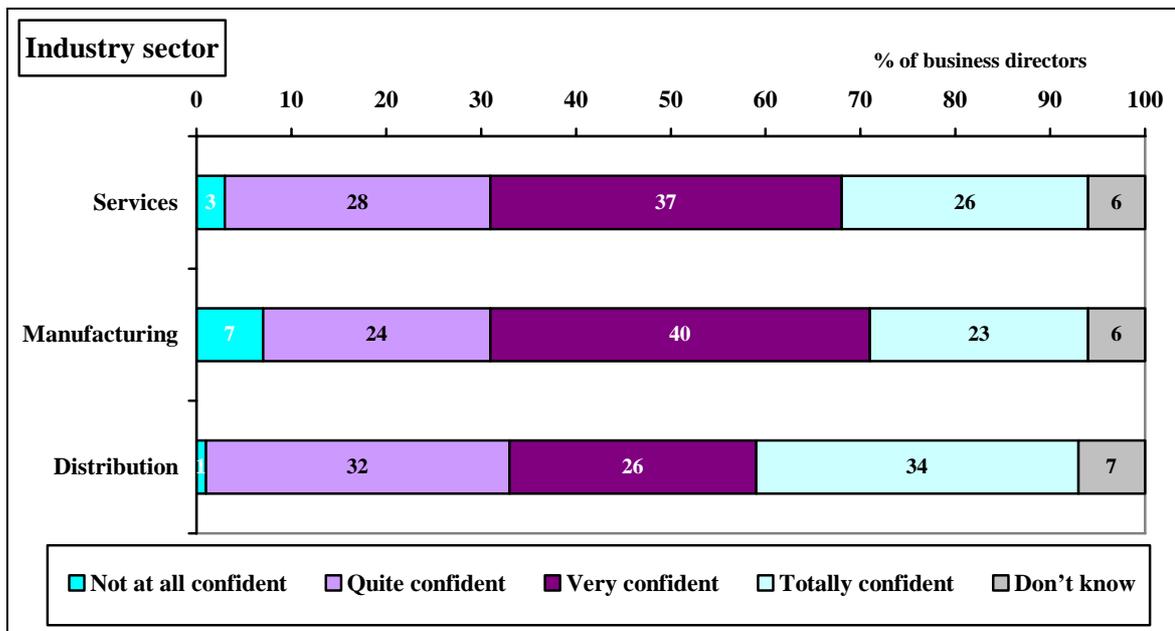
4.3.5 How confident are you of your organisation’s abilities to find and retrieve information or data on demand, e.g. for an audit or for compliance purposes?



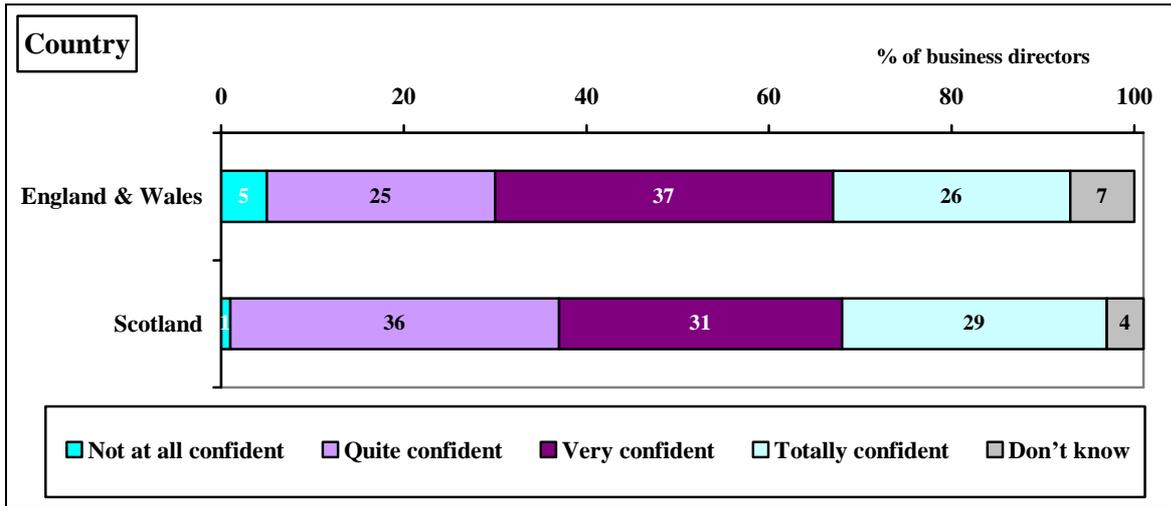
- 73% of business directors are not totally confident of their organisation’s ability to find and retrieve information or data on demand, e.g. for an audit or for compliance purposes.
- 4% admit they are not at all confident, and 28% say they are only quite confident.
- But 35% say they are very confident in their company’s ability to find and retrieve information or data on demand.
- Yet only 27% are totally confident of this aspect.
- Just 6% admit they do not know how confident they are in this respect.



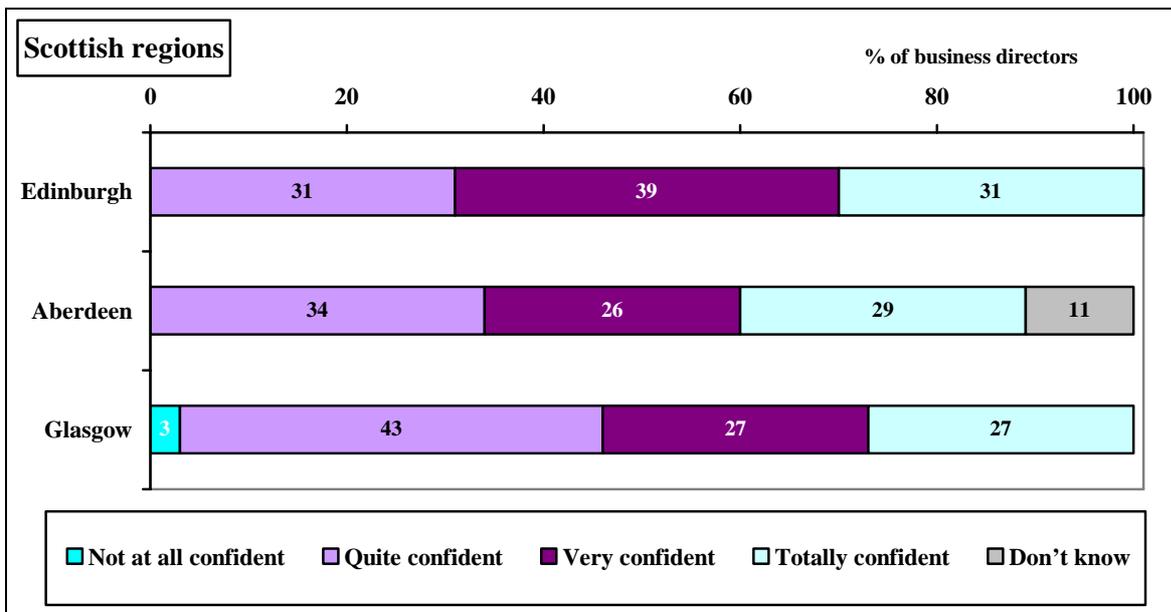
- More business directors in small companies (5%) are not at all confident in their company's ability to find and retrieve information or data on demand, compared to large companies (1%).



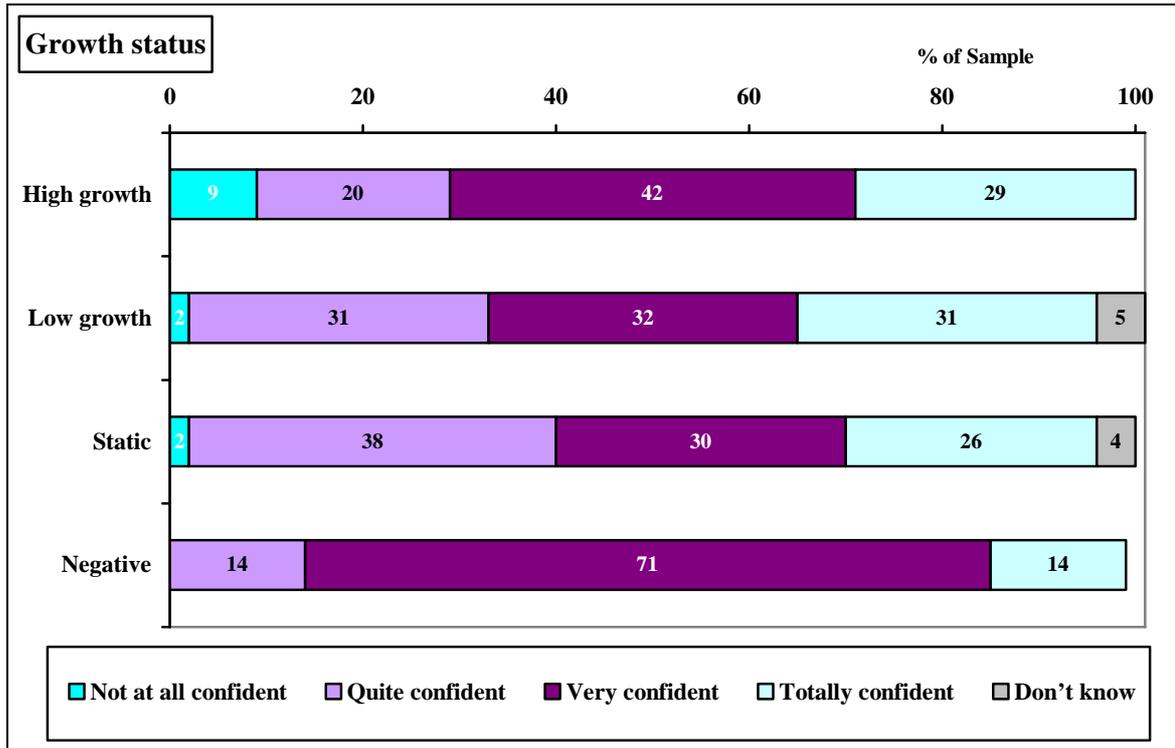
- More business directors in manufacturing companies (7%) are not at all confident in their company's ability to find and retrieve information or data on demand, compared to distribution companies (1%).
- However, more business directors in manufacturing companies (40%) are very confident in their company's ability to find and retrieve information or data on demand, compared to distribution companies (26%).



- More business directors in Scottish companies (36%) describe themselves as quite confident in their company's ability to find and retrieve information or data on demand, compared to those in England & Wales (25%).

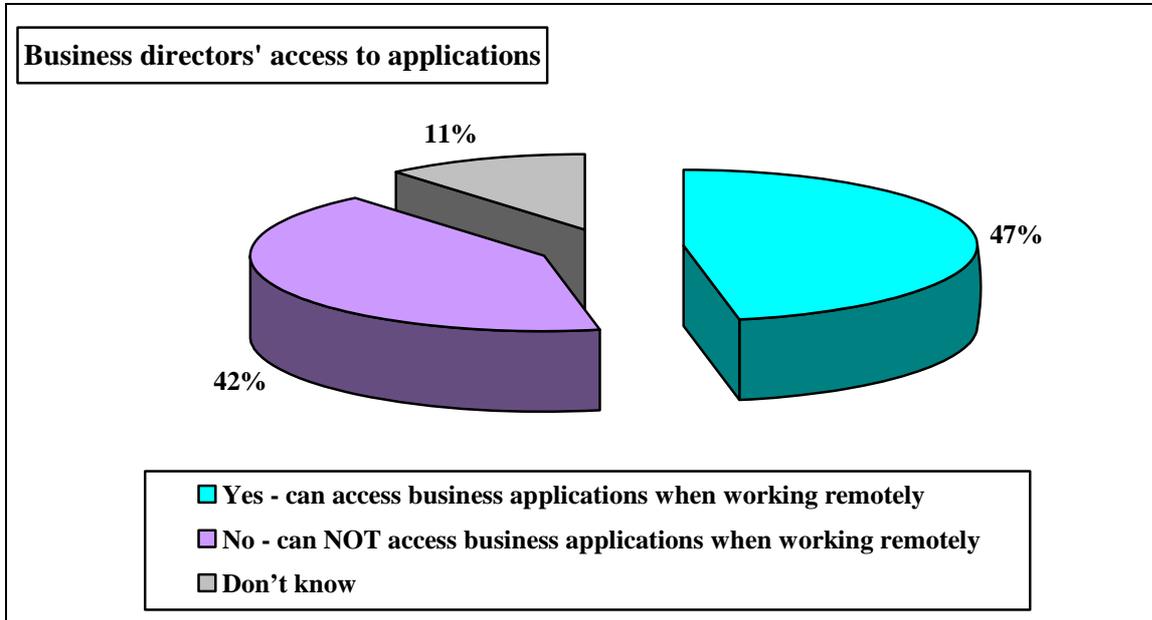


- More business directors in the Aberdeen region (11%) are unsure of how confident they are in their company's ability to find and retrieve information or data on demand, compared to companies in the Edinburgh region (zero).

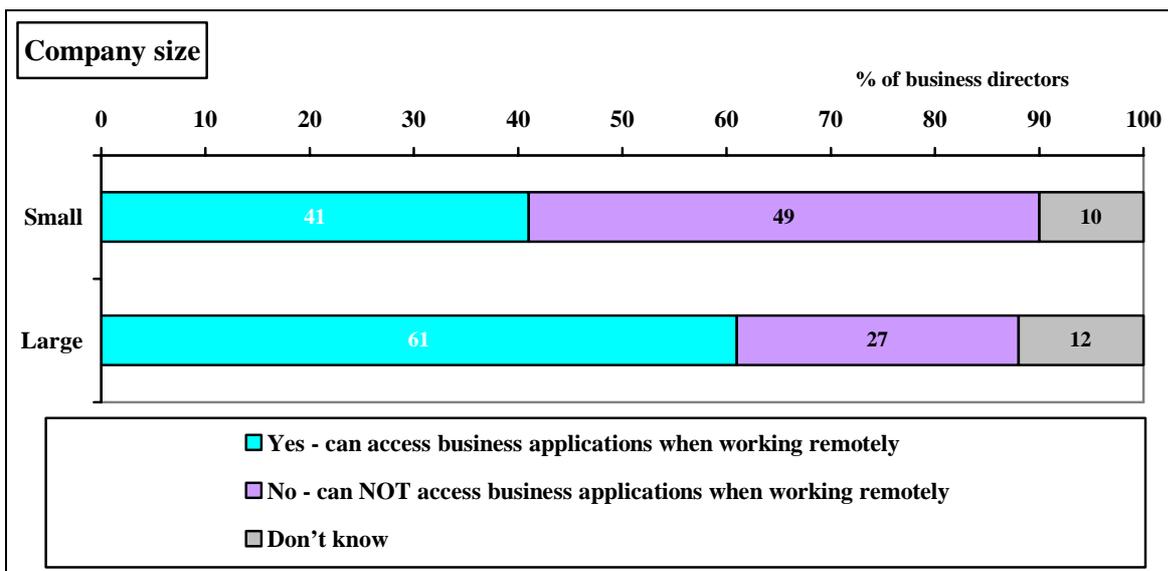


- More business directors in companies with static turnover growth (38%) describe themselves as quite confident in their company’s ability to find and retrieve information or data on demand, compared to those with high turnover growth (20%).

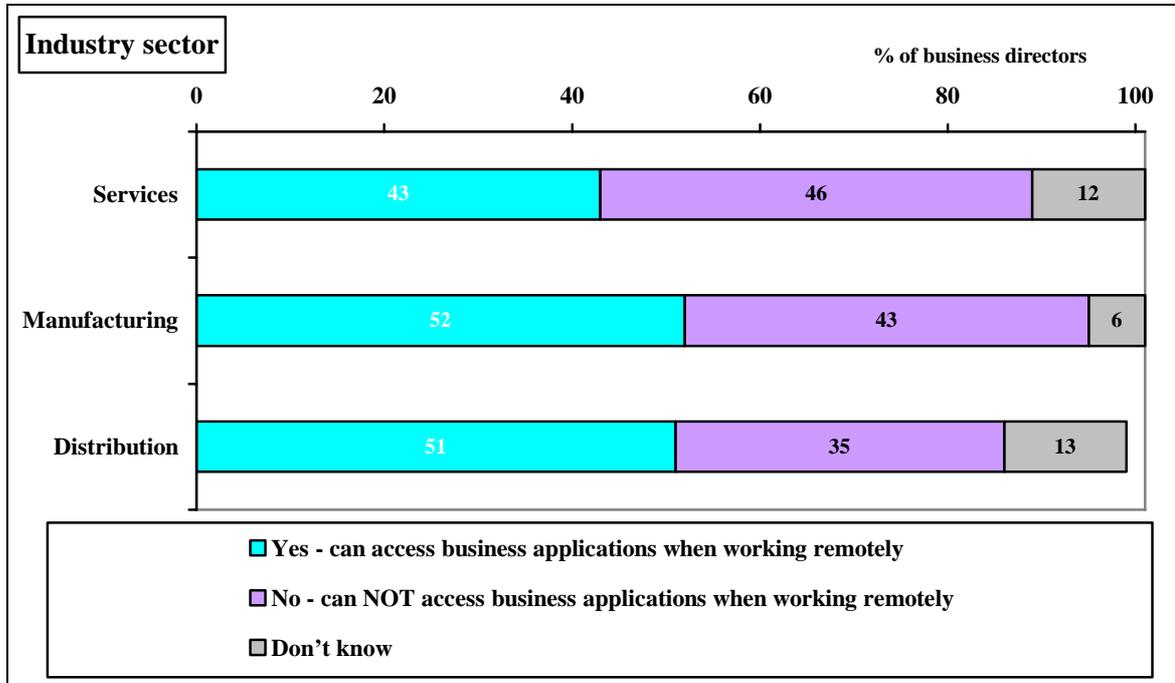
4.3.6 Are business managers in your organisation and other non-IT staff able to access business applications, like ERP, CRM or accounting systems etc. when they are teleworking or remote working?



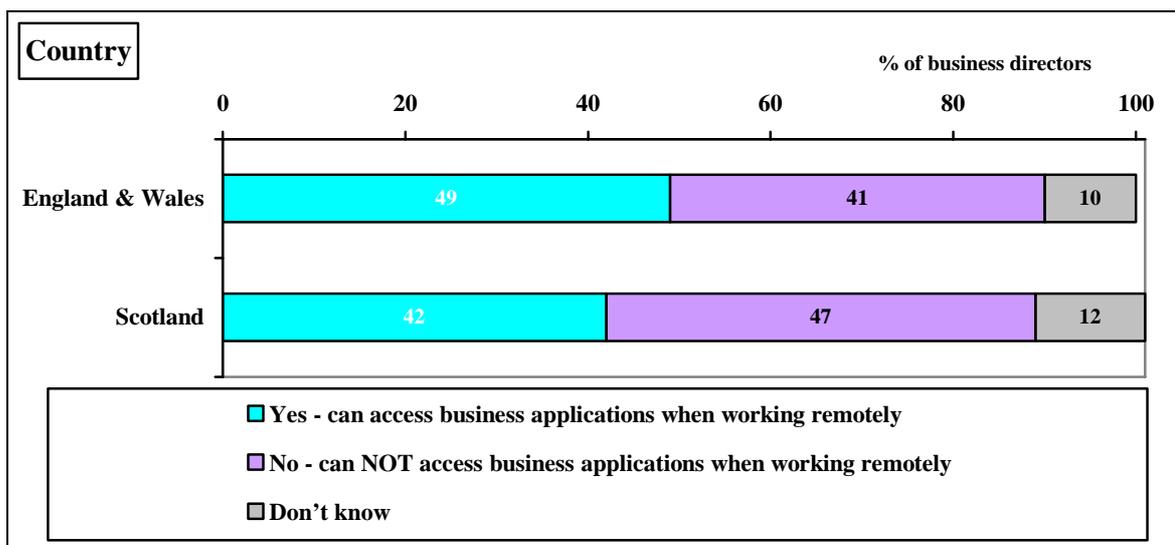
- 47% of companies say business managers and other non-IT staff are able to access business applications, like ERP, CRM or accounting systems etc. when they are teleworking or remote working.
- In contrast, 42% say this remote access to business applications is not possible.
- Another 11% admit they are not sure if this degree of application access is possible or not.



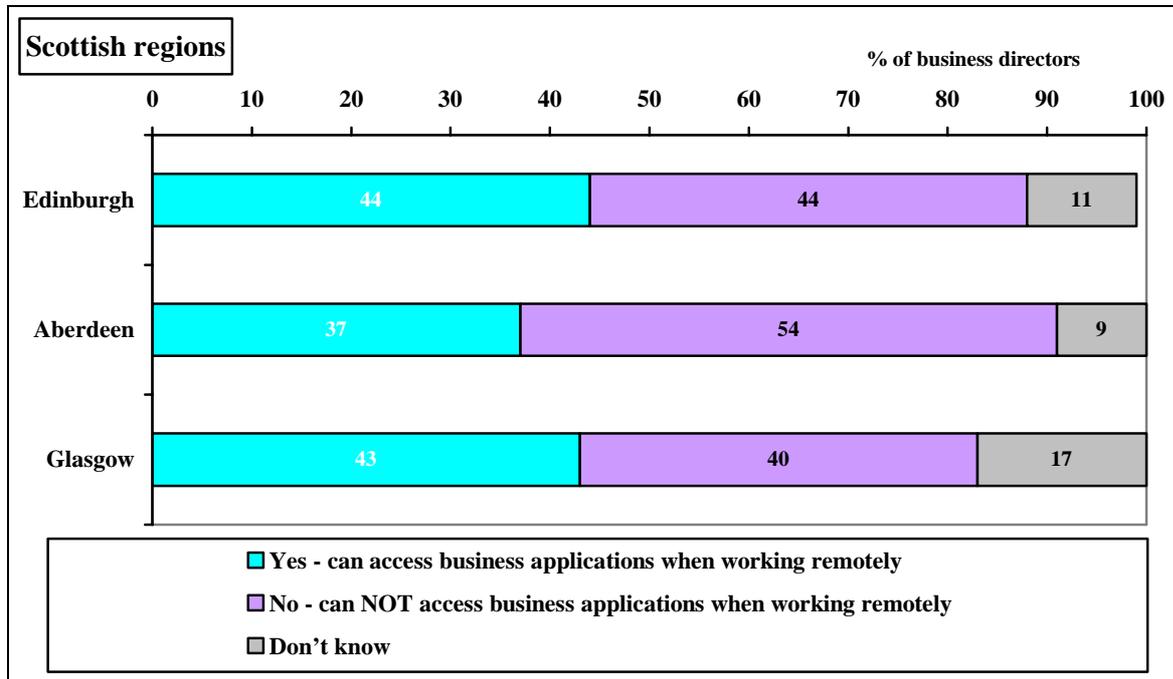
- More business directors in large companies (61%) say business managers and non-IT staff are able to access business applications when they are teleworking or remote working, compared to small companies (41%).
- In contrast, more business directors in small companies (49%) say such staff are not able to access business applications when they are teleworking or remote working, compared to large companies (27%).



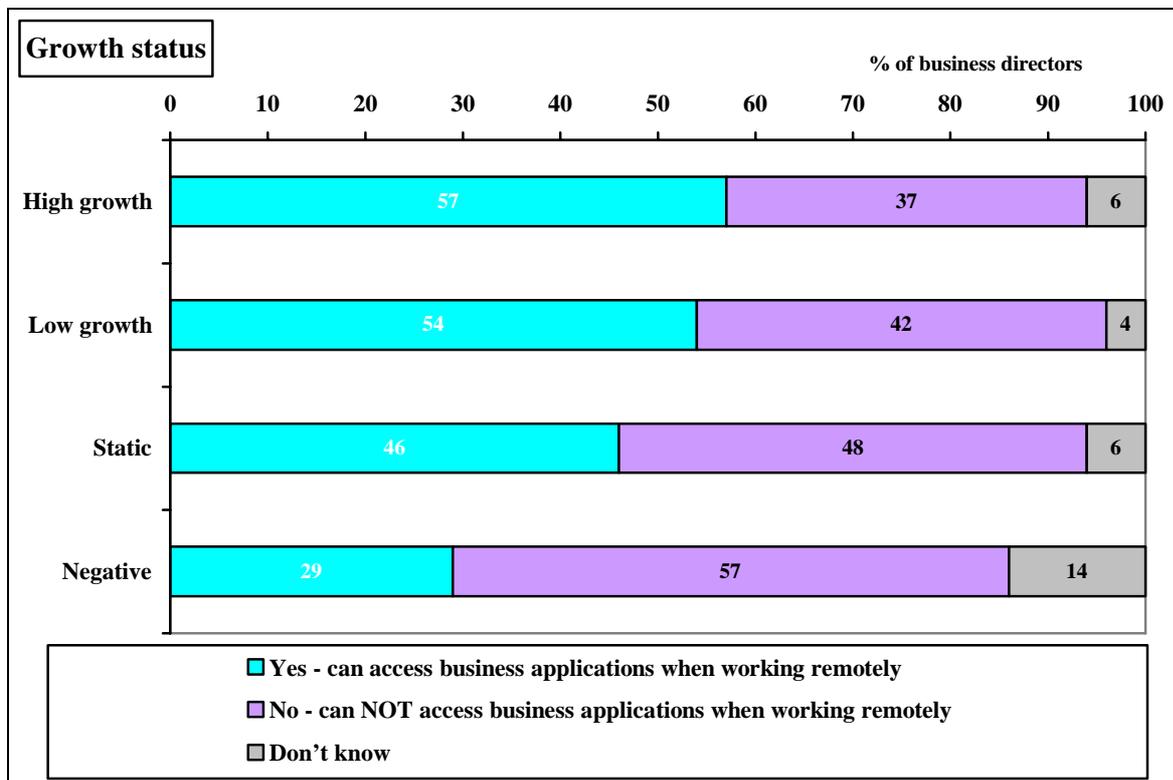
- Statistically, there is no significant difference according to industry sector and whether business managers and non-IT staff are able to access business applications when teleworking or working remotely.



- Statistically, there is no significant difference according to country and whether business managers and non-IT staff are able to access business applications when teleworking or working remotely.

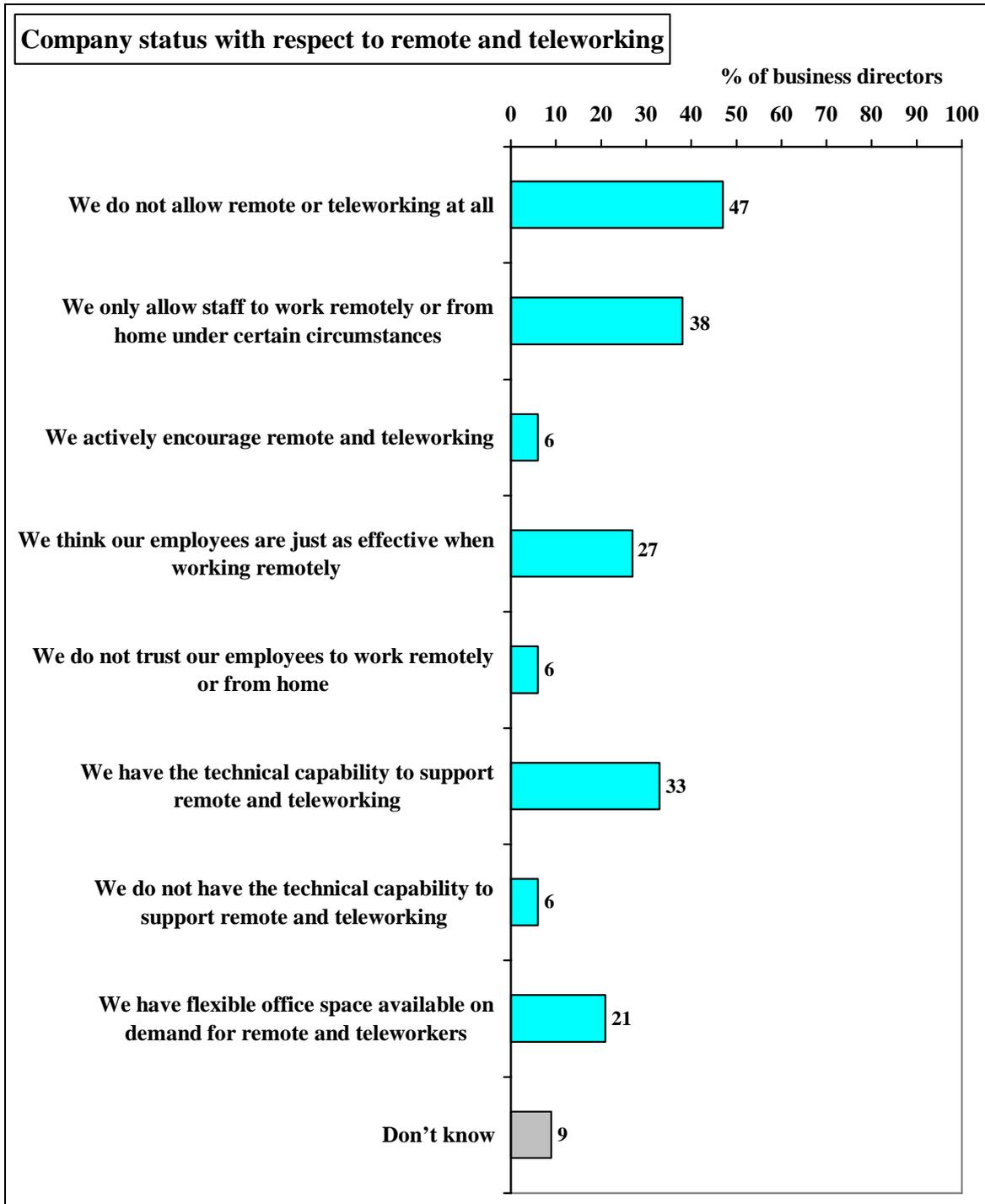


- Statistically, there is no significant difference according to Scottish region and whether business managers and non-IT staff are able to access business applications when teleworking or working remotely.



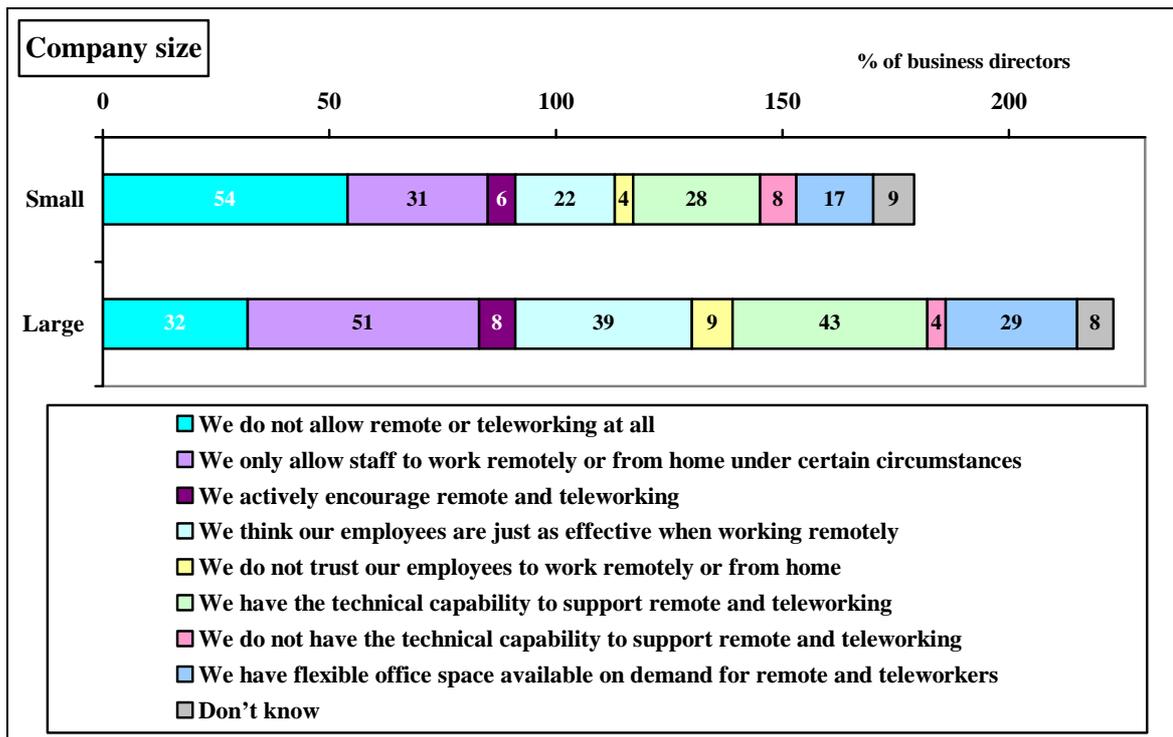
- Statistically, there is no significant difference according to a company's turnover growth and whether business managers and non-IT staff are able to access business applications when teleworking or working remotely.

4.3.7 Which of the following sum up your company’s status with respect to remote and teleworking?

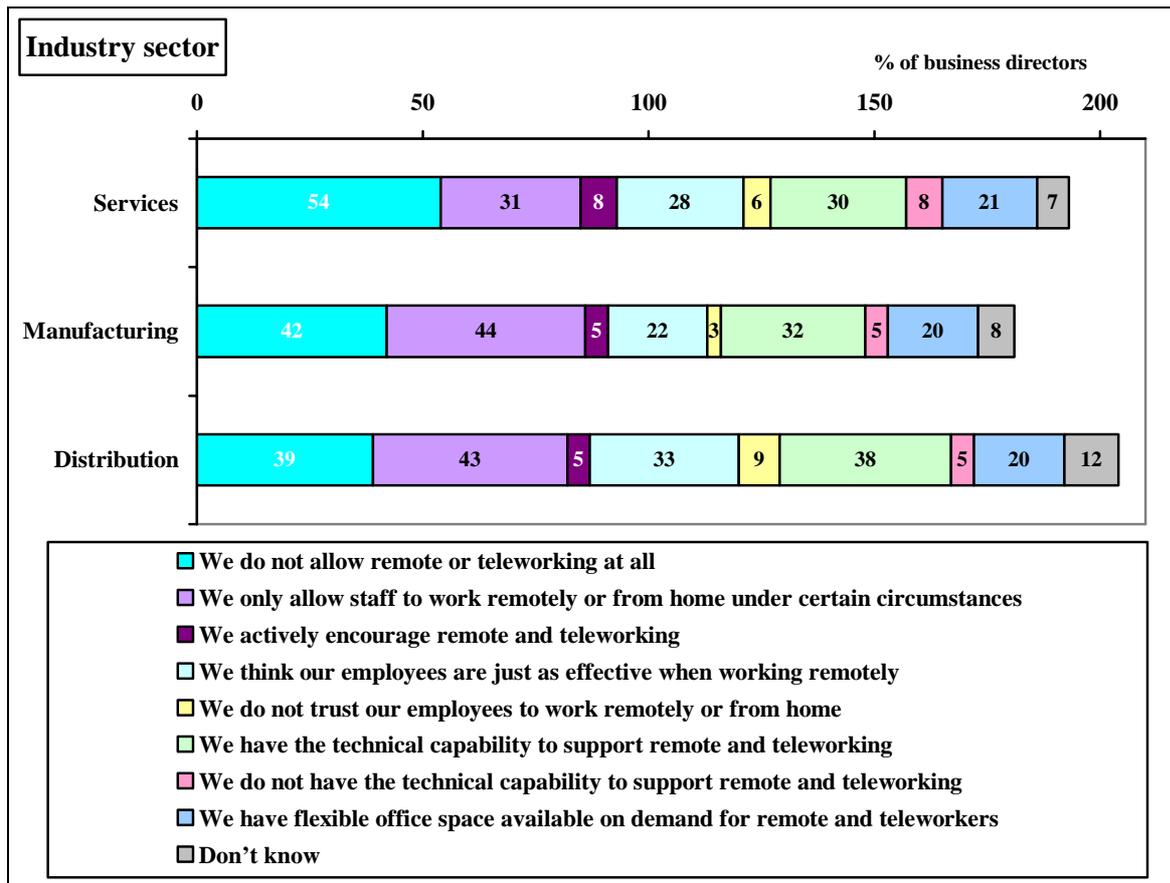


- 47% of companies do not allow remote or teleworking at all.
- In contrast, 38% only allow staff to work remotely or from home under certain circumstances.
- And 6% actively encourage remote and teleworking.

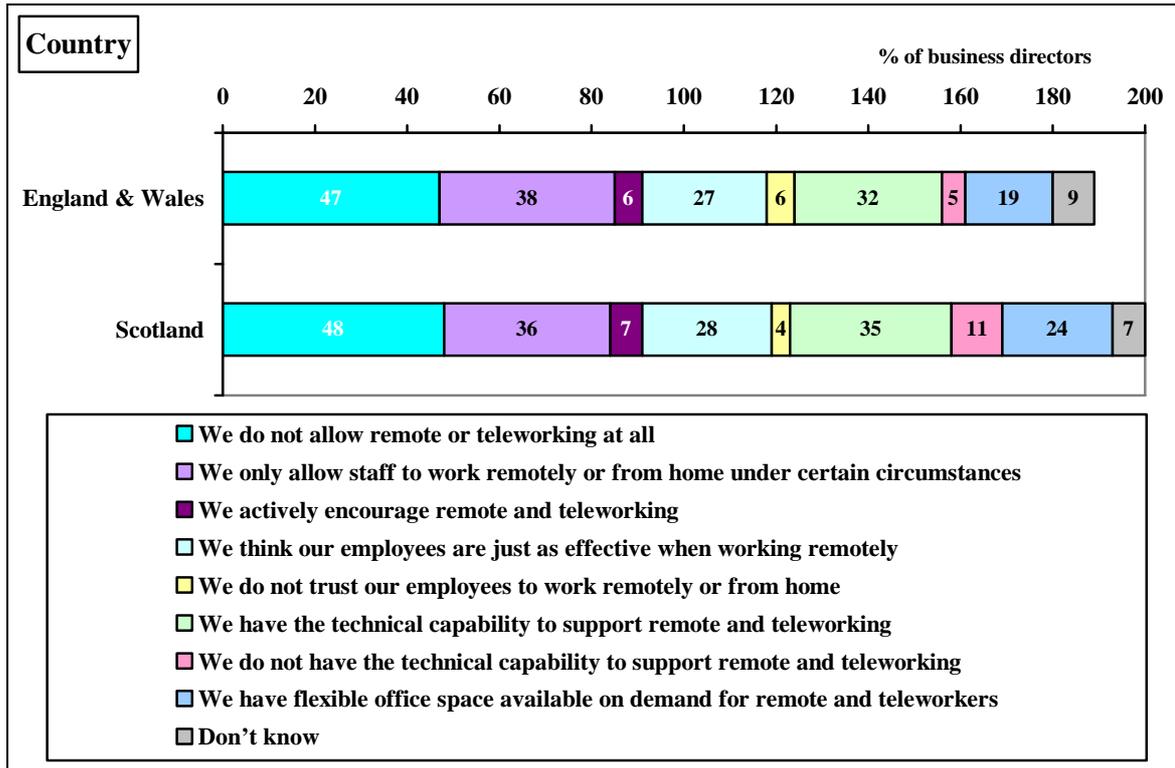
- 21% of companies have flexible office space available on demand for remote and teleworkers.
- 27% of business directors think their employees are just as effective when working remotely, whereas only 6% do not trust their employees to work remotely or from home.
- But only a third (33%) have the technical capability to support remote and teleworking, whereas 6% say they do not.
- However, 9% of business managers are not sure which of these sum up their company’s status with respect to remote and teleworking.



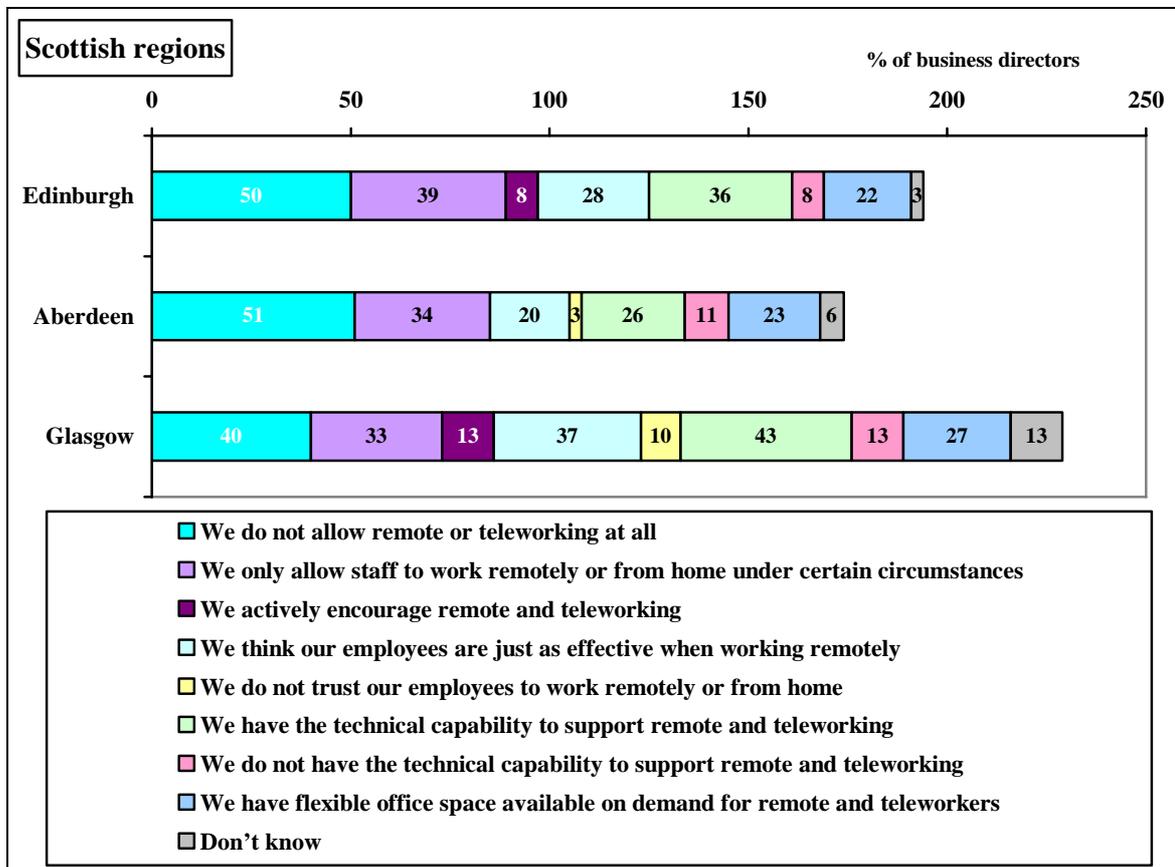
- More business directors in small companies (54%) say they do not allow remote or teleworking at all, compared to large companies (32%).
- Whereas, more business directors in large companies (51%) say they only allow staff to work remotely or from home under certain circumstances, compared to small companies (31%).
- Yet more business directors in large companies (39%) think their employees are just as effective when working remotely, compared to small companies (22%).
- And more business directors in large companies (43%) say they have the technical capability to support remote and teleworking, compared to small companies (28%).
- Furthermore, more business directors in large companies (29%) say they have flexible office space available on demand for remote and teleworkers, compared to small companies (17%).



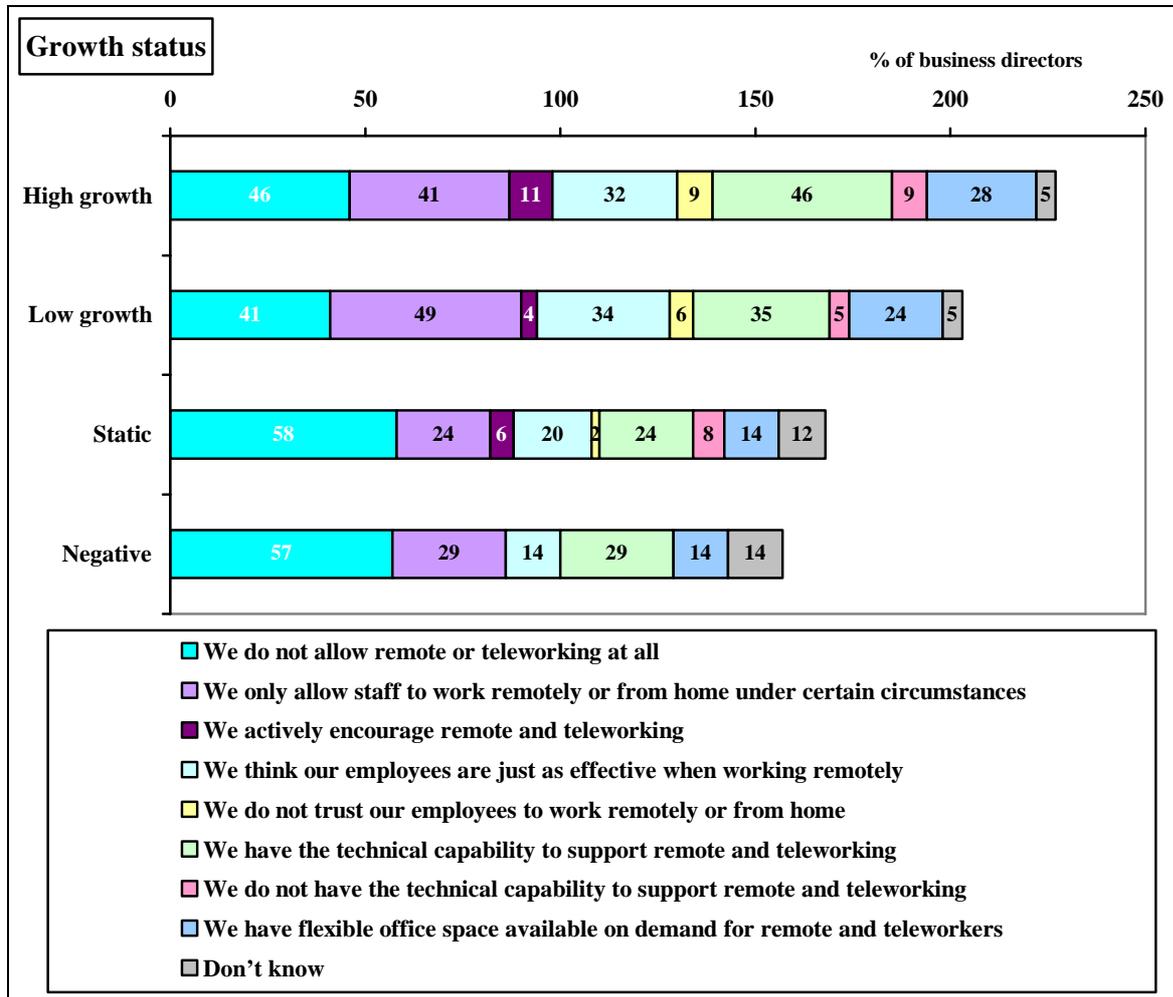
- More business directors in services companies (54%) say they do not allow remote or teleworking at all, compared to manufacturing (42%) and distribution (39%) companies.
- But, more business directors in manufacturing companies (44%) say they only allow staff to work remotely or from home under certain circumstances, compared to services companies (31%).



- More business directors in Scottish companies (11%) say they do not have the technical capability to support remote and teleworking, compared to those in England & Wales (5%).

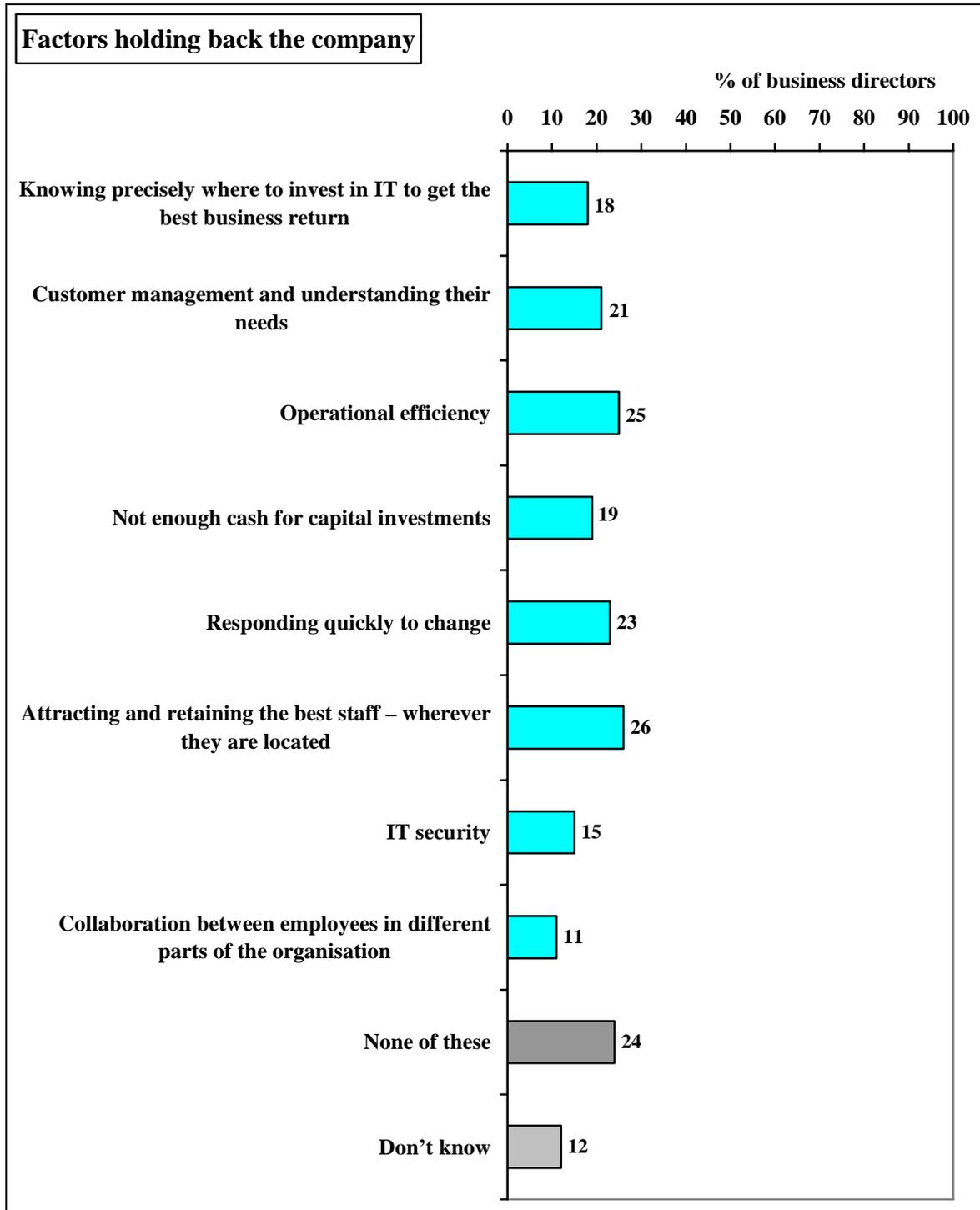


- More business directors in the Glasgow region (13%) actively encourage remote and teleworking, compared to companies in the Aberdeen region (zero).



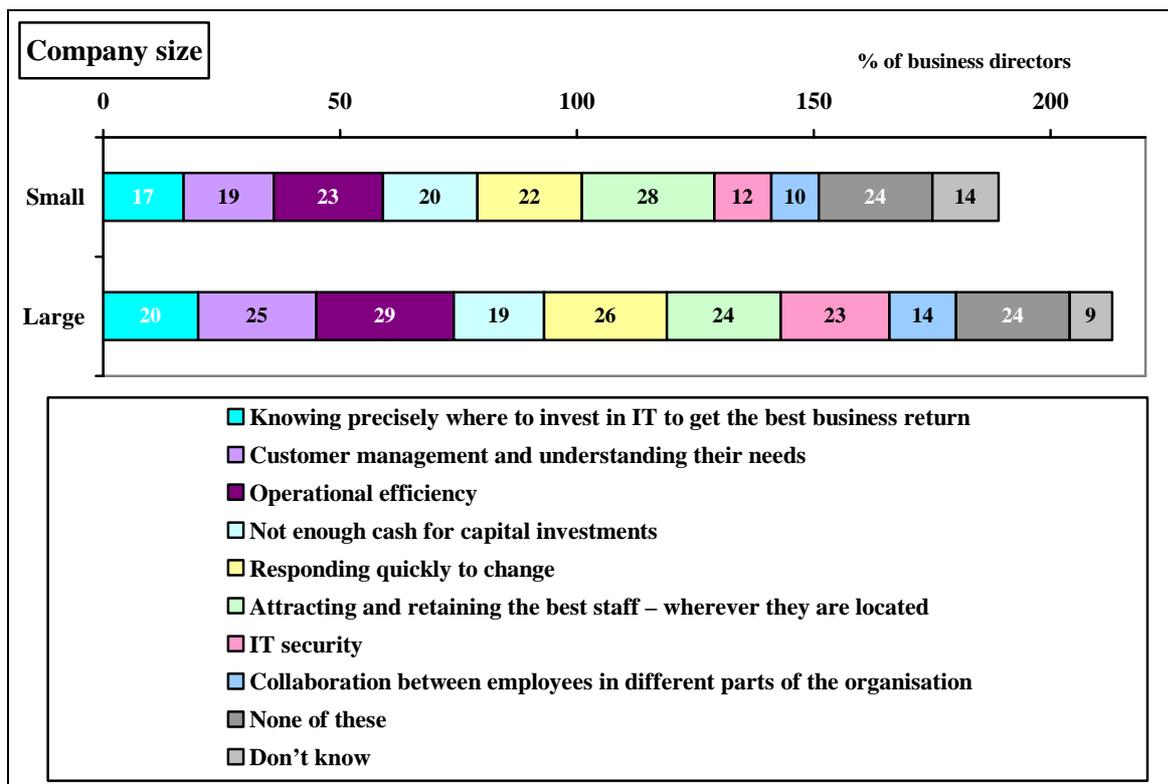
- More business directors in companies with low turnover growth (49%) say they only allow staff to work remotely or from home under certain circumstances, compared to those with static turnover growth (24%).
- But, more business directors in companies with high turnover growth (46%) say they have the technical capability to support remote and teleworking, compared to those with static turnover growth (24%).

4.3.8 In your view, which of the following do you think are holding back your organisation?

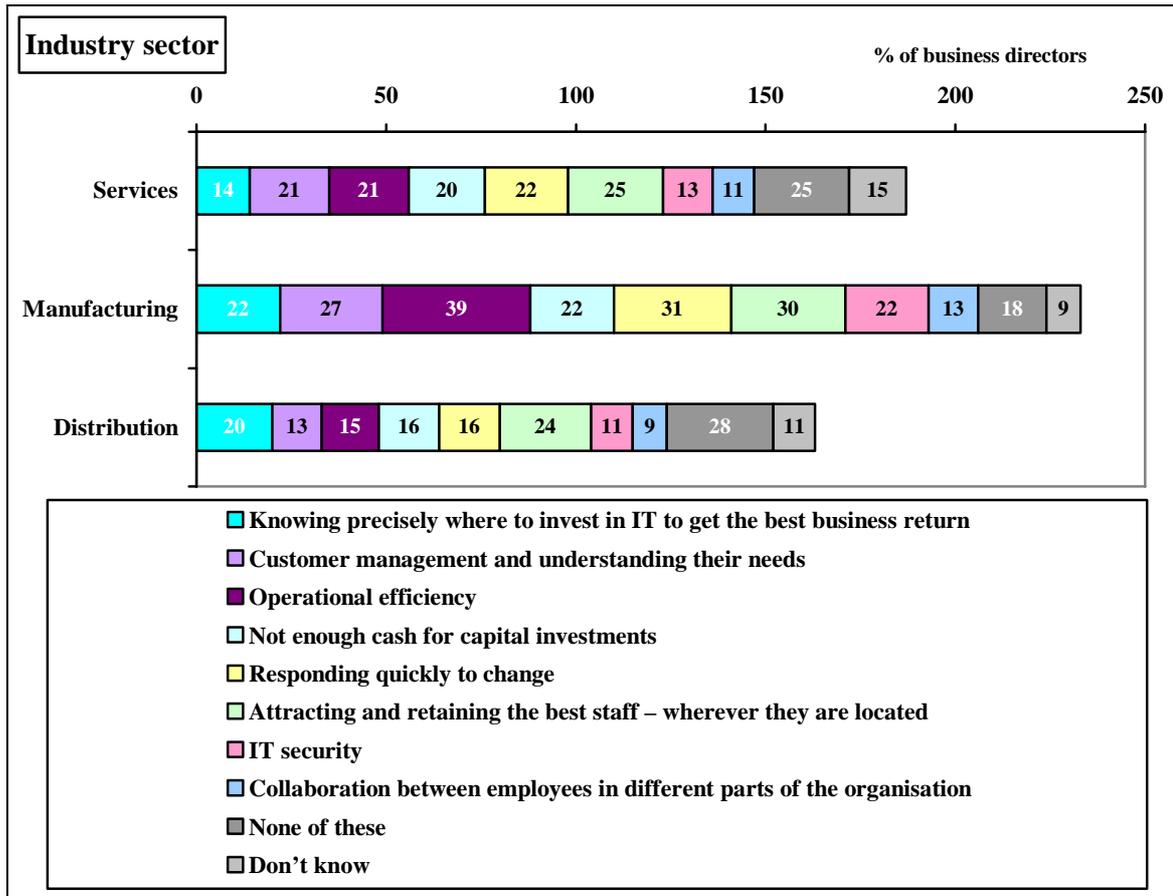


- Collectively, 64% of business directors say at least 1 of these issues is holding back their organisation.
- But in general, companies only have 1 to 2 of these issues that they feel are holding them back – indeed, only 20% have 3 or more issues that are affecting them in this way.

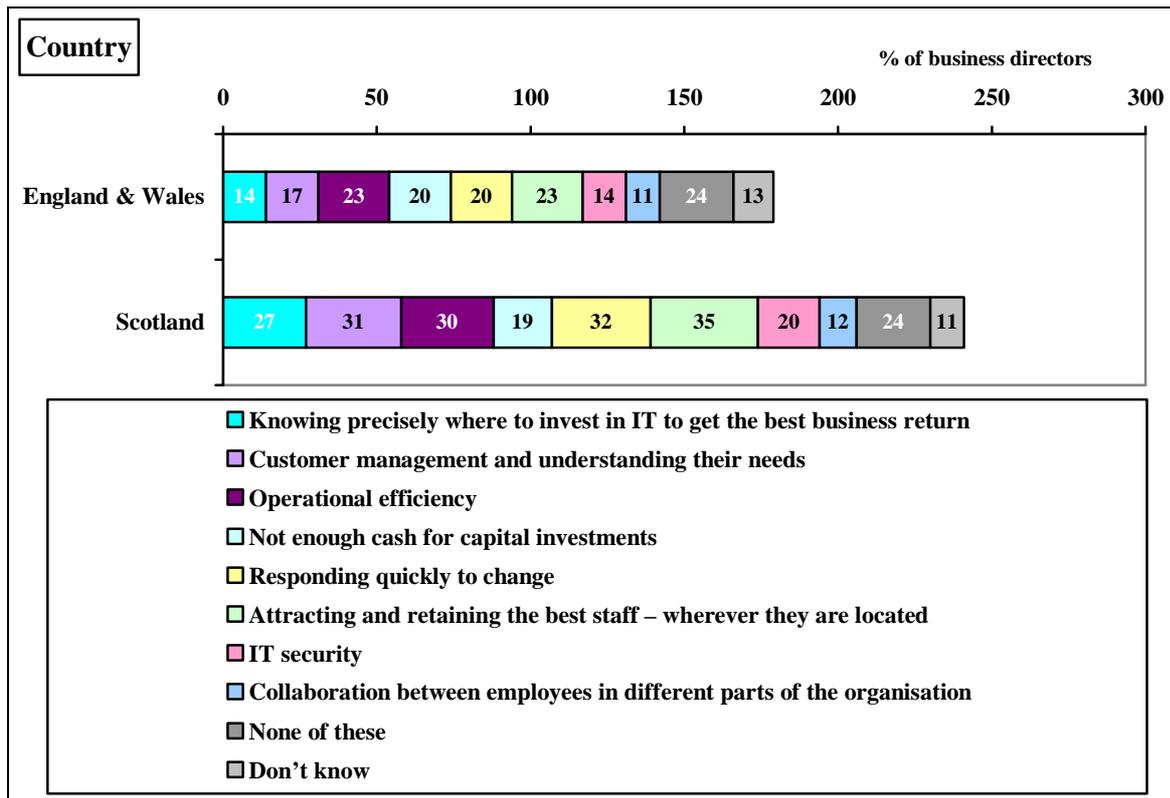
- Furthermore, no single area stands out from the others in terms of what is affecting companies, with no single issue being relevant to more than 26% of the sample – indicating varied problems among these companies.
- However, 26% of business directors say the issue of attracting and retaining the best staff (wherever they are located) is holding back their company.
- Almost as many are struggling with operational efficiency (25%).
- 23% are being held back by their lack of ability to be able to respond quickly to change.
- 21% are struggling with customer management and understanding their needs.
- Not having enough cash for capital investment is a problem for 19% of companies.
- 18% are being held back by not knowing precisely where to invest in IT to get the best business return.
- But 15% are being held back by IT security issues.
- And 11% of companies are being held back by difficulties with collaboration between employees in different parts of the organisation.
- In contrast, 24% say their organisation is not being held back by any of these issues, and another 12% are unsure which of them are holding them back.



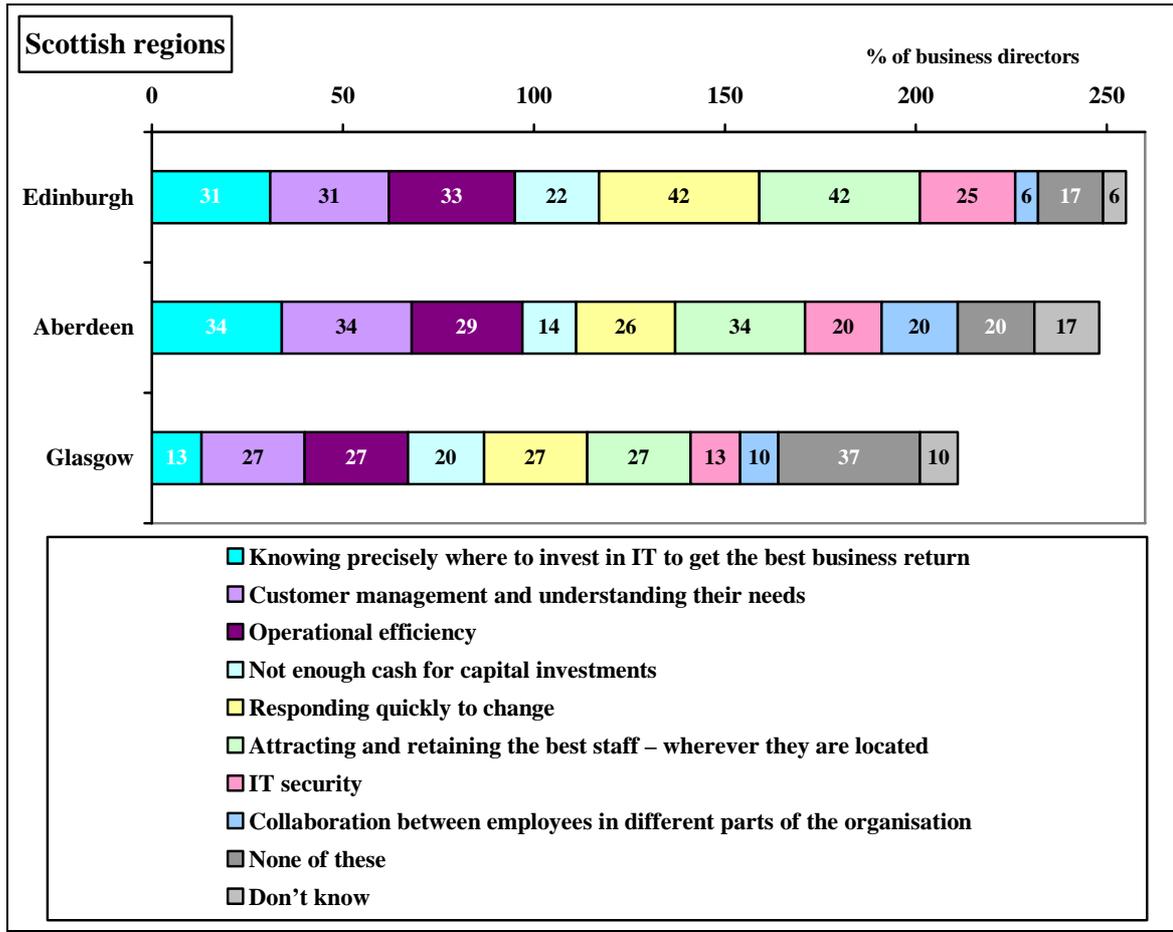
- More business directors in large companies (23%) say the issue of IT security is holding back their company, compared to small companies (12%).
- Otherwise, statistically there is no significant difference according to company size and which of these issues is holding companies back.



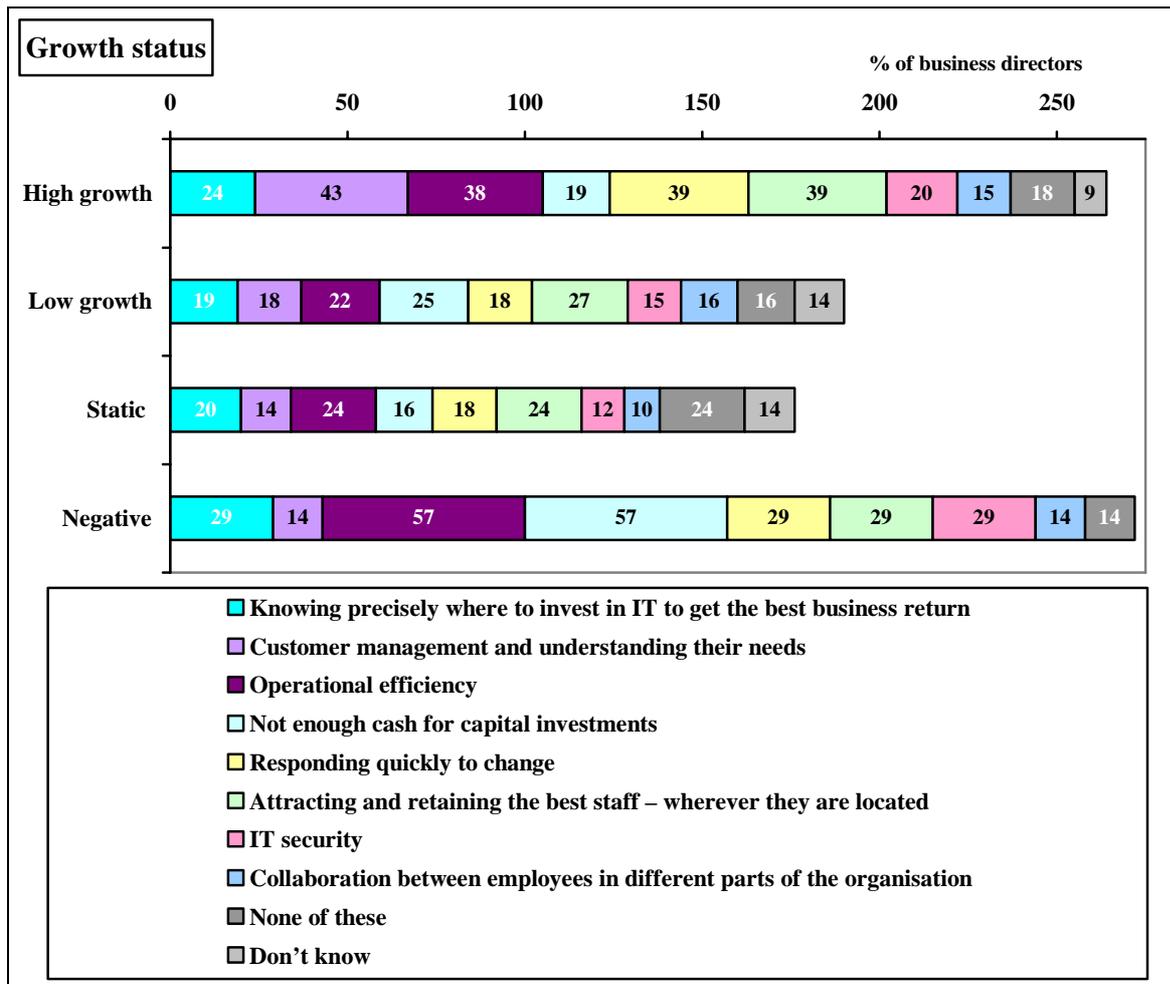
- Overall, business directors in manufacturing companies say more of these issues are holding them back, compared to services and distribution companies (i.e. length of bars in the above chart).
- In fact, more business directors in manufacturing companies (73%) say at least 1 of these issues is holding back their organisation, compared to services companies (60%).
- And, more business directors in manufacturing companies (27%) say 3 or more issues are affecting them in this way, compared to distribution companies (13%)[not shown].
- In detail, more business directors in manufacturing companies (27%) say they are struggling with customer management and understanding their needs, compared to distribution companies (13%).
- Also, more business directors in manufacturing companies (39%) say they are struggling with operational efficiency, compared to services (21%) and distribution (15%) companies.
- In addition, more business directors in manufacturing companies (31%) say they are being held back by their lack of ability to respond quickly to change, compared to distribution companies (16%).
- Furthermore, more business directors in manufacturing companies (22%) say the issue of IT security is holding back their company, compared to services (13%) and distribution (11%) companies.



- Overall, business directors in Scottish companies say more of these issues are holding them back, compared to those in England & Wales (i.e. length of bars in the above chart).
- In fact, more business directors in Scottish companies (28%) say 3 or more issues are affecting them in this way, compared to those in England & Wales (17%) [not shown].
- In detail, more business directors in Scottish companies (27%) admit they are being held back by not knowing precisely where to invest in IT to get the best business return, compared to those in England & Wales (14%).
- Also, more business directors in Scottish companies (31%) say they are struggling with customer management and understanding their needs, compared to those in England & Wales (17%).
- In addition, more business directors in Scottish companies (32%) believe they are being held back by their lack of ability to respond quickly to change, compared to those in England & Wales (20%).
- Furthermore, more business directors in Scottish companies (35%) say the issue of attracting and retaining the best staff is holding back their company, compared to those in England & Wales (23%).

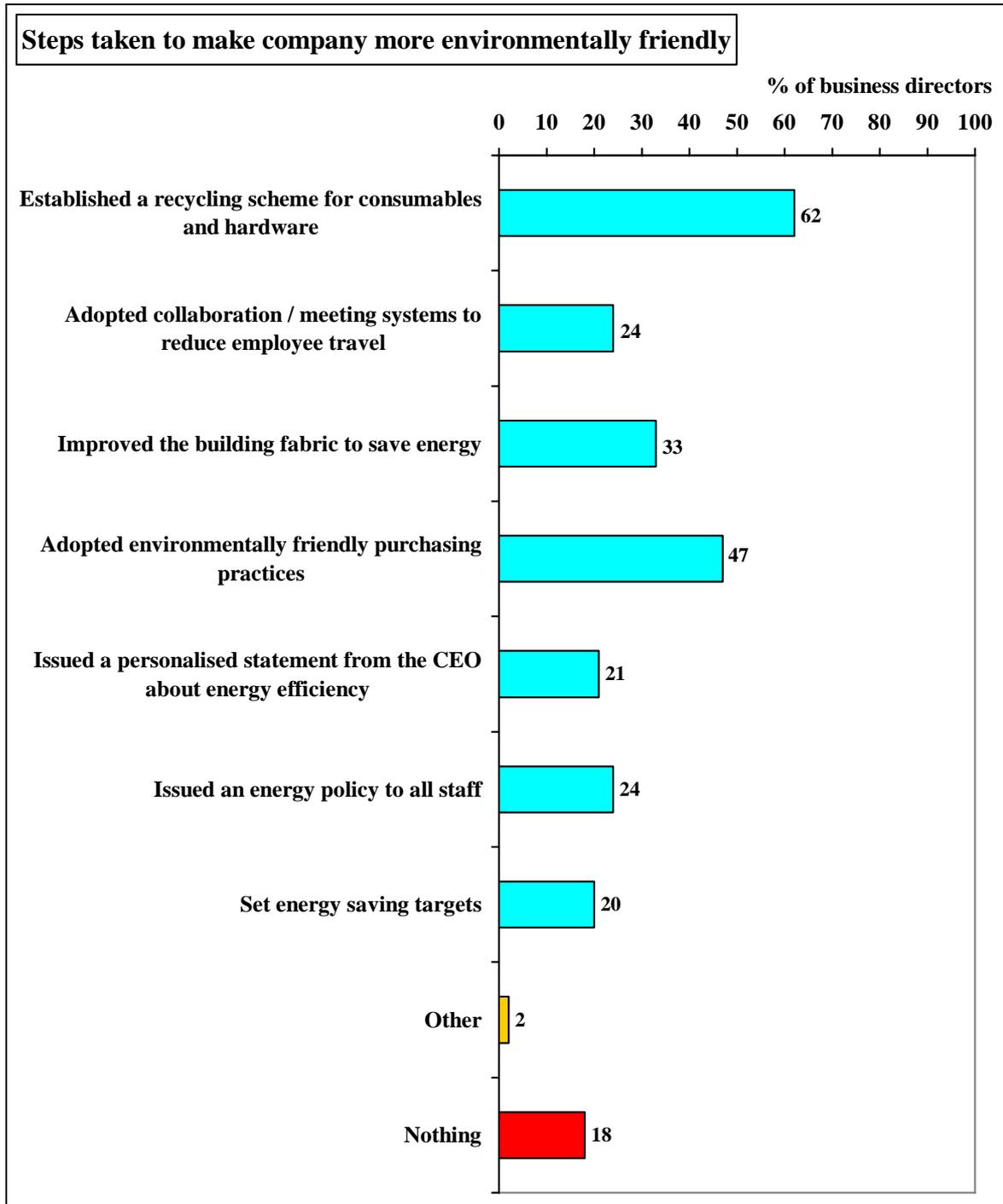


- Overall, business directors in the Edinburgh region say more of these issues are holding them back, compared to those in Glasgow (i.e. length of bars in the above chart).
- Otherwise, statistically, there is no significant difference according to Scottish region and which of these issues is holding back the organisation.



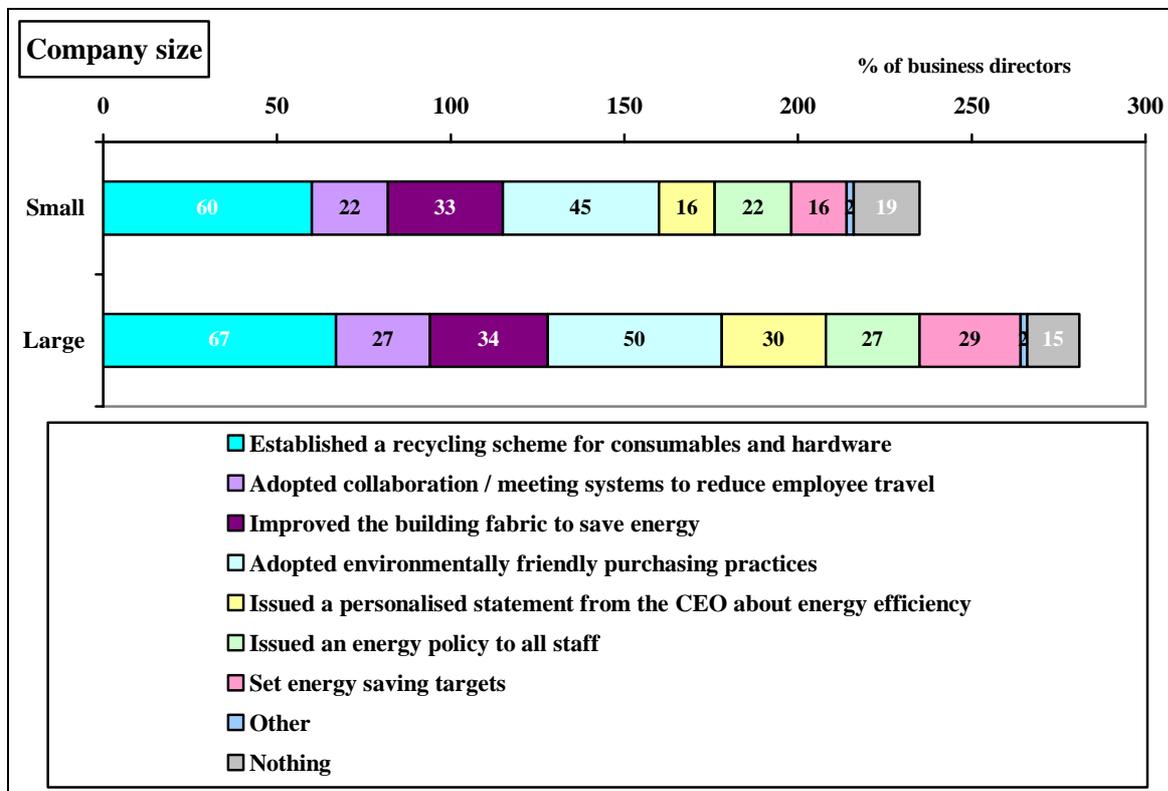
- Overall, business directors in high growth companies say more of these issues are holding them back, compared to those with low turnover growth and those whose turnovers have remained static (i.e. length of bars in the above chart).
- In fact, more business directors in companies with high turnover growth (35%) say 3 or more issues are holding their organisation back, compared to those with low turnover growth (19%) and those that have remained static (18%) [not shown].
- In detail, more business directors in companies with high turnover growth (43%) say they are struggling with customer management and understanding their needs, compared to those with low turnover growth (18%) and those that have remained static (14%).
- Also, more business directors in companies with high turnover growth (38%) admit they are struggling with operational efficiency, compared to those with low turnover growth (22%).
- In addition, more business directors in companies with high turnover growth (39%) believe they are being held back by their lack of ability to respond quickly to change, compared to those with low turnover growth and those that have remained static (both 18%).

4.3.9 Which of the following steps has your organisation taken to be more environmentally friendly?



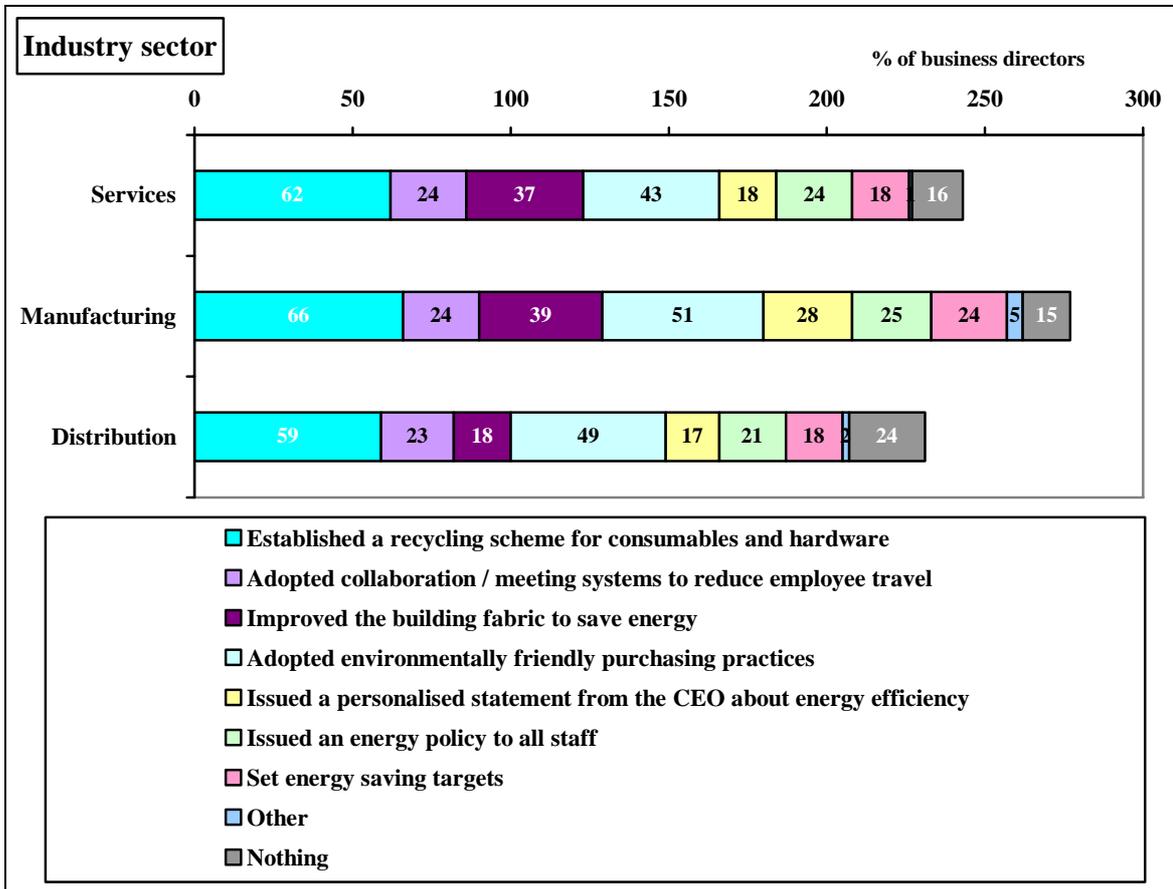
- Among these business directors, 82% say their organisation has taken some steps to be more environmentally friendly.
- Indeed, 60% of companies have taken multiple steps towards this aim; 39% have taken 3 or more and 15% have taken 5 or more [not shown].
- But 18% of business directors say their company has not taken any steps in this direction.

- However, the single biggest initiative that business directors say their company has taken is to establish a recycling scheme for consumables and hardware (62%).
- This is followed by the adoption of environmentally friendly sourcing practices (47%).
- 1 in 3 (33%) have improved the building fabric to save energy.
- 1 in 4 (24%) have adopted the widely available collaboration / meeting systems to reduce employee travel and the same number (24%) have issued an energy policy to all staff.
- But only 21% of companies have backed this up with a personalised statement issued from the CEO about energy efficiency.
- Slightly fewer still (20%) have set energy saving targets.
- The ‘Other’ category (2%) includes adoptions of ISO 14 standard, wind-power, electric cars and donating to The Woodland Trust.

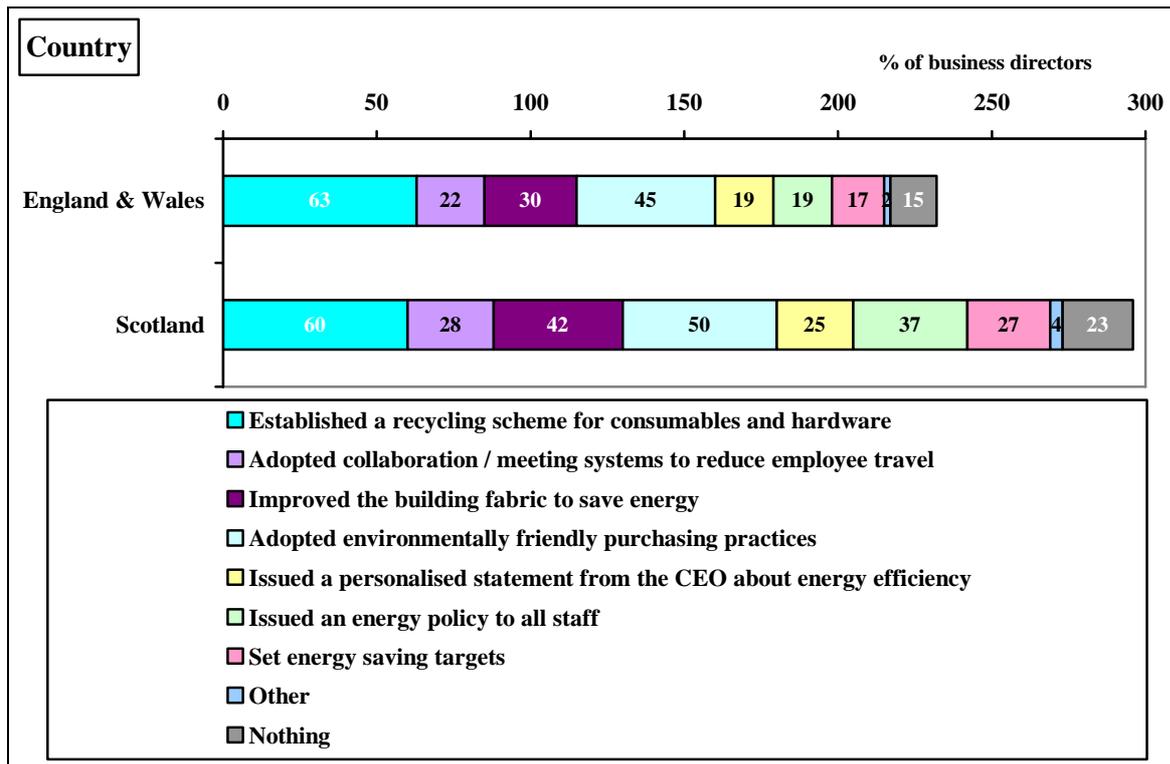


- Overall, business directors in large companies say their company has taken more of these steps to become more environmentally friendly, compared to small companies (i.e. length of bars in the above chart).
- In fact, more business directors in large companies (50%) say their organisation has taken 3 or more steps to become more environmentally friendly, compared to small companies (34%) [not shown].
- And more business directors in large companies (22%) say their organisation has taken 5 or more steps in this direction, compared to small companies (11%) [not shown].

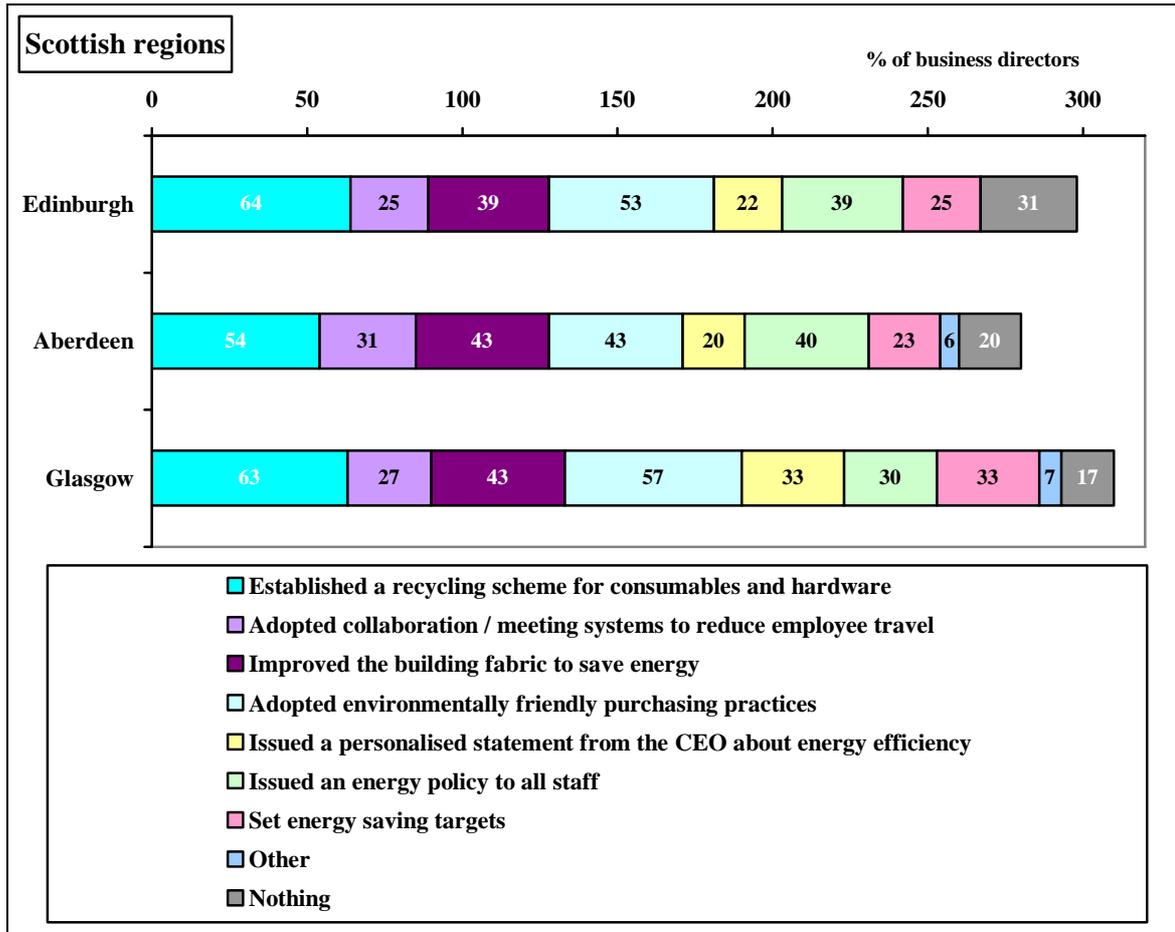
- In detail, more business directors in large companies (30%) say their organisation has issued a personalised statement issued from the CEO about energy efficiency, compared to small companies (16%).
- In addition, more business directors in large companies (29%) say their organisation has set energy saving targets, compared to small companies (16%).



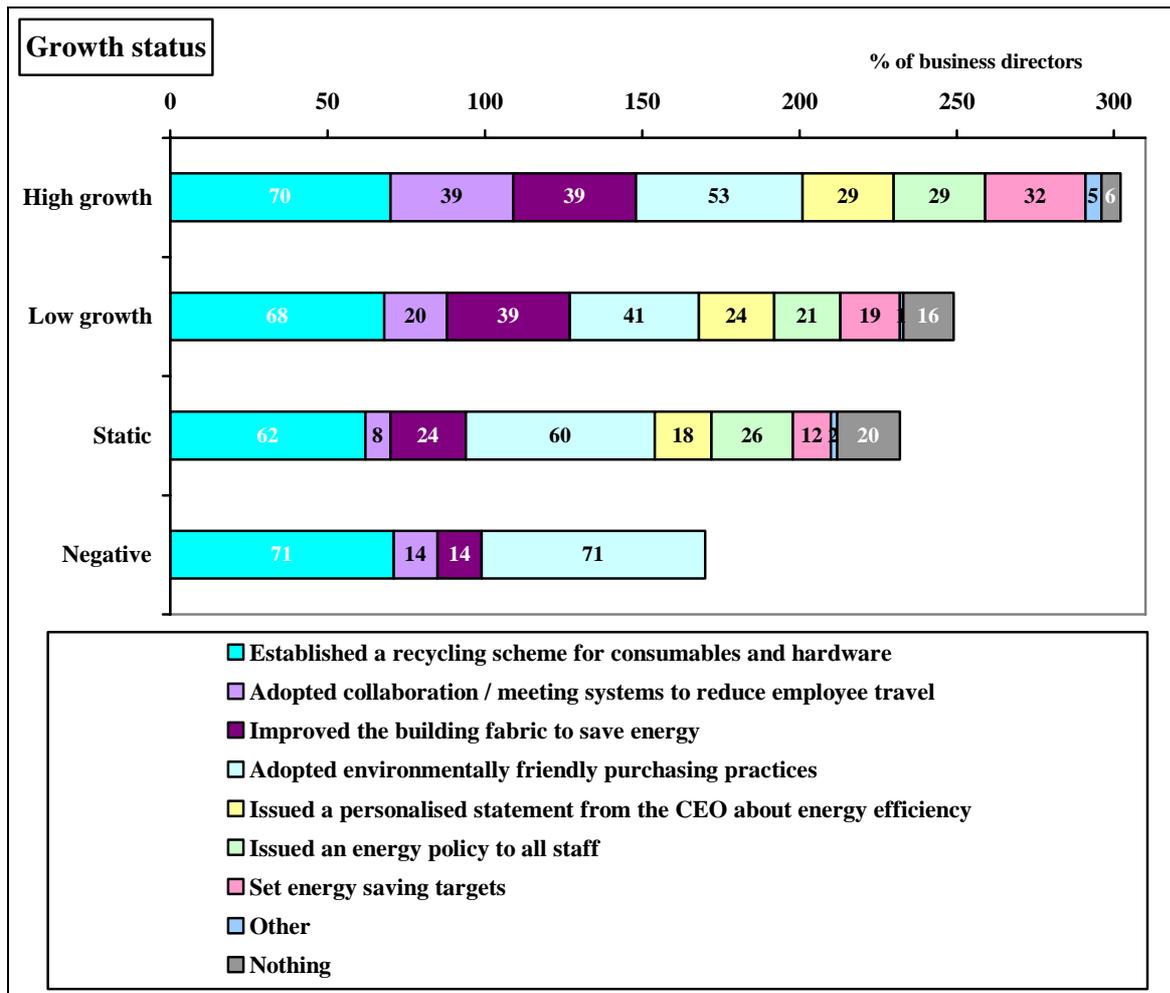
- Overall, business directors in manufacturing companies say their company has taken more of these steps to become more environmentally friendly, compared to those in distribution companies (i.e. length of bars in the above chart).
- In fact, more business directors in manufacturing companies (69%) say their organisation has taken multiple steps to be more environmentally friendly, compared to the distribution sector (54%) [not shown].
- In detail, more business directors in services (37%) and manufacturing (39%) companies say their organisation has improved the building fabric to save energy, compared to the distribution sector (18%).
- And, more business directors in manufacturing companies (28%) say their organisation has issued a personalised statement issued from the CEO about energy efficiency, compared to the services companies (18%).
- Also, more business directors in manufacturing companies (5%) say their organisation has taken ‘other’ steps, compared to the services companies (1%).



- Overall, business directors in Scotland say their company has taken more of these steps to become more environmentally friendly, compared to those in England & Wales (i.e. length of bars in the above chart).
- In fact, more business directors in Scottish companies (51%) say their organisation has taken 3 or more steps to be more environmentally friendly, compared to England & Wales (34%) [not shown].
- Also, more business directors in Scottish companies (24%) say their organisation has taken 5 or more steps to be more environmentally friendly, compared to England & Wales (11%) [not shown].
- In detail, more business directors in Scottish companies (42%) say their organisation has improved the building fabric to save energy, compared to England & Wales (30%).
- Similarly, more business directors in Scottish companies (37%) say their organisation has issued an energy policy to all staff, compared to England & Wales (19%).
- Finally, more business directors in Scottish companies (27%) say their organisation has set energy saving targets, compared to England & Wales (17%).



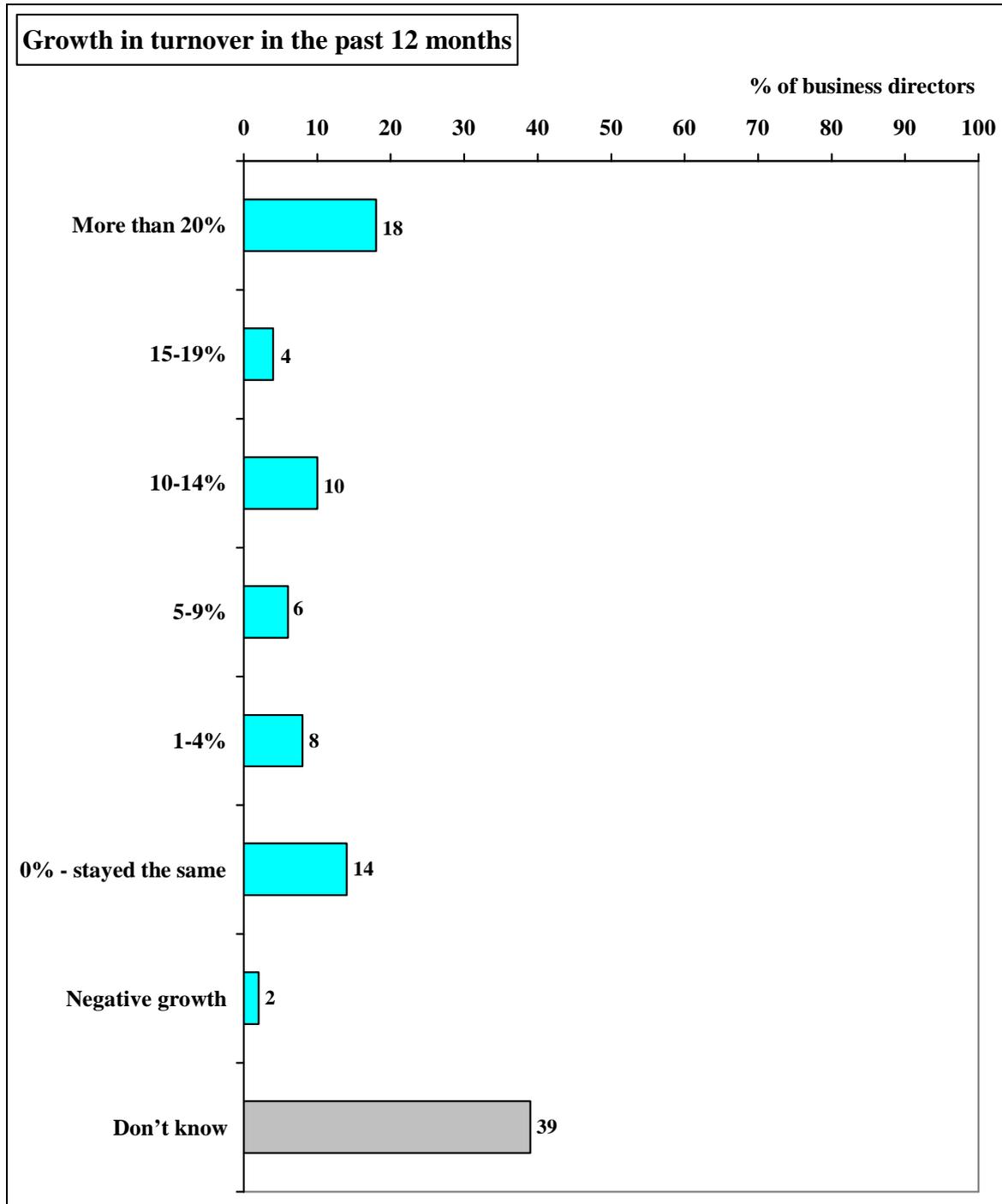
- Statistically, there is no significant difference according to Scottish region and the steps these Scottish business directors say their companies have taken to be more environmentally friendly.



- Overall, business directors in companies with high growth status say their company has taken more of these steps to become more environmentally friendly, compared to those with low growth and those that have remained static (i.e. length of bars in the above chart).
- Indeed, more business directors in companies with high turnover growth (94%) say their organisation has taken at least some steps to be more environmentally friendly, compared to those with low turnover growth (84%) and those whose turnover has remained static (80%) [not shown].
- Also, more business directors in companies with high turnover growth (25%) say their organisation has taken 5 or more steps, compared to those who have remained static (8%) [not shown].
- Conversely, more business directors in companies with low turnover growth (16%) and those who have remained static (20%) say their organisation has not taken any steps in this direction, compared to those with high turnover growth (6%).
- In more detail, more business directors in companies with high turnover growth (39%) say their organisation has adopted collaboration / meeting systems to reduce employee travel, compared to those with low turnover growth (20%) and those who have remained static (8%).

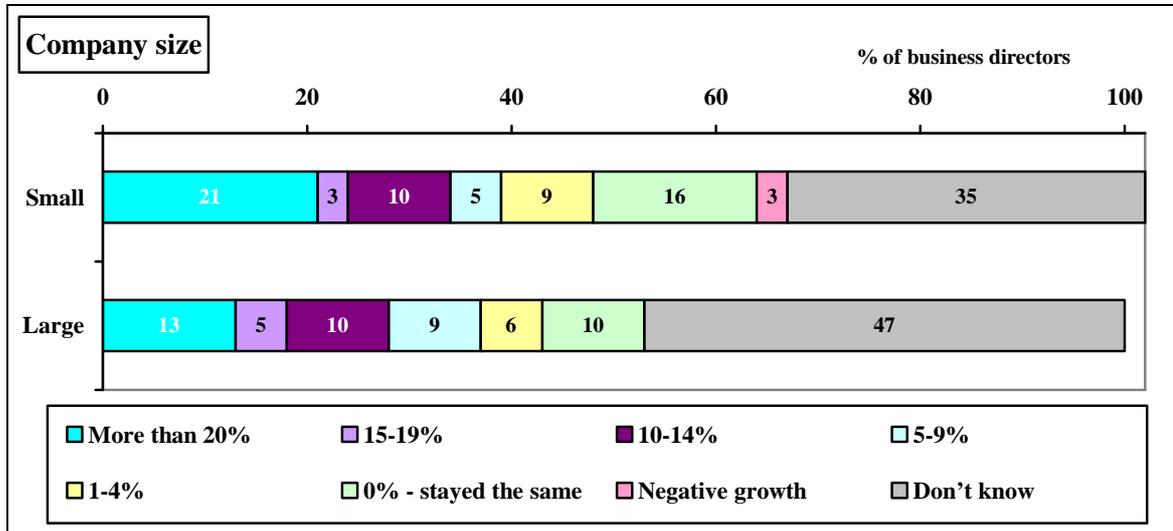
- And more business directors in companies whose turnover has remained static (60%) say their organisation has adopted environmentally friendly sourcing practices, compared to those with low turnover growth (41%).
- Finally, more business directors in companies with high turnover growth (32%) say their organisation has set energy saving targets, compared to those who have remained static (12%).

4.3.10 In percentage terms, please indicate approximately how much your organisation’s turnover has grown in the past 12 months?

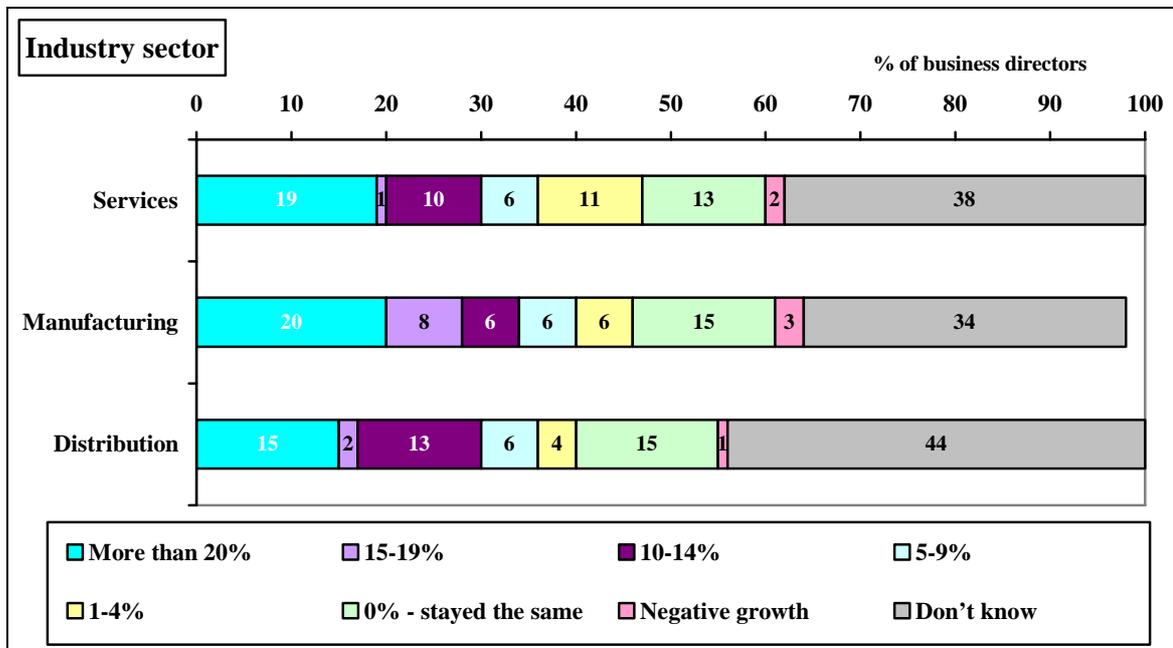


- 61% of these business directors cited a figure in terms of how much their organisation’s turnover has grown in the last 12 months.
- Collectively, 46% of companies say their turnover has grown in the last 12 months – 14% say it has remained static, and 2% say it has decreased.
- The average amount of growth in turnover in the last 12 months has been 13.3%.

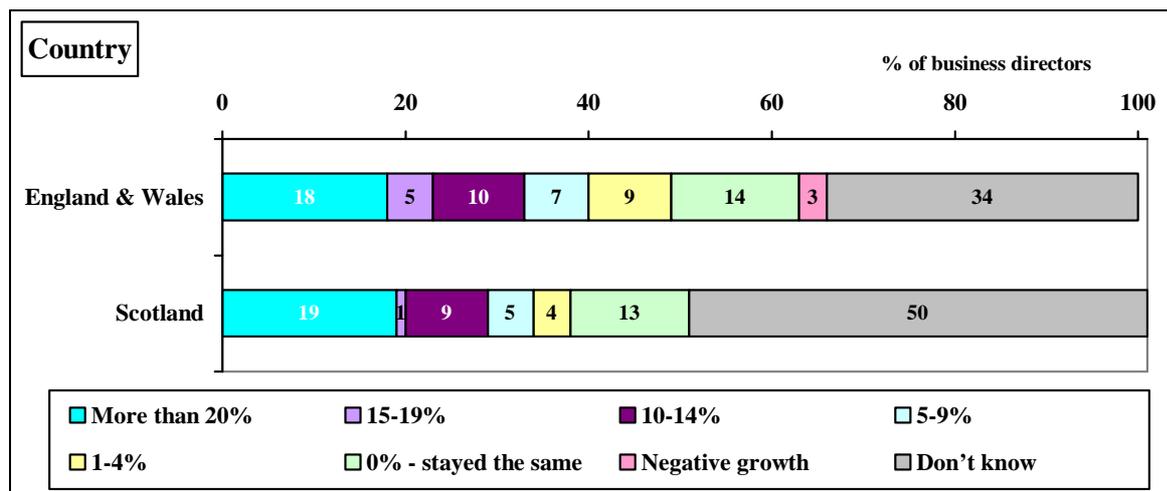
- Indeed, 18% claim their organisation’s turnover has grown more than 20% in the last 12 months.
- And 32% say it has grown by 10% or more.



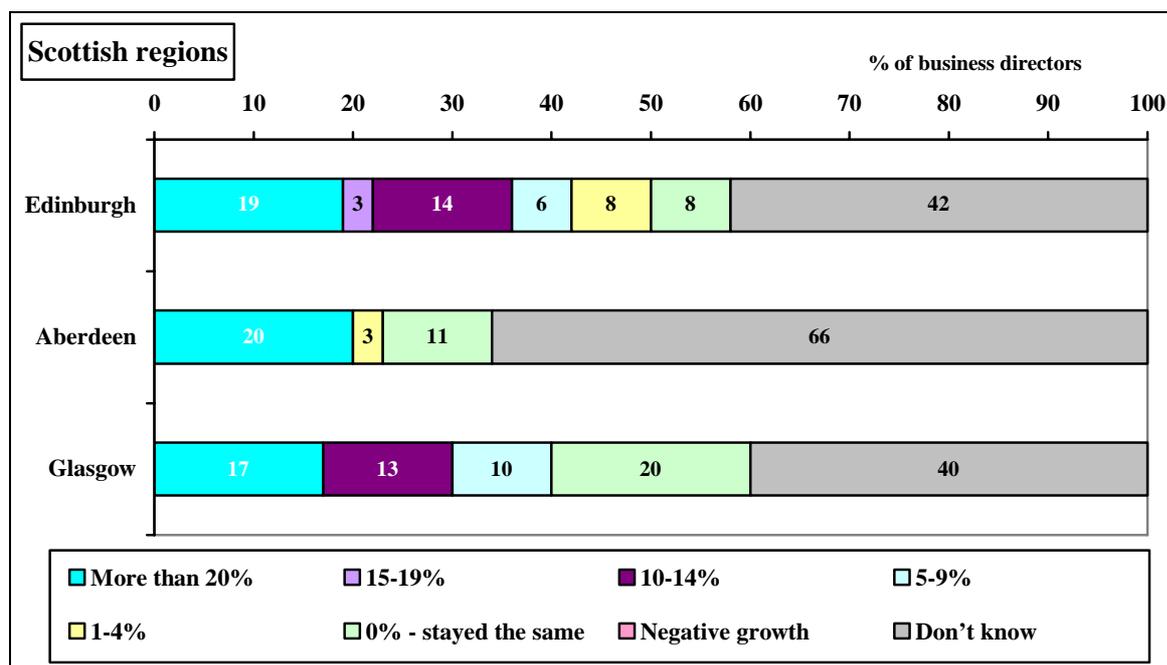
- More business directors in small companies (65%) cited a figure in terms of how much their organisation’s turnover has grown in the last 12 months, compared to large companies (53%).
- Otherwise, statistically, there is no significant difference according to company size and the views of these business directors on their organisation’s turnover growth in the last 12 months.



- Statistically, there is no significant difference according to industry sector and the views of these business directors on their organisation’s turnover growth in the last 12 months.



- More companies in England & Wales (66%) gave a figure in terms of how much their organisation’s turnover has grown in the last 12 months, compared to Scottish companies (50%).
- Otherwise, statistically, there is no significant difference according to country and the views of these business directors on their organisation’s turnover growth in the last 12 months.



- More business directors in the Edinburgh (58%) and Glasgow (60%) regions gave a figure for how much their organisation’s turnover has grown in the last 12 months, compared to companies in the Aberdeen region (34%).
- Among those who did cite a figure, the average amount of growth in turnover in the last 12 months is 14.7% for companies in the Edinburgh region, 17.7% for the Aberdeen region and 12.2% for the Glasgow region [not shown].

4.4 Business Network IQ

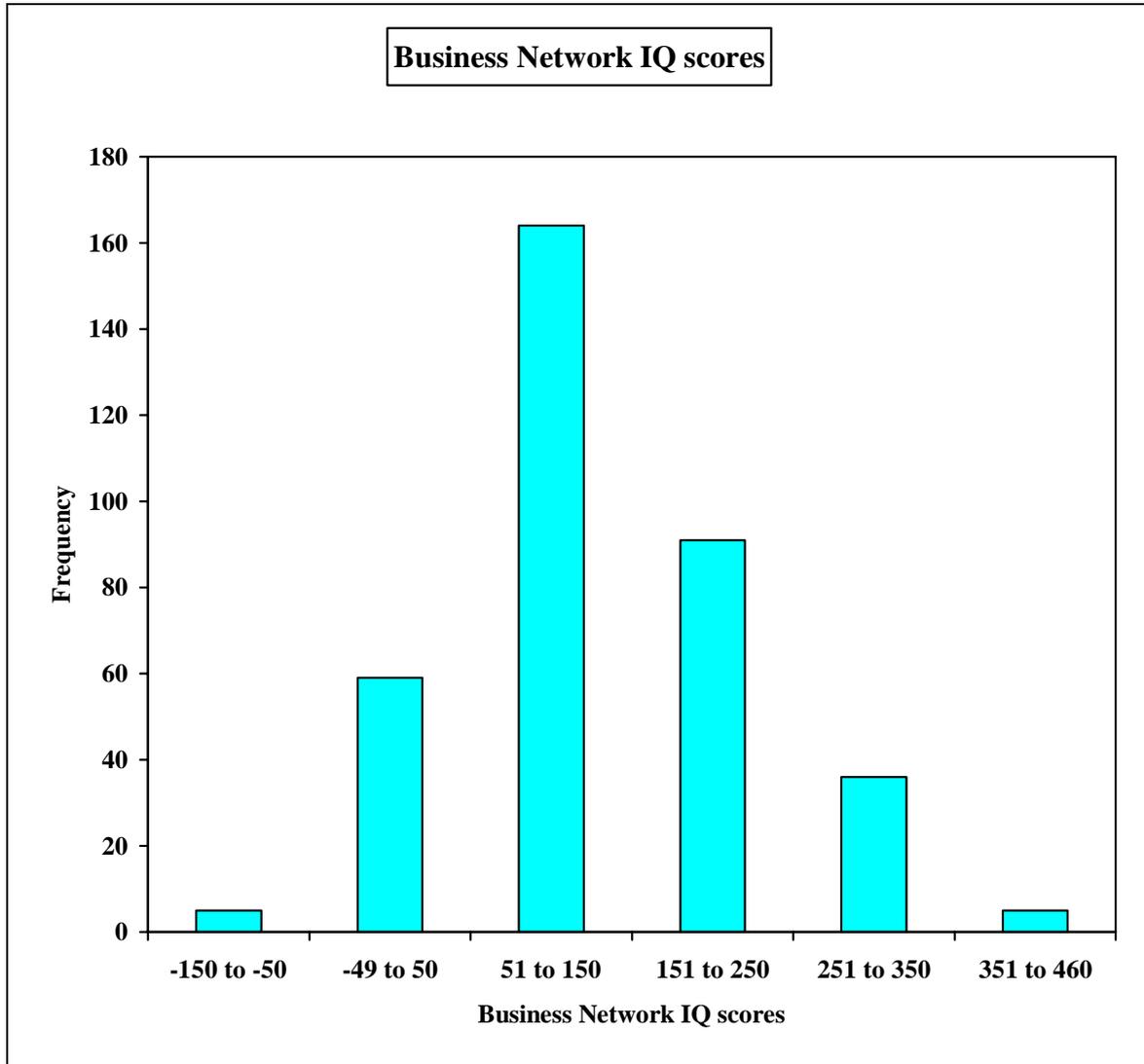


Table 4.4.1. Business Network IQ Scores

Average	136
Median	130
Range	-90 to 380

- For the business respondents, the minimum Network IQ score a company can achieve is -150 and the maximum is +460.
- However, the average Network IQ score for the business sample is 136, but this ranges from -90 to +380.
- 56% of companies that scored very highly (i.e. above a score of 251) are in the services sector, 12% are in manufacturing and 32% are in the distribution sector.
- But they are split fairly evenly across the two company size bands of large (44%) and small (56).
- 28% of these high scoring companies are in Scotland, and 15% are based in Edinburgh, 7% are in Aberdeen but more (17%) are in Glasgow.

- 39% are high turnover growth companies, 24% are low growth companies, 5% have been static, but none of them have had negative turnover growth in the last 12 months.
- One business director among Cisco’s customers was also interviewed in this project and achieved scores well above average (185).

Table 4.4.2. Business Network IQ scores by company size

	20-250	251-1000
Average	124	160
Median	120	155
Range	-90 to 380	-60 to 380

- Large companies (160) have a higher average business Network IQ score, compared to small companies (124).

Table 4.4.3. Business Network IQ scores by industry sector

	Services	Manufacturing	Distribution
Average	134	140	134
Median	120	140	130
Range	-80-360	-50-380	-90-380

- Statistically, there is no significant difference according to industry sector and the average business Network IQ score a company has.

Table 4.4.4. Business Network IQ scores by country

	England & Wales	Scotland
Average	133	143
Median	130	130
Range	-90-380	-60-360

- Statistically, there is no significant difference according to country and the average business Network IQ score a company has.

Table 4.4.5. Business Network IQ scores by Scottish region

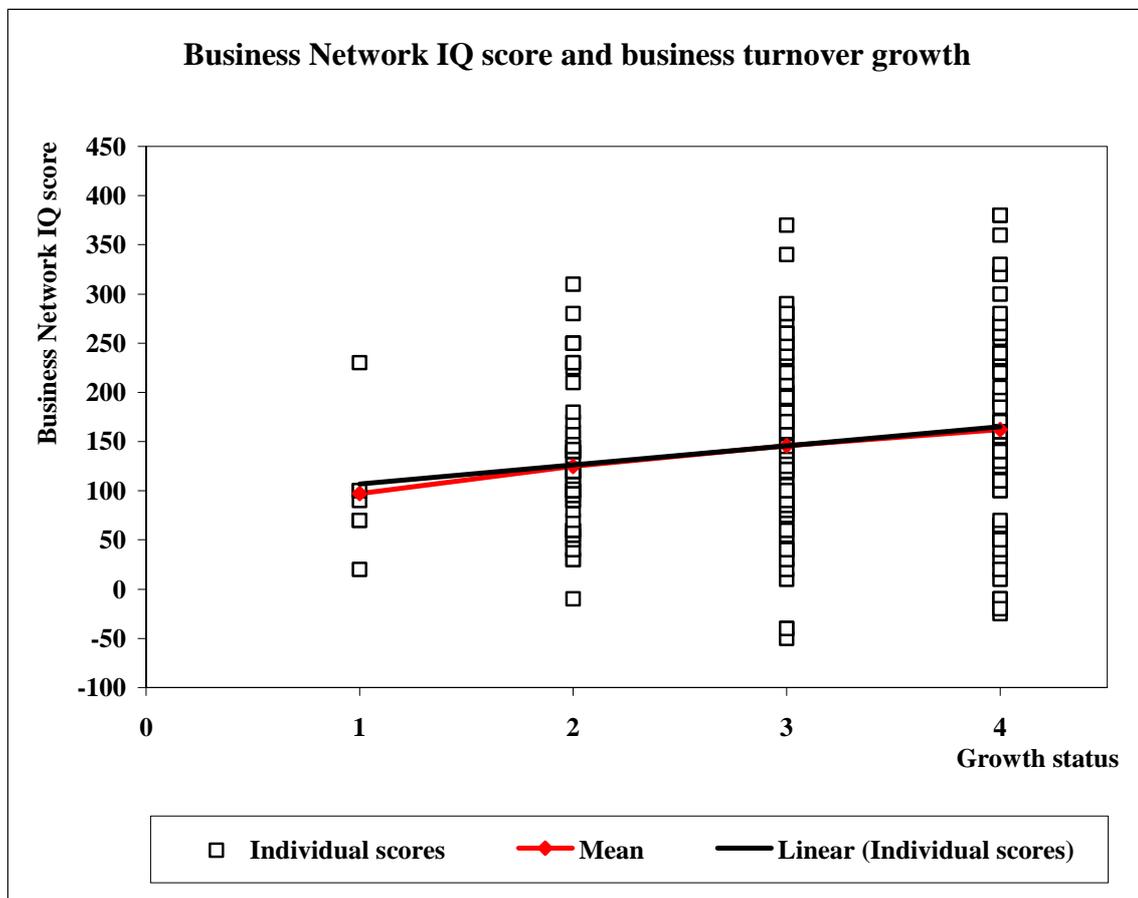
	Edinburgh	Aberdeen	Glasgow
Average	147	128	155
Median	127.5	130	150
Range	-30-360	-60-300	-50-330

- Statistically, there is no significant difference according to Scottish region and the average business Network IQ score a company has.

Table 4.4.6. Business Network IQ scores by growth status

	High growth	Low growth	Static	Negative
Average	162	145	125	97
Median	145	140	118	90
Range	-25-380	-50-370	-10-310	20-230

- Companies that have experienced high turnover growth in the last 12 months (162) have a higher average business Network IQ score, compared to companies whose turnover has remained static (125).
- While the sub-sample size for companies that experienced a loss in the last 12 months is too small to be included in the same statistical analysis, the 7 companies have the lowest average business Network IQ score of all (97).



Where:

1= Negative

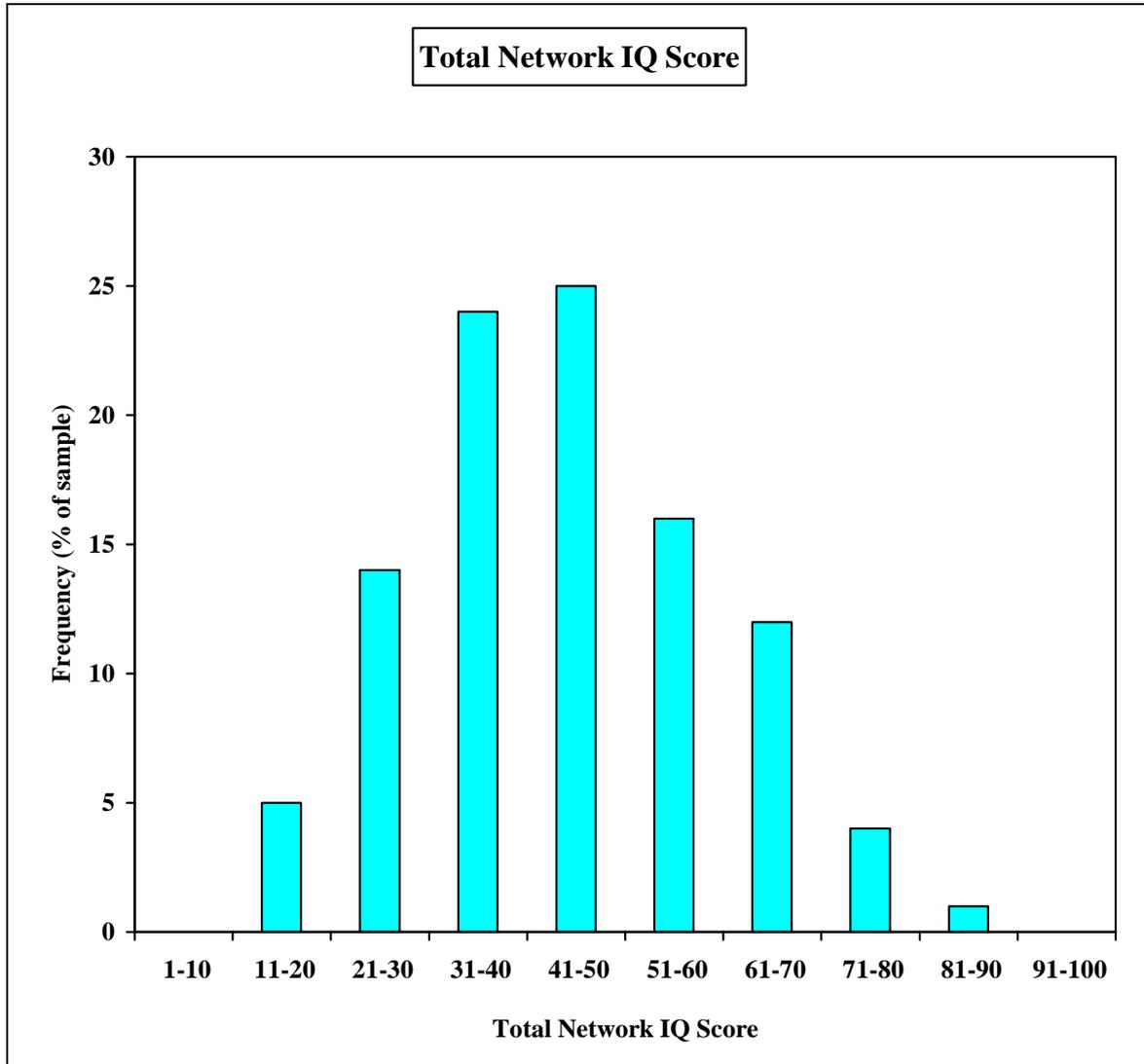
2= Static

3= Low turnover growth (1-14%)

4= High turnover growth (15% or more)

- There is clearly a wide array of business Network IQ scores for companies with a particular turnover growth status.
- However, there is a subtle linear relationship between the business Network IQ score and the turnover growth status.

4.5 Total Network IQ Scores



- The questionnaires for the business and IT respondents were not identical, but covered similar subject areas (e.g. IT security, mobile working, information sharing, environmental issues etc).
- In this section of the report, they have been combined to get a total IQ score by normalising each individual spectrum of scores to a scale of 1 to 100.

Table 4.5.1. Total Network IQ Score

Average	44
Median	43
Range	10-87

- On this basis, the average Total Network IQ score is 44, but this ranges from 10 to 87.
- 33% of companies scored highly (i.e. above 50) and this includes 3 of Cisco's customers (who scored 55, 60 and 73).

Table 4.5.2. Total Network IQ score – IT and Business scores

	IT respondents	Business respondents
Average	41	47
Median	39	46

- Business respondents have slightly higher Total Network IQ scores than the IT professionals.

Table 4.5.3. Total Network IQ scores by company size

	20-250	251-1000
Average	42	48
Median	41	47

- Large companies (48) have a higher average Total Network IQ score, compared to small companies (42).

Table 4.5.4. Total Network IQ scores by industry sector

	Services	Manufacturing	Distribution
Average	46	43	44
Median	44	43	41

- Services companies (46) have a higher average Total Network IQ score, compared to manufacturing companies (43).

Table 4.5.5. Total Network IQ scores by country

	England & Wales	Scotland
Average	44	44
Median	43	44

- Statistically, there is no difference according to country and the average Total Network IQ score.

Table 4.5.6. Total Network IQ scores by Scottish regions

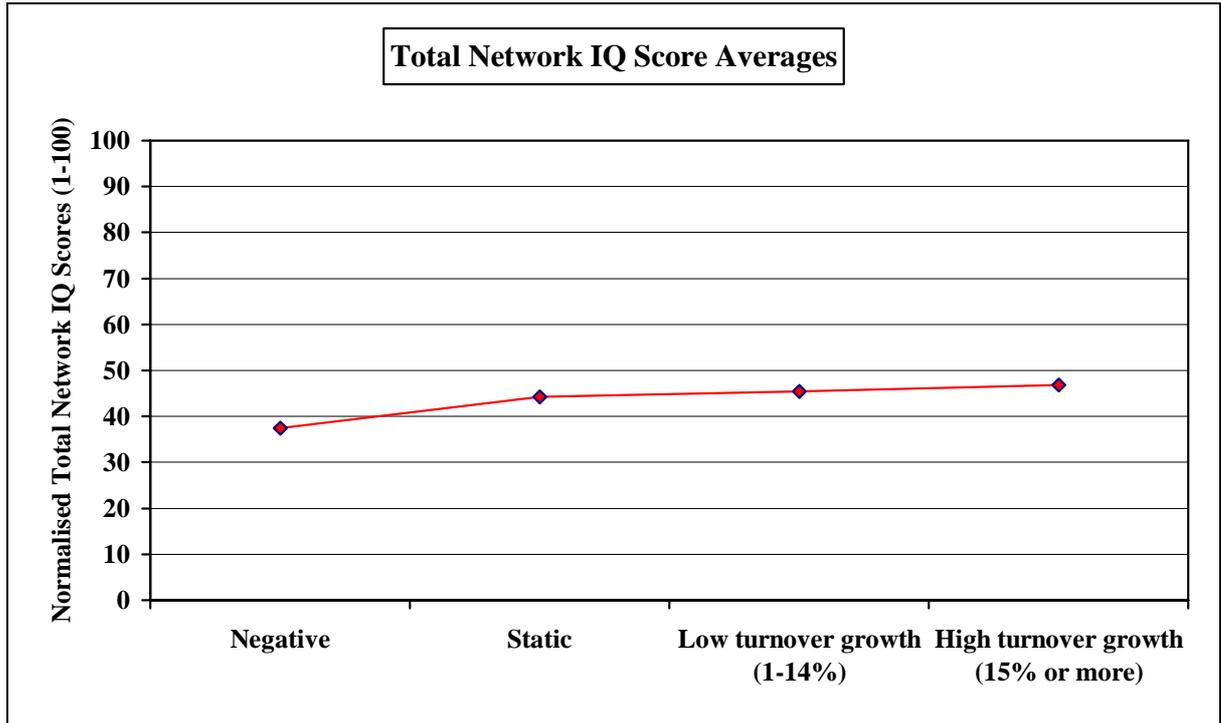
	Edinburgh	Aberdeen	Glasgow
Average	45	43	44
Median	44	43	44

- Statistically, there is no difference according to Scottish region and the average Total Network IQ score.

Table 4.5.7. Total Network IQ scores by growth status

	High growth	Low growth	Static	Negative
Average	47	45	44	37
Median	47	45	43	36

- There is a gradual decrease in the average Total Network IQ score from companies with a high turnover growth (47) to those that have seen negative growth (37).



- There is a subtle linear relationship between the Total Network IQ score and the turnover growth status of a company.

Appendix 1: IT Questionnaire

Qualifying Questions:

A) Are you responsible on a day-to-day basis for IT and telecommunications within your organisation? [Select only 1]

- Yes [Continue]
- No [Find alternative name and terminate the interview]

B) Does your organisation have its headquarters in the UK or overseas? [Select only 1]

- UK headquarters [Continue]
- Overseas headquarters [Terminate]

C) In total, across the entire organisation, approximately how many employees are there? [DO NOT READ OUT, but select only 1 accordingly]

- Less than 20 [Terminate]
- 20-249 employees [Continue]
- 250-1000 employees [Continue]
- More than 1000 [Terminate]

D) Where is your main place of work located? [DO NOT READ OUT, but select only 1 accordingly]

- London [Continue]
- SE [Continue]
- SW [Continue]
- Central England [Continue]
- The North of England [Continue]
- Wales [Continue]
- Edinburgh [Continue]
- Aberdeen [Continue]
- Glasgow [Continue]
- None of these [Verify first using database info, but if respondent insists, terminate]

Main Questions:

1) In which of the following broad industry sectors does your organisation primarily operate? [Select only 1]

- Services
- Manufacturing (including engineering, construction, agriculture, mining etc)
- Distribution (including retail, wholesale and transport)
- [None of these]
- [Don't know]

2) Which of the following best describe your organisation's approach to buying technology for your IT network? [Select all that apply]

- | | |
|---|-----|
| - We replace old equipment when it breaks | 0 |
| - Purchases are driven by ad-hoc requests from business managers or departments | 10 |
| - We are sometimes limited by end users' acceptance of and adaptability to new technology | 15 |
| - We have a long-term IT network strategy | 20 |
| - Our network strategy is in line with the organisation's business plan | 30 |
| - [None of these] | -10 |
| - [Don't know] | -10 |

3) Which of the following will have an impact on your IT investment priorities for the next 12-18 months? [Select all that apply]

- | | |
|---|----|
| - Contain costs | 10 |
| - Enhance and streamline business processes | 10 |
| - Customer management | 10 |

- Customer service and experience 10
 - Enabling business growth 10
 - Regulatory compliance 10
 - Operational efficiency 10
 - Organisational agility 10
 - Mobile working (i.e. working from any location) 10
 - Teleworking (i.e. working from home) 10
 - Converged communications 10
 - IT security 10
 - None of these -30
 - Don't know -20
- 4) Which of the following apply to your IT security strategy? [Select all that apply]**
- We do not have a formal, documented, IT security strategy 0
 - The IT security strategy is focused on technology 5
 - We have security devices at the network edge 10
 - We have security features embedded within the network 20
 - Our strategy is accompanied by documented policies for employees to follow 30
 - [None of these] 0
 - [Don't know] -10
- 5) How important to your organisation is the role of employees' training about IT security issues and the policies you have in place? [Select only 1]**
- Very important 30
 - Moderately important 20
 - Quite important 10
 - Not very important 0
 - Not at all important – we do not carry out any such training -20
 - [Don't know] -10
- 6) Which of the following best describe how your organisation stores its data? [Select only 1]**
- Direct-attached storage where data is stored on server's own disk drives with no storage networking present 10
 - Network-attached storage serving individual departments or workgroups 15
 - In a central location; however each application has its own storage 'silo' 20
 - Virtualised storage, where all data is in one or more shared storage 'pools' 30
 - [None of these] 0
 - [Don't know] -10
- 7) When it comes to enabling access to your applications from across the business, which of the following best describes the model you aspire to? [Select only 1]**
- Each branch office or department would run its own application sets 10
 - We would like to use a WAN access service (e.g. Citrix) to enable application access but are not concerned about having multiple instances of the same application 20
 - We aim to operate a single instance of each application, with the network enabling access and distribution 30
 - [None of these] 0
 - [Don't know] -10
- 8) Which of the following apply to your organisation's wireless LAN? [Select all that apply]**
- It is only available in certain areas, and for particular purposes (e.g. Internet access or file sharing) 10
 - It is available in every area 20
 - We can enable basic wireless access for visitors 20
 - It also supports voice traffic 30
 - It is pervasive throughout the organisation, supporting voice, data and guest data services 30
 - We do not have a wireless LAN 0
 - [None of these] 0
 - [Don't know] -10

- 9) Which of the following best describe how your organisation manages its network? [Select only 1]**
- Each device or service has a separate management interface 10
 - We use a single system to manage all network services, but we lack an integrated view of the services as a whole 20
 - A single, integrated management interface tracks all services, giving a unified view of all services 30
 - [None of these] 0
 - [Don't know] -10
- 10) Which of the following has happened or would happen if your organisation were to experience an outage? [Select all that apply]**
- We would experience some reduction or loss in service 0
 - A support company would be contacted 5
 - Repairs would be made by in-house staff 10
 - Spares of the most important components would be used from in-house stocks 15
 - The most critical parts of the organisation would still be running 20
 - Redundant network infrastructure would support the whole organisation with no impact on user experience 30
 - [None of these] 0
 - [Don't know] -10
- 11) Which of the following steps has your organisation taken to be more environmentally friendly? [Select all that apply]**
- We align with our company's environmental policy 10
 - Established a recycling scheme for consumables and hardware 10
 - Use virtualisation and other technologies to maximise hardware utilisation efficiency 20
 - Adopted collaboration / meeting systems to reduce employee travel 20
 - Improved the building fabric to save energy 20
 - Adopted environmentally friendly sourcing practices 20
 - Set energy saving targets for hardware 30
 - Other – please specify
 - Nothing - our company does not operate an environmental policy -10
 - Not sure -10
- 12) In percentage terms, please indicate approximately how much your organisation's turnover has grown in the past 12 months? [DO NOT READ OUT, but select only 1 accordingly]**
- More than 20%
 - 15-19%
 - 10-14%
 - 5-9%
 - 1-4%
 - 0% - stayed the same
 - Negative growth
 - Don't know
- 13) Which of the following technologies does your organisation use in its IT network? [Select all that apply]**
- Voice and data carried over separate networks 0
 - Firewalls and/or antivirus 5
 - Wireless LAN 10
 - Quality of service (QoS) 10
 - Voice over IP (VoIP) 15
 - Conferencing (If selected, ask multi-choice: by phone (5), web (15) or video (25))
 - Unified messaging 15
 - Mobile working, teleworking 15
 - Video telephony 20
 - Converged voice and data network 20
 - Storage area networking 20
 - Virtual private networks 20
 - Instant and/or video messaging 20

- Intrusion detection and/or prevention	20
- Network event correlation, also known as security event management	30
- Extension to mobile telephone, also know as mobility	30
- Voice over Wi-Fi	30
- Wide-area file and/or application services	30
- [Don't know]	-20

Appendix 2: Business Questionnaire

Qualifying Questions:

A) Which one of the following job roles do you hold within your organisation? [Select only 1]

- CEO [Continue]
- MD [Continue]
- Head of operations and/or logistics [Continue]
- Divisional head [Continue]
- Departmental head [Continue]
- Group head [Continue]
- None of these [Find alternative name and terminate the interview]

B) Are you a trained IT professional? [Select only 1]

- Yes [Terminate this questionnaire and ask Questionnaire A instead]
- No [Continue]

C) Does your organisation have its headquarters in the UK or overseas? [Select only 1]

- UK headquarters [Continue]
- Overseas headquarters [Terminate]

D) In total, across the entire organisation, approximately how many employees are there? [DO NOT READ OUT, but select only 1 accordingly]

- Less than 20 [Terminate]
- 20-249 employees [Continue]
- 250-1000 employees [Continue]
- More than 1000 [Terminate]

E) Where is your main place of work located? [DO NOT READ OUT, but select only 1 accordingly]

- London [Continue]
- SE [Continue]
- SW [Continue]
- Central England [Continue]
- The North of England [Continue]
- Wales [Continue]
- Edinburgh [Continue]
- Aberdeen [Continue]
- Glasgow [Continue]
- None of these [Verify first using database info, but if respondent insists, terminate]

Main questions

1) In which of the following broad industry sectors does your organisation primarily operate? [Select only 1]

- Services
- Manufacturing (including engineering, construction, agriculture, mining etc)
- Distribution (including retail, wholesale and transport)
- [None of these]
- [Don't know]

2) Which of the following sum up your view of your organisation's IT network? [Select only 1]

- The IT network is just another type of technology - a pipe for data [Skip 3] 10
- To some parts of the organisation, the IT network is very important [Ask 3] 20
- The IT network is a vital and strategic platform for all parts of the organisation [Skip 3] 30
- Do not have a view on the IT network [Skip 3] -10
- Not sure [Skip 3] 0

- 3) **[Just to those who selected option 2 in qu 2] In which parts of the organisation is the IT network deemed to be very important? [Select all that apply]**
- IT
 - Sales
 - Marketing
 - HR
 - Finance
 - Distribution
 - Operations
 - Manufacturing
 - Remote worker
 - Not sure
- 4) **To what degree does your company’s IT network enable the company to set up and manage information sharing policies? [Select only 1]**
- Not at all well – we are unable to do this 0
 - Quite well 5
 - Moderately well 10
 - Very well 20
 - Exceptionally well 30
 - [Don’t know] -10
- 5) **Which of the following sum up your opinion on the IT security risks your organisation faces and the solutions it has in place? [Select only 1]**
- I have little knowledge of the security risks we face or how good or bad our protection might be 0
 - I am aware of the risks we face but our IT security could be improved 10
 - Our security provisions are well matched with the risks 20
 - Our security provisions exceed the current levels of risk 30
 - [None of these] 0
 - [Don’t know] -10
- 6) **How confident are you of your organisation’s abilities to find and retrieve information or data on demand, e.g. for an audit or for compliance purposes? [Select only 1]**
- Not at all confident 0
 - Quite confident 10
 - Very confident 20
 - Totally confident 30
 - [Don’t know] -10
- 7) **Are business managers in your organisation and other non-IT staff able to access business applications, like ERP, CRM or accounting systems etc when they are teleworking or remote working? By remote working we mean working from any location using wireless technology; and by teleworking, we mean employees logging on from an office at home using a plug-in network access point. [Select only 1]**
- Yes 30
 - No 0
 - [Don’t know] -10
- 8) **Which of the following sum up your company’s status with respect to remote and teleworking? [Select all that apply]**
- We do not allow remote or teleworking at all 0
 - We only allow staff to work remotely or from home under certain circumstances 10
 - We actively encourage remote and teleworking 30
 - We think our employees are just as effective when working remotely 30
 - We do not trust our employees to work remotely or from home 0
 - We have the technical capability to support remote and teleworking 30
 - We do not have the technical capability to support remote and teleworking 0
 - We have flexible office space available on demand for remote and teleworkers 30
 - [Don’t know] -10

9) In your view, which of the following do you think are holding back your organisation? [Select all that apply]

- Knowing precisely where to invest in IT to get the best business return -10
- Customer management and understanding their needs -10
- Operational efficiency -10
- Not enough cash for capital investments -10
- Responding quickly to change -10
- Attracting and retaining the best staff – wherever they are located -10
- IT security -10
- Collaboration between employees in different parts of the organisation -10
- [None of these] 0
- [Don't know] -20

10) Which of the following steps has your organisation taken to be more environmentally friendly? [Select all that apply]

- Established a recycling scheme for consumables and hardware 20
- Adopted collaboration / meeting systems to reduce employee travel 20
- Improved the building fabric to save energy 20
- Adopted environmentally friendly purchasing practices 20
- Issued a personalised statement from the CEO about energy efficiency 20
- Issued an energy policy to all staff 30
- Set energy saving targets 30
- Other – please specify (Variable scores will be given against the carbon trust documentation)
- Nothing -10

11) In percentage terms, please indicate approximately how much your organisation's turnover has grown in the past 12 months? [DO NOT READ OUT, but select only 1 accordingly]

- More than 20%
- 15-19%
- 10-14%
- 5-9%
- 1-4%
- 0% - stayed the same
- Negative growth
- Don't know

- E N D -