Research Report – IT barometer 2009

A survey on the importance of IT in Finnish companies from the perspective of IT and business management

1. Introduction

The annual IT barometer of the Finnish Information Processing Association charts the importance of Information Technology (IT) for Finnish companies and organisations. The barometer gathers the views of the executive personnel about the utilisation of information technology, the kinds of changes to be expected within the next years, and the kind of IT know-how needed in the organisation in the future. The IT barometer can also be used to measure the differences of opinion between corporate and IT management personnel.

During 2008, two new themes arose strongly in the public IT discussion. These were the recession and social media. Social media, such as Facebook and LinkedIn, are sometimes also called peer networks. These were the special themes in the Finnish Information Processing Association IT barometer for 2009. The barometer examines the opinions of the survey respondents about the readiness of companies to utilise social media, as well as the effects of the recession on the utilisation of information technology. From the public discussion point of view, the relationship between IT utilisation and the financial recession is important because information and IT are the largest sources of productivity in national economies such as Finland. The information for the survey was gathered during the first months of the recession, December 2008 and January 2009.

Other themes for the 2009 IT barometer include IT risk management and IT governance. In connection with the IT governance theme, the survey included questions about measuring the commercial and other effects of IT.

Themes in the 2008 barometer included outsourcing IT functions and the role of the information manager in the companies. The outsourcing theme was further developed in the 2009 barometer.

The barometer is repeated annually, and it functions as a general measuring tool in the field of IT. An IT index, consisting of seven key figures, has been compiled from the replies to the barometer. The index enables the measuring and monitoring of yearly changes in the utilisation of information technology and the investment environment.

1.1. Research Data

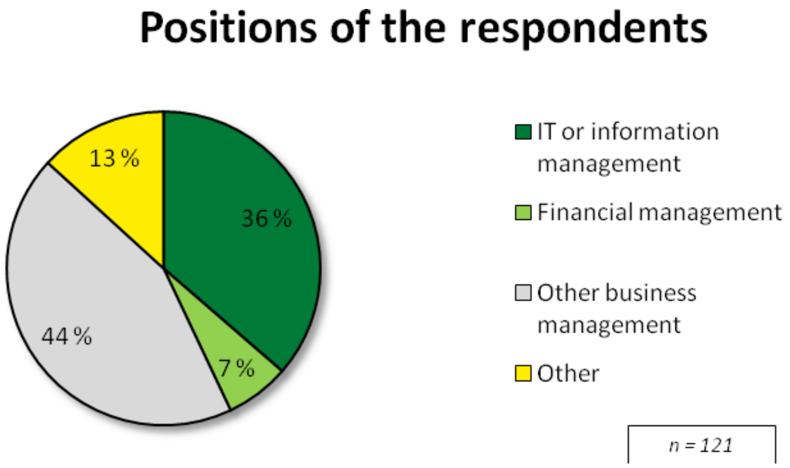
The IT barometer was conducted as an online survey. Participants received an email with a link to the survey. The target group was extracted from the Finnish Information Processing Association marketing database. The survey was targeted at representatives of operational, IT, and information management of Finnish companies with over 500 employees. The survey consisted of 26 structured and open questions.

PR consultancy Conexio, FIPA, and Information Systems Science at the Department of Business Technology of the Helsinki School of Economics planned the survey and compiled the survey form together. FIPA was responsible for the technical implementation, whereas Conexio analysed the results and prepared the research report. Tomi Dahlberg from the Helsinki University of Technology provided method assistance for the research and took part in analysing the results and compiling the research report together with Conexio and FIPA.

A total of 121 respondents participated in the survey. The pie diagram on the following page illustrates the division of the respondents between business and IT management personnel.

In order to increase reliability, the replies from persons working in the same company were rated as one reply. There is some minor variation between rated and non-rated replies, but the differences are not significant. Therefore the statistical significance of the differences between the rated and non-rated replies was not analysed. However, in questions comparing the views of business management and IT management, non-rated replies were used.

In order to increase the reliability of the results, as well as for research purposes, we examined whether the results were affected by whether or not a respondent worked in an ICT company. Some significant differences were found in the comparison of the replies from people working in ICT companies and in other companies. For questions where the deletion of the replies of people working in ICT companies had a significant effect on the results, the deviant findings have been noted in the research report. Mainly, however, the answers were consistent.



A total of 121 respondents from organisations with over 500 employees: 44 respondents from IT and information management, 77 from general or financial management

When evaluating the results of the survey and their reliability, it must be noted that they are based on the individual opinions of the respondents and therefore do not represent the official positions of the organisations. Considering the above-mentioned, we consider the results of the survey reliable.

1.2. Summary

- During the initial stages of the financial recession, understanding the importance of information technology was at quite a high level.
- The respondents thought that IT management and utilisation were well taken care of. The views of the business management have changed to a more positive attitude towards IT functions.
- The IT index grew by 23% to 123. This reflects the growth in the importance of information technology in companies in the challenging financial situation. The key figures that reflect the effect of IT on business activities were almost two times higher than in 2008. 96% of the companies saw the role of IT functions as a competitive factor increasing in the future (in 2008, this amount was 88%).

- The companies see that in the future, the share of IT costs will stay at the same level as before or decrease. This is a significant change compared to the survey in 2008: last year, the companies believed that the costs would increase moderately.

- In the respondents' opinions, IT produces more turnover growth, cost savings, and improved profitability than the Finnish national economy.

- Measuring the effects of IT is a common issue in Finnish companies. The business effects of IT are not widely measured using reliable business indicators, which means that the benefits of IT for business activities are largely based on beliefs. Approximately 50% of Finnish companies say they do measure the goals of IT acquisitions or the effects of IT innovations on their business.

- The financial recession has added to the pressure to cut IT costs and reduce the IT development operations. 61% of the companies believe that the recession increases the pressure of cutting IT costs. This pressure may override the views of the IT productivity potential.

- Outsourcing is slowing down to some extent. Compared to last year, fewer companies stated the view of the respondents as trying to outsource as much of the IT operations as possible.

- IT outsourcings and acquisitions are often lacking in clear business objectives, and the realisation of the set objectives is not evaluated with measurements.

- Approximately 50% of IT projects overrun their projects and schedules.

- Information technology has an even bigger role than before in creating new innovations and cost savings in companies. 65% of the companies feel that innovative solutions, utilising online business and IT, function as a means of coping in the challenging financial situation.

- Although online business activities have an ever-larger role in companies, social media has not been well prepared for. Few organisations have clear rules for the use of peer networks and social media. In order to utilise online business activities to a significant extent, such rules should be created.

- The use of IT governance methods in Finnish organisations is only beginning. By far the preferred governance model is ITIL. 55% of Finnish companies use ITIL.

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2. Key Figures and the IT Index of the IT Barometer

The results of the IT barometer have been reduced into key figures and then calculated into an IT index, which is a numeric representation of how Finnish companies utilise IT. The key figures and the IT index facilitate comparison between the studies in various years. The basic value of the index was set at 100 in 2008.

IT index 2009	2009	2008	Index value 2009
Current IT costs as a percentage of turnover	4.46%	4.45%	1.00
IT costs as a percentage of turnover after three years	4.49%	4.84%	0.93
The impact of IT-based innovations on turnover last year	8.19%	4.27%	1.92
Costs saved by improving performance through IT as a percentage of turnover	7.57%	4.54%	1.67
Organisations that consider it difficult to find IT experts for their needs	47%	52%	0.90
Organisations in which IT creates added value by enabling the development of new innovations and business operations	82%	78%	1.05
Organisations that develop IT as a strategic resource	77%	68%	1.13
IT index 2009 (n=100)	**123**	**100**	

The comparison of the 2008 and 2009 key figures shows that the IT index value has grown by an amazing 23% from 2008. The growth indicates that the respondents have a better understanding of the importance of information technology for business activities and that information technology is more often seen as enabling the growth of the business operations instead of as a pure cost factor. The most important changes in the key figures reflect the views of the respondents about the growing role of information technology in enabling new innovations and cost savings. These key figures of the effect of IT on business activities were almost two times higher than in 2008. Also, the fact that a larger part of the respondents replied that their organisation is developing IT as a strategic resource, speaks of the growing importance of IT.

At the same time, the key figures show that the portion of IT costs from turnover is estimated to stay quite stable for the following three years. Last year the respondents were still expecting a clear growth in IT costs. One reason for the change in the expected IT costs could be the recession. In light of the recession and last year's expectations of rising IT costs, it is interesting to see that the respondents estimated that the share of IT costs from the turnover did not rise or fall during the past year. Companies also said that the search for IT experts has been somewhat easier than previously, which is probably at least partly due to the recession.

IT costs as a percentage of turnover	*Average*	*Dispersion*	*Median*
2009 current	*4.46%*	*4.47*	*3*
2009 in 3 years' time	*4.49%*	*4.65*	*3*
2008 current	*4.45%*	*4.75*	*3*
2008 in 3 years' time	*4.84%*	*5.54*	*3*
The effect of IT on the company's business	*Average*	*Dispersion*	*Median*
2009 increase in turnover from innovations and forms of business enabled by IT	*8.19%*	*11.38*	*5*
2009 savings in total costs from rationalised activities enabled by IT	*7.57%*	*7.66*	*5*
2008 increase in turnover from innovations and forms of business enabled by IT	*4.27%*	*7.07*	*2*
2008 savings in total costs from rationalised activities enabled by IT	*4.54%*	*5.64*	*3*

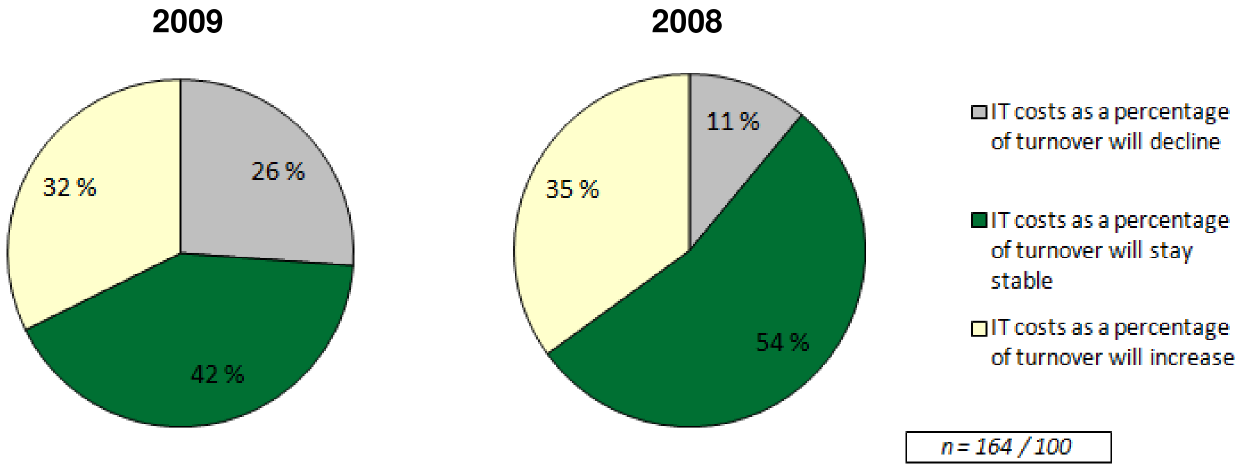
The comparison of the key figures shows that the respondents' views are partially inconsistent: the relative portion of IT costs from the turnover was estimated to stay as it was, while IT was expected to improve turnover, enable cost savings, enable new innovations and business operations, and develop as a strategic resource. Later in the report we will return to whether the respondents think the organisations are measuring the business effects of IT, such as the impact of IT innovations on turnover.

In order to give the analysis more depth and reliability, we have also examined how the deletion of replies from people working within companies in the ICT branch will affect the key figures. The key figures did not change significantly in comparison with the entire data. The most significant deviation is shown as the lower portion of IT costs from the turnover. In non-ICT organisations, the portion of IT costs from turnover is also expected to grow moderately. Viewed together, the key figure tables suggest that the management of both IT-intensive and other organisations feel that the importance of IT has grown.

March 2009, non-ICT companies	2009
Current IT costs as a percentage of turnover	4.03%
IT costs as a percentage of turnover in three years	4.15%
The impact of IT-based innovations on turnover last year	8.05%
Costs saved by improving performance through IT as a percentage of turnover	6.94%
Organisations that consider it difficult to find IT experts for their needs	50%
Organisations in which IT creates added value by enabling the development of new innovations and business operations	83%
Organisations that develop IT as a strategic resource	78%

3. The Impact of IT on Costs and Turnover

3.1. IT Costs as a Percentage of Turnover

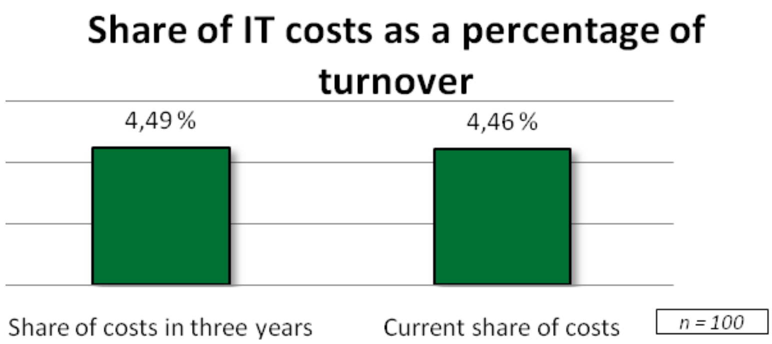


The respondents' views on how the percentage of IT costs will change during the following three years.

The survey studied the share of IT costs in the company's turnover, and what direction the IT costs were expected to develop in the coming years. The results of the barometer show that the respondents expect the portion of turnover taken by IT costs to stay relatively stable for the following three years. If the companies' turnovers decrease according to financial predictions for 2009 and 2010, the IT costs will decline as well. The replies show a clear change from the results of the previous year's barometer.

Similarly to last year, a third of the respondents expect the share of IT costs from the turnover to grow. At the same time, one fourth of the respondents think that IT costs will decrease. Last year, the amount was 10% of the respondents. The result reflects the situation in the first months of the financial recession.

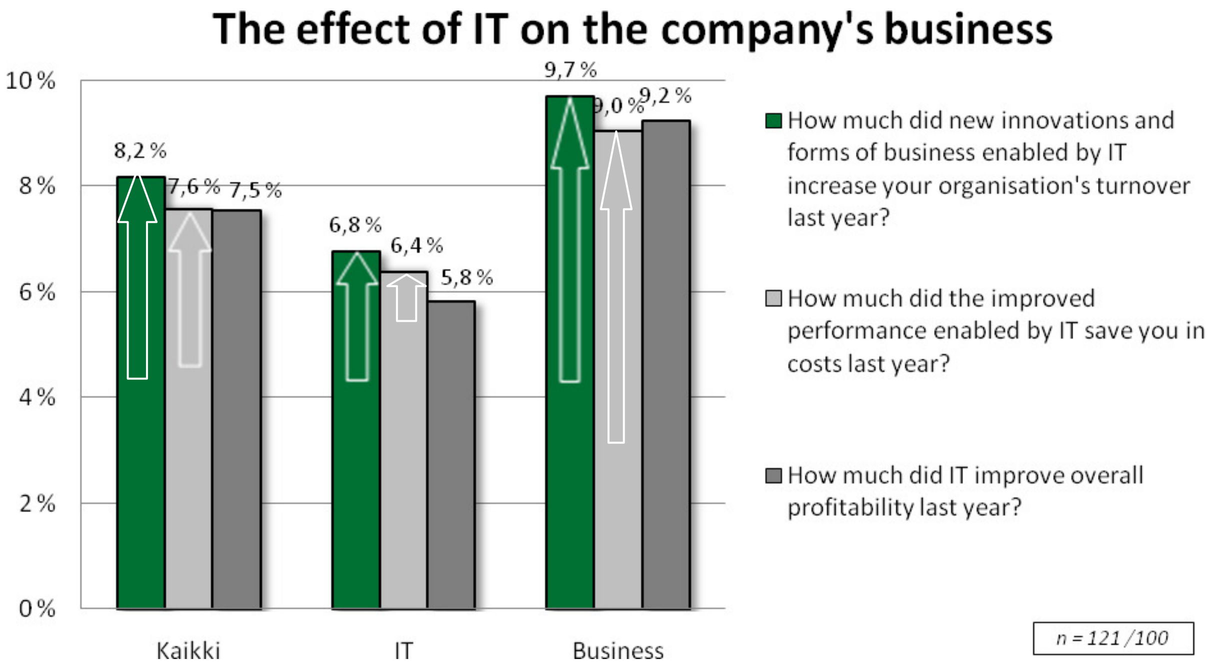
The realised IT costs were estimated to have stayed stable. In the previous year's survey, the share of IT costs from the turnover was estimated to grow significantly, but according to the survey, this has not happened.



The percentage of turnover used on IT at the present moment and after three years.

	Share of costs in 3 years	Standard deviation	Current share of costs	Standard deviation
2009	*4.49%*	*4.65*	*4.46%*	*4.47*
2008	*4.84%*	*4.75*	*4.45%*	*5.54*

3.2. The Effect of IT on the Company's Turnover and Productivity



The effect of IT on a company's turnover. The arrows represent the change from last year's results.

In addition to the costs, we examined the views of the respondents about how much IT has improved their company's turnover with new innovations, how much costs have been saved by improving the company's performance through IT, and how much IT as a whole has improved the profitability of the operations. The bar chart above illustrates the total results and the differences between the replies of business and IT management.

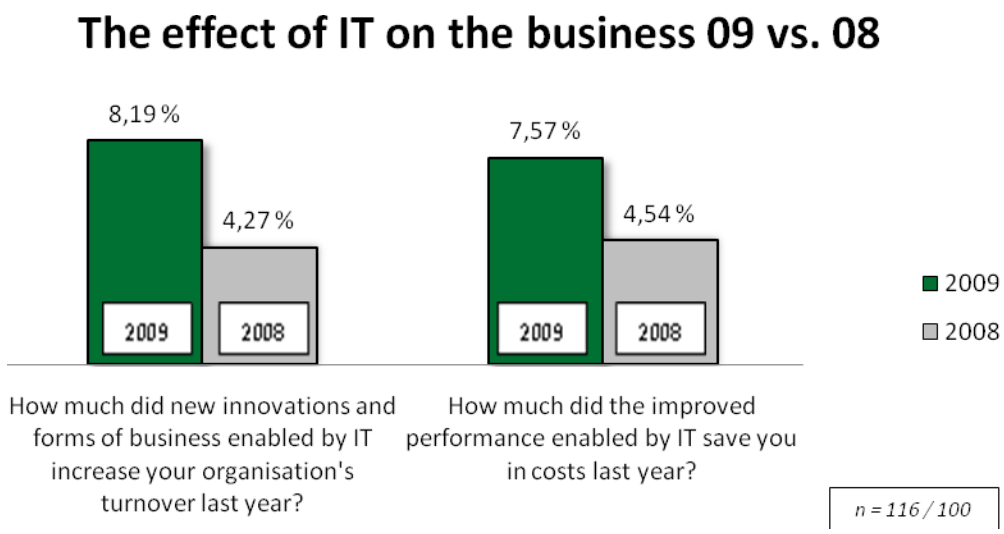
The respondents estimate that IT-based innovations increased the turnover by approximately 8% last year. Improving performance through IT was seen to have enabled organisational cost savings of approximately 7.5%, and IT as a whole to have improved the profitability of the activities by 7.5%. The business management estimated the effect of IT on innovations, cost savings, and profitability as significantly higher than the IT and information management.

	All	*Dispersion*	*IT management*	*Dispersion*	*Business management*	*Dispersion*
How much did new innovations and forms of business, enabled by IT, increase your organisation's turnover last year?	*8.2%*	*11.38*	*6.8%*	*7.09*	*9.7%*	*16.35*
How much did improved performance enabled by IT save you in costs last year?	*7.6%*	*7.66*	*6.4%*	*6.42*	*9.0%*	*11.76*
How much did IT improve the total profitability last year?	*7.5%*	*9.08*	*5.8%*	*6.00*	*9.2%*	*12.56*

A significant change can be seen in the results between 2009 and 2008. As seen in the bar chart below, the respondents estimated that IT will improve turnover more and produce more savings than the previous year.

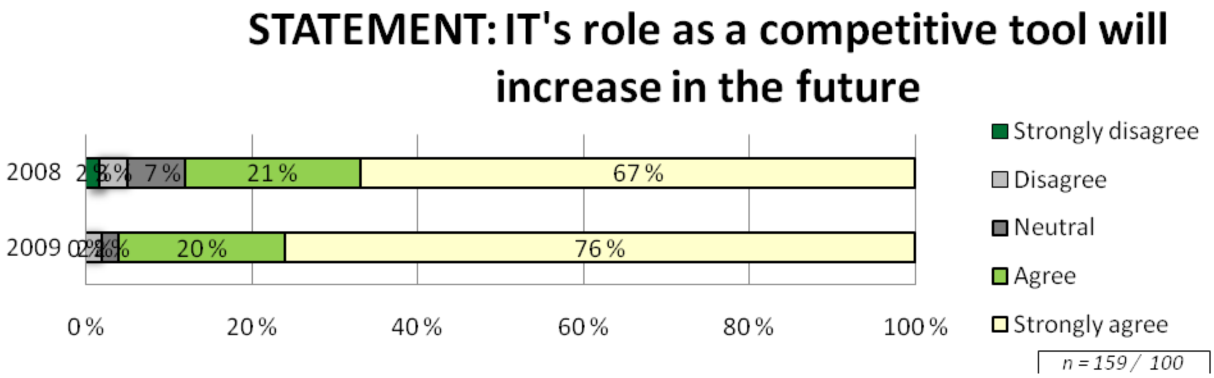
What do these results tell us? According to the results, the impact of information technology on the growth of turnover, cost savings, and growth of profitability clearly exceed the corresponding figures measured on the Finnish national economy level. If the figures based on the estimations of the respondents correspond to the ones calculated from the organisations' accounts, this can be seen as a clear indication of the role of information and IT as the most important source of profitability and financial growth. However, the differences between the business and IT management views suggest that this is more likely based on images than measurable figures. The results on the amount of measurement of the impacts of IT on the business activities, presented later, support this view.

Be that as it may, the results show a significant change in the views of the respondents during the past year. Business management especially felt that IT was more important than before for the business activities of the organisations. The impacts of the financial recession can be seen as being reflected in the high productivity expectations that the business management had for IT.



4. The Impact of IT on the Company's Competitiveness

One of the central goals of the IT barometer was to find out the opinions of the respondents on the impact that information technology has on the competitiveness and business activities of the companies. The diagram below illustrates the views of the respondents on the role of IT as a future competitive tool.



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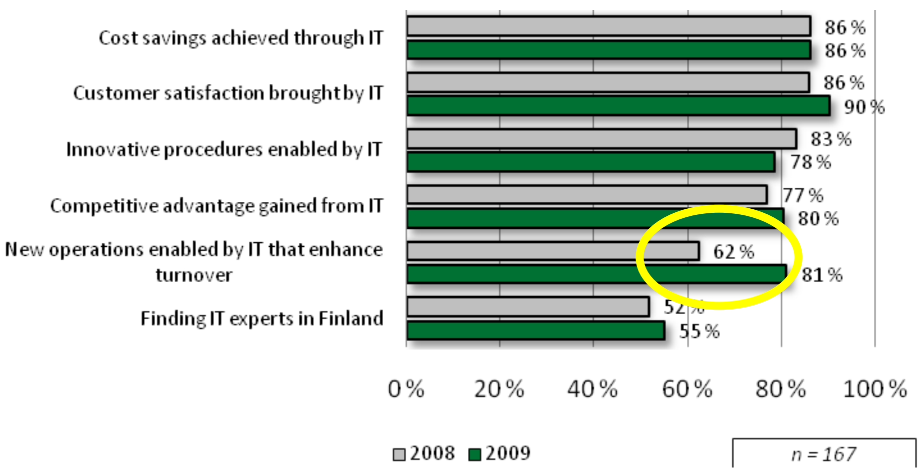
The views of the respondents to the argument that the importance of IT as a competitive tool will grow in the future.

Compared to last year, the role of IT as a competitive tool is seen to be emphasised even more than before. Almost all respondents saw IT as a significant competitive tool in the future. Only 4% of the respondents disagreed with the statement. Last year, the figure was 11%.

4.1. The Effect of IT on the Company's Success Factors

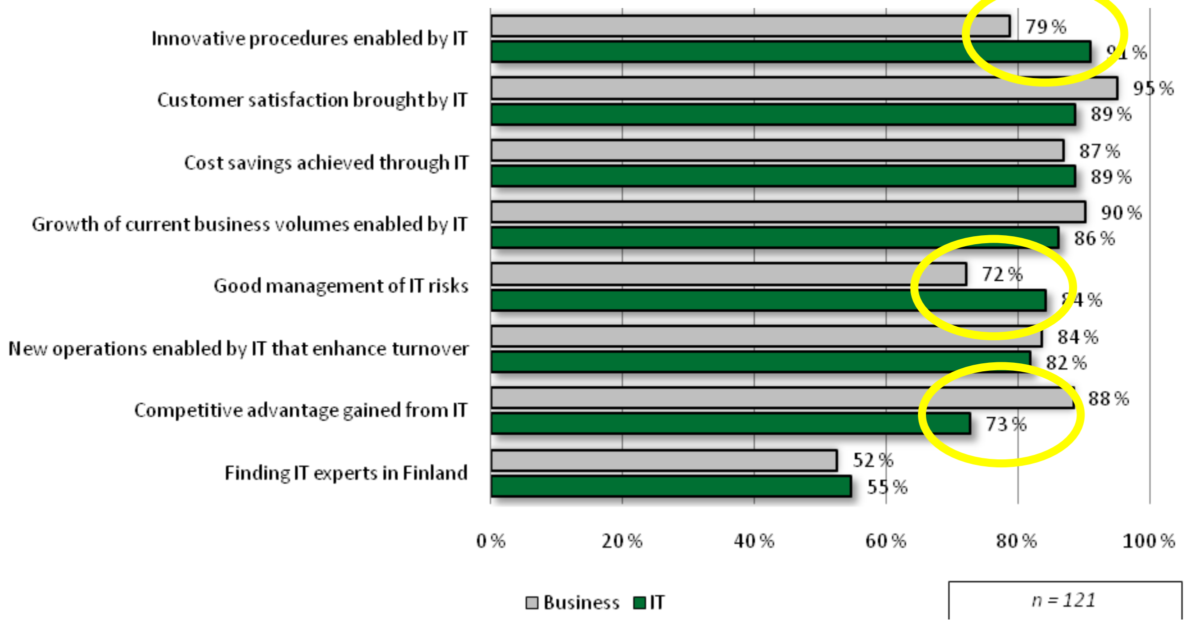


The importance of different factors for the success of the company (the percentage of respondents who regard the factor as important for the success of the company).

The survey also studied the factors through which IT affects competitiveness. The overall results show that the respondents saw IT affecting competitive advantage through various success factors. Compared to the results of the previous year, the views of the impact of IT on compatibility had become much more diverse. The most significant single change was the strengthened view that IT enables new operations that can increase turnover. The results may partially reflect the recession, which raises the expectations related to multichannel services, electronic services and business activities, as well as products and services that utilise information.

The views of IT and the business management personnel differed to some extent. The basic differences have been noted earlier in the report. The business management emphasised the competitive advantage more and saw the possibilities of IT as a success factor in creating competitive advantage as larger than the IT management. The most significant differences included enabling innovative methods and IT risk management, which were especially emphasised in the replies from the IT management.

During the early months of the financial recession, both groups considered finding IT experts relatively difficult. This could limit the utilisation of the impact of IT on competitiveness.



Differences in the views of the IT and business management. The importance of different factors for the success of the company (the percentage of respondents who regard the factor as important for the success of the company).

4.2. Competence Areas that Affect the Company’s Success – Open Answers

IT and business managers were also asked to describe in their own words, which competence areas will in the future be important for their company's success. The following areas were highlighted:

- Developing the business activities and improving the business processes with IT, especially IT's ability to be flexibly adjusted for the needs of the business activities.
- Integration of systems (operations management, CRM, invoicing, reporting, etc.).
- Architecture and its flexibility.
- Financial benefits from IT, and measurement of the profit from investments.
- Management of IT Projects.

- Acquisition of IT services, purchasing competence.
- Management of outsourcing.

The importance of IT for business development and rationalisation of business processes was emphasised in several replies. Utilisation of modelling and simulation and information lifecycle management were mentioned as concrete examples of rationalisation of processes. IT utilisation was also seen as a means of developing services offered to the customers, such as online trading.

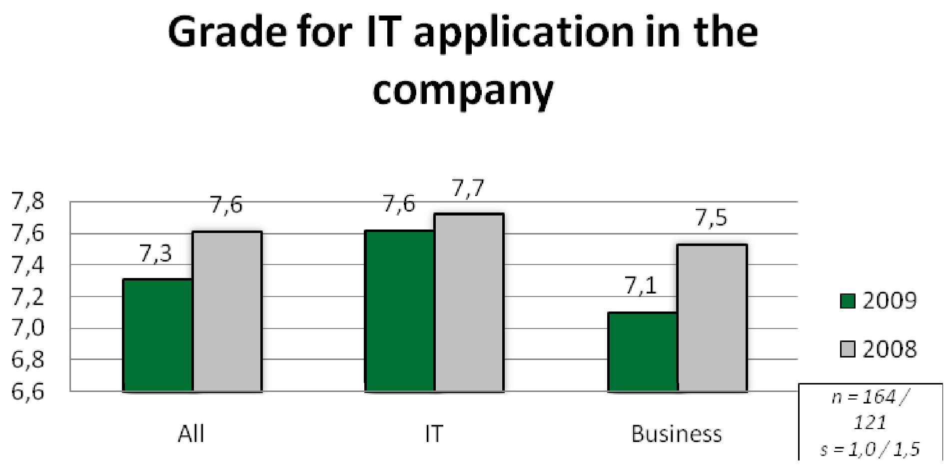
Several respondents emphasised the cooperation between business management and information management as an important competence area. Fluent cooperation is a requirement for successful development of business activities. For example, requirement specifications require a functional dialogue between information management and business management. The IT experts were hoped to master the technology and to have a good understanding of business processes and the ability to interact with the business management.

Networking with customers and partners, as well as command of the processes using system integration were highlighted in the open answers as another important competence area. For example, knowledge of the automation and integration of electronic invoicing and invoice management as well as other business projects within the company's systems and processes was considered important. Also knowledge about the total architecture and architectural planning were mentioned as important success factors for the future. The ability to create flexible and durable IT architecture policy definitions supports the innovations and development of the business activities.

Management and the productive completion of IT projects were also highlighted in the replies. Several respondents also recognised the importance of expertise in IT service acquisition, such as asking for tenders, partner selection, and the ability to develop the operating models for outsourcing partnerships. For the newer competence areas, for example Agile methods and lean thinking, service-oriented architecture, and SaaS were highlighted.

5. The Ability of Organisations to Utilise IT and the Demand for Competence

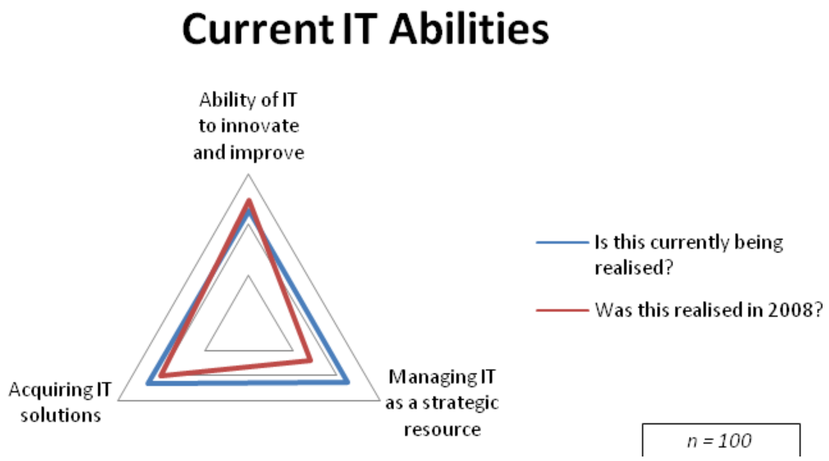
The respondents were asked to rate the application of IT in their company on a scale of 4 to 10. The average grades dropped from the previous year. The deterioration of the grades from business management explains most of the fall in the overall average as shown in the bar chart below. The result could be a signal of the growing difference between the expectations that the business management has on IT and the actual status of IT utilisation in the first months of the recession even though the average grade only dropped relatively little.



The survey also studied the IT abilities of organisations in innovating and improving their operations, acquisitions of IT solutions, and managing IT as a strategic whole. The respondents were asked to estimate the current situation for each ability in their organisation, the importance of the ability in the future, and the expertise need for the ability.

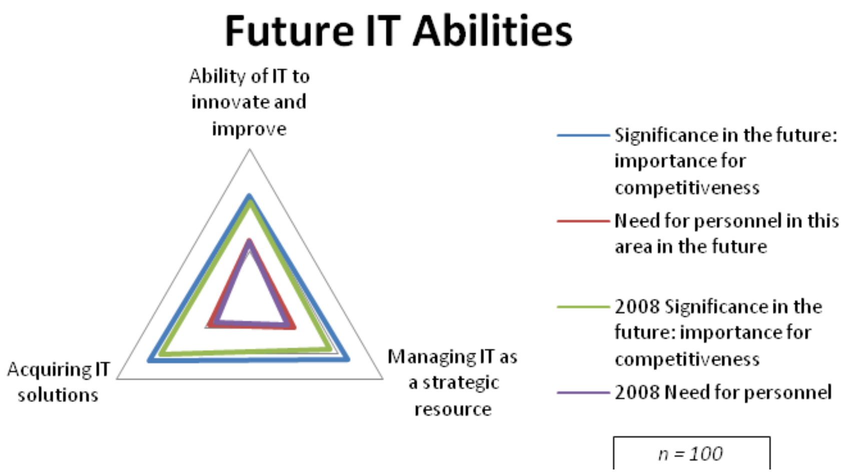
The results are shown on the diamond chart. The agreeing replies are on the outer side of the chart, the disagreeing ones are shown on the inner side. The chart helps to perceive the ability situation, expertise needs, and problem areas.

5.1. IT Abilities



The current IT abilities in the companies.

According to the respondents, the companies have an average of at least a fair level of expertise in all the three areas studied. In the 2008 barometer, the respondents saw shortcomings in managing IT as a strategic whole, whereas this year that seems to have been remedied.



The IT abilities of the company and their importance for success and need for personnel, 2008 and 2009.

The estimations about the importance of the abilities in the future and the future need for personnel are very similar for 2008 and 2009. As noted earlier, the respondents considered the acquisition of IT solutions and managing IT as a strategic resource more important than the previous year.

5.2. The Ability of IT to Innovate and Create Added Value for the Business Activities

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
IT creates added value by enabling the development of new innovations and improving business processes in our organisation.	8%	7%	4%	39%	42%
It is very important for our organisation's success that we are able to efficiently utilise IT for innovation and improving business processes.	0%	2%	2%	19%	76%
In the future we will need more personnel with experience particularly in utilising IT for innovation and for improving business processes.	1%	9%	17%	30%	44%
We are well aware of the added value created by IT and its impact on our business processes based on reliable measurements.	15%	22%	11%	32%	20%

The survey examined the opinions that the respondents had about the ability of IT to innovate and create added value for the business, using the statements above. Almost all respondents considered IT utilisation in innovation and operation improvement important or very important for the success of the company. In addition, 75% of the respondents estimated that their company will in the future need more personnel able to use IT for creating new innovations and processes. Measurement of the innovative effects of IT is, however, much less developed. Approximately 50% of the respondents estimated that their company knows the added value and business impacts of IT innovations and processes, based on reliable indicators.

5.3. Strategic IT Management

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Our organisation manages and develops IT as a strategic resource.	3%	12%	8%	37%	40%
It is very important for our organisation's success that we manage and develop IT as a strategic resource.	0%	0%	2%	11%	86%
In the future we will need more personnel with experience particularly in strategic IT management.	4%	9%	20%	28%	39%
We connect the goals of the IT strategy to the business strategy goals and are able to estimate the impacts of IT on our business operations based on reliable measurements.	15%	17%	14%	34%	20%

The survey examined the opinions of the respondents about the strategic IT management, using the statements above. Almost all of the respondents estimated developing IT as a strategic resource to be important for the success of the company. According to the survey, the situation looks good, as 2/3 of the respondents see that their company is developing IT as a strategic resource. The measurement is however once again shown to be undeveloped. Approximately 50% of the respondents estimated that their company is able to reliably measure the impact of IT on the business.

5.4. Selecting the IT Solutions

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree
In our organisation the solution selection process functions smoothly and IT acquisitions are done in a manner that takes the needs of the company into consideration.	3%	9%	9%	38%	42%
It is central for the organisation's success that in the future the solution selection process functions smoothly and that IT acquisitions are done in a manner that takes the needs of the company into consideration.	0%	0%	5%	11%	84%
In the future we will need more personnel with experience particularly in acquiring IT solutions and who can take the needs of the company into consideration.	4%	9%	26%	30%	31%
We are setting measurable targets for IT acquisitions in order to consider the business needs.	3%	15%	16%	32%	34%
After IT acquisitions, we monitor the reaching of targets using reliable measurements.	14%	20%	13%	33%	19%

The survey examined the opinions of the respondents about the selection of IT solutions, using the statements above. The results on selecting IT solutions are in accordance with the previously reported results. Almost all respondents considered fluent IT management acquisitions to be important for successful business operations. 80% of the respondents saw that the IT solution acquisitions were fluent, and that the acquisitions take into account the needs of the business operations. Some shortcomings could be seen in measuring the IT acquisitions: 2/3 of the respondents said that their company sets measurable targets for IT acquisitions, but only 50% monitor the reaching of these targets with reliable measurements.

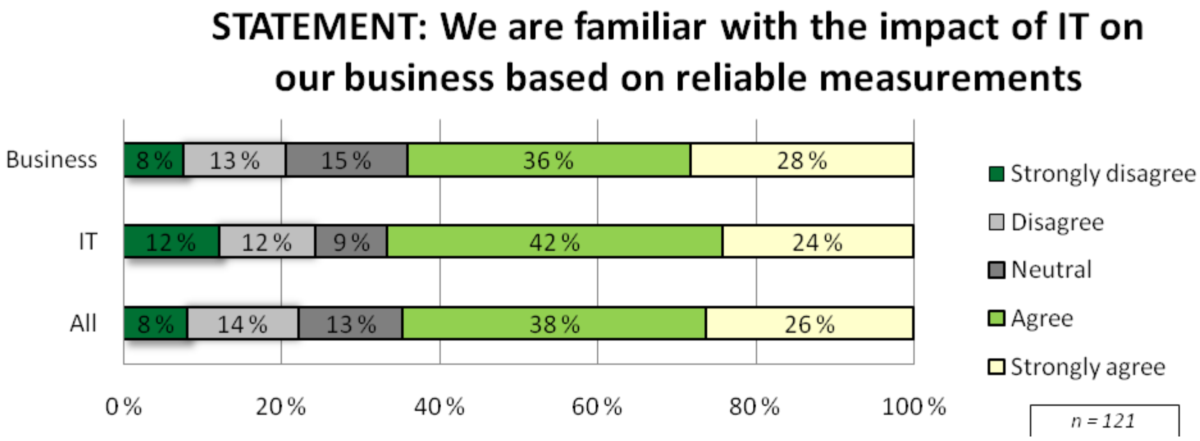
5.5. Does IT Serve Achieving Strategic IT Goals?

The views of the respondents to the argument, change from 2008 to 2009.

Managers in Finnish companies consider the use of IT in reaching strategic goals as extremely important. Almost all respondents saw that IT supports reaching the strategic goals of the company as a partner of the business operations. The responses show only slight strengthening of the view compared to the previous survey. It is also worth noting that the estimations of business and IT managers coincide with each other.

The views of the respondents to the argument, differences in the views of the IT and business management.

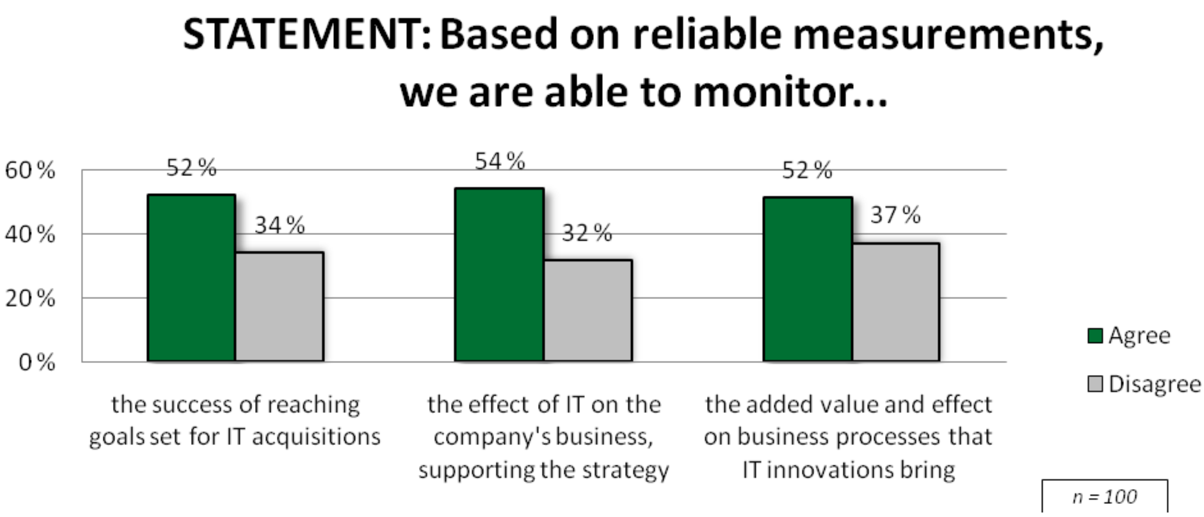
5.6. Measuring IT



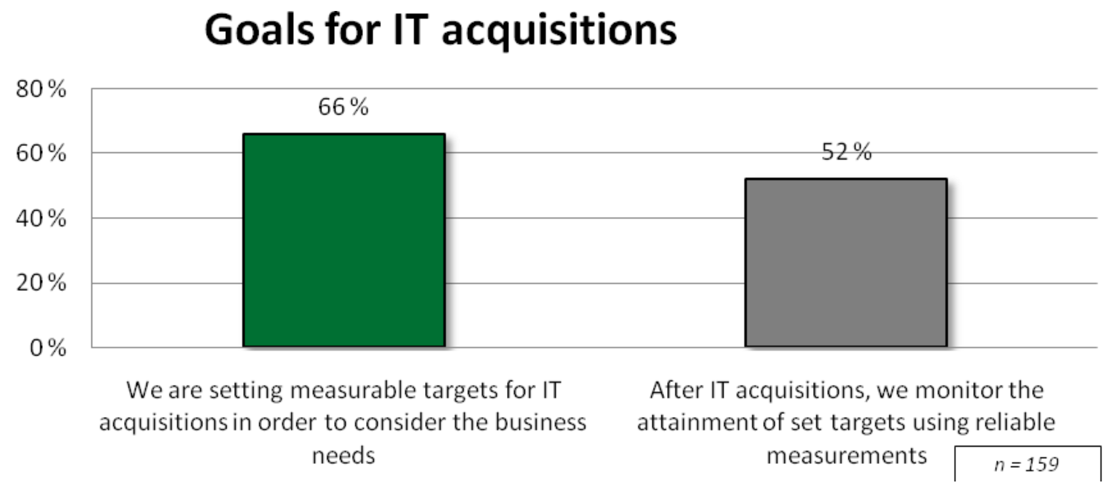
At the end of this section, we have placed several control statements (see above) that examined the business impact of IT. When asked about the reliable measurement of the business impacts of IT in various contexts, the typical reported results were that only approximately 50% of the respondents said that their organisation measures the impacts of IT reliably or fairly reliably.

When asking about measurement out of context, the results were slightly different: a little over 60% of the respondents said that their organisation measures the business impacts of IT at least fairly reliably.

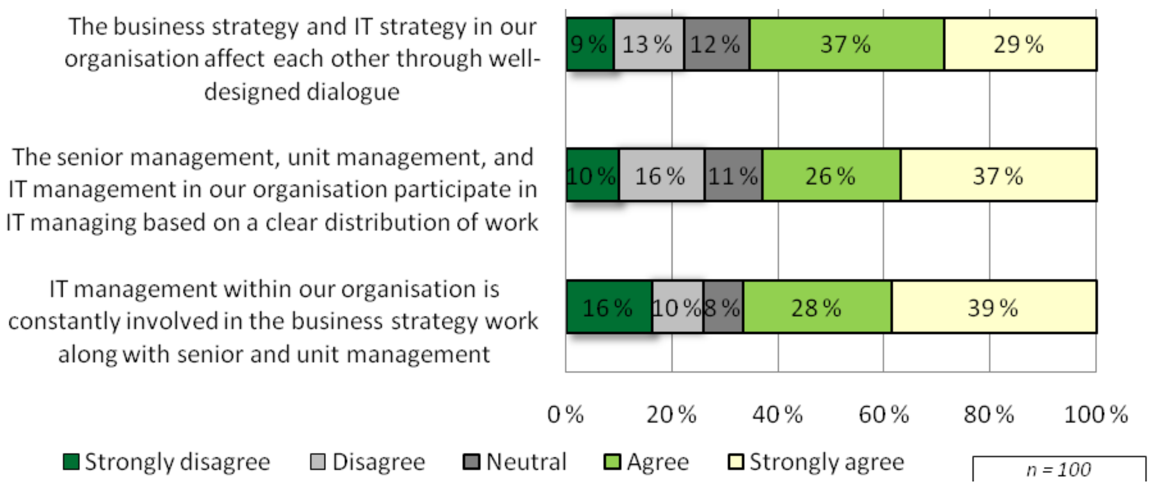
Based on the results of this survey, it is not possible to give an answer to whether reliable measurement of the business impacts means measuring the impact of IT on the growth, cost savings, or the profitability of the business activities. This was asked in the beginning of the survey, and the results were reported in section 3.2. We estimate that understanding the business importance of IT and measuring the business impact of IT reliably are not comparable. The views of the benefits of IT for business are more like beliefs than actual results based on measurements.



When studying the measurement of the various effects of IT, it can be noted that only 50% of the companies are able to monitor the goals set for IT acquisitions, the impact of IT on business as strategic support, or the added value and impact on business processes of innovations that utilise IT, based on reliable measurements. For IT acquisitions, 2/3 of the companies set measurable targets for IT acquisitions, but only 50% monitor the reaching of these targets with reliable measurements.

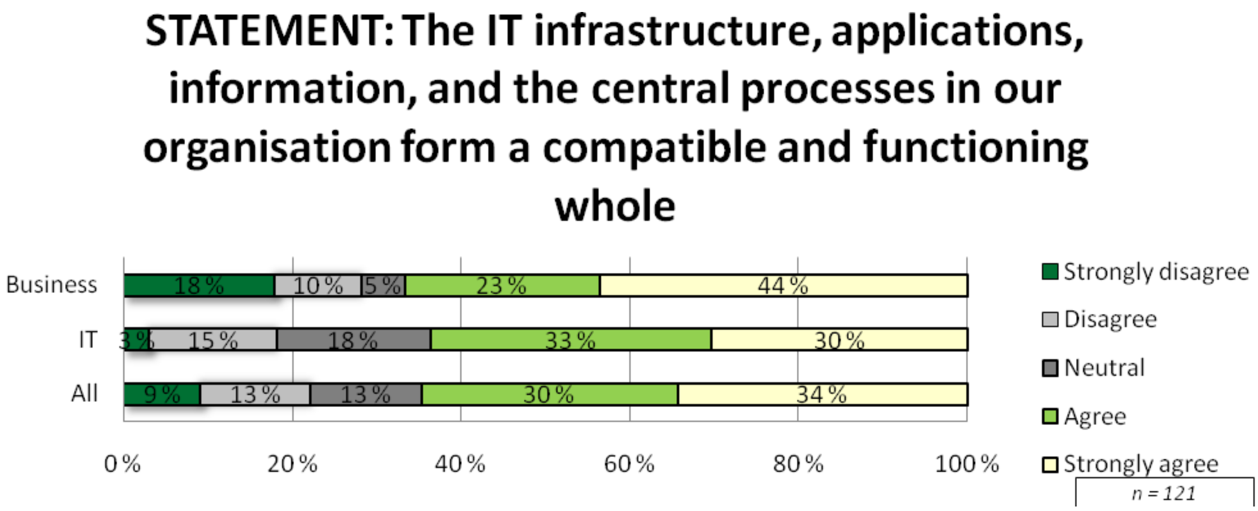


5.7. Cooperation Between Business and IT



Cooperation between business and IT, views of the respondents to the argument

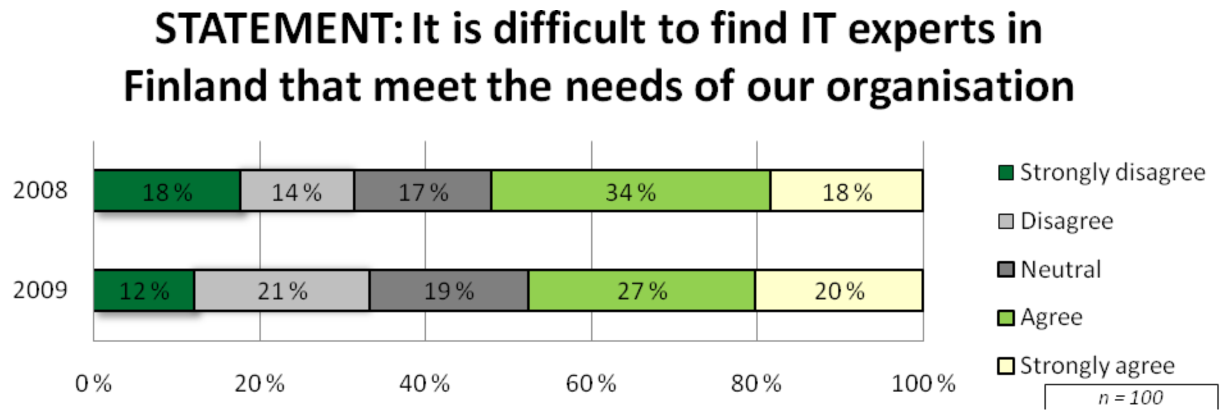
The survey examined the opinions of the respondents about the cooperation between business and IT, using the statements above. According to the answers, in approximately one third of the companies, the business strategy and IT strategy affect each other through a functioning dialogue, the senior management, business management and IT management have agreed on clear responsibilities on managing IT operations, and the IT management is constantly involved in the work on business strategies. A third of the companies have a fairly functioning dialogue, and in the last third, the dialogue is poor. Even though the results paint a positive picture about the cooperation of business and IT in Finnish companies, the positive cooperation results do not reach the same level as results reported earlier about the strategic importance of IT for business. Of those, almost 100% were positive.



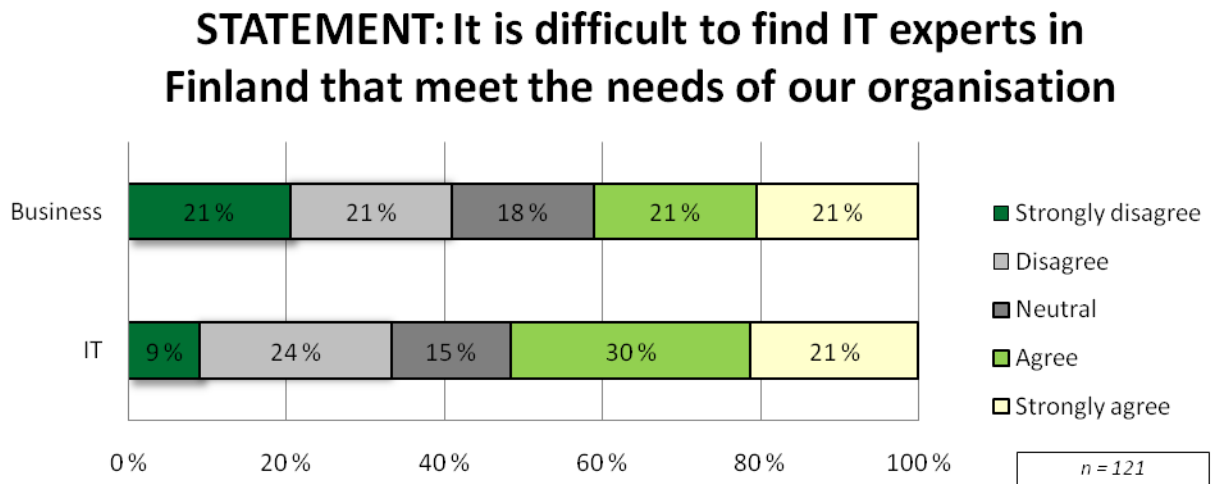
Cooperation between business and IT, views of the companies on the argument

The views of the respondents on the results of the cooperation between business and IT were studied using the above statements about the architecture and the compatibility of its parts. The results are consistent with, although somewhat more positive than, the results on the cooperation between business and IT. The business managers viewed the architecture compatibility as better than the IT managers.

5.8. Finding IT Experts in Finland

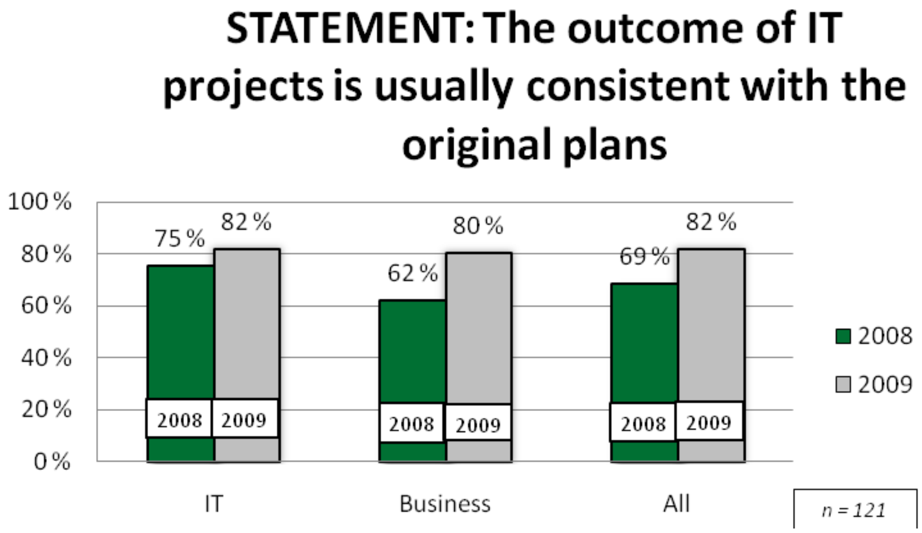


In the first stages of the financial recession, finding IT experts for the expertise needs of the company was still considered quite problematic. Even though IT is generally seen as a factor that affects the success of companies profoundly, the lack of experts will limit the success possibilities of the company. A total of 48% of the respondents considered it hard to find IT experts in Finland. However, the situation is slightly better than in 2008. The IT management considered finding experts more difficult than the business management.



6. Success of IT Projects

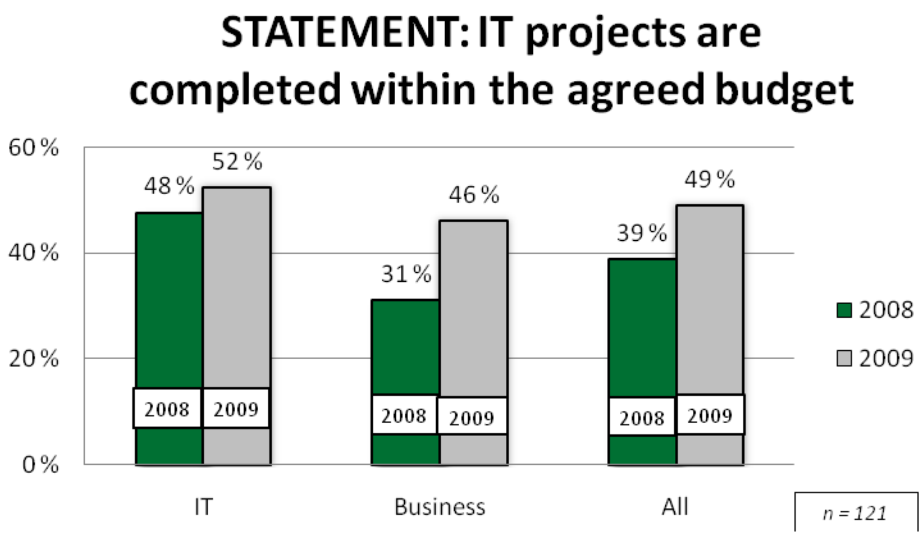
The survey studied whether IT projects are successful in Finnish companies, and whether the views of the business and IT management about the success of the projects differ from each other. The respondents were asked to evaluate whether the planned outcomes of IT projects in their organization are reached and whether projects are realised within the schedule and budget. The barometer survey from 2008 showed that the corporate management considered the IT projects to be often problematic. The 2009 barometer shows a considerable improvement of the situation.



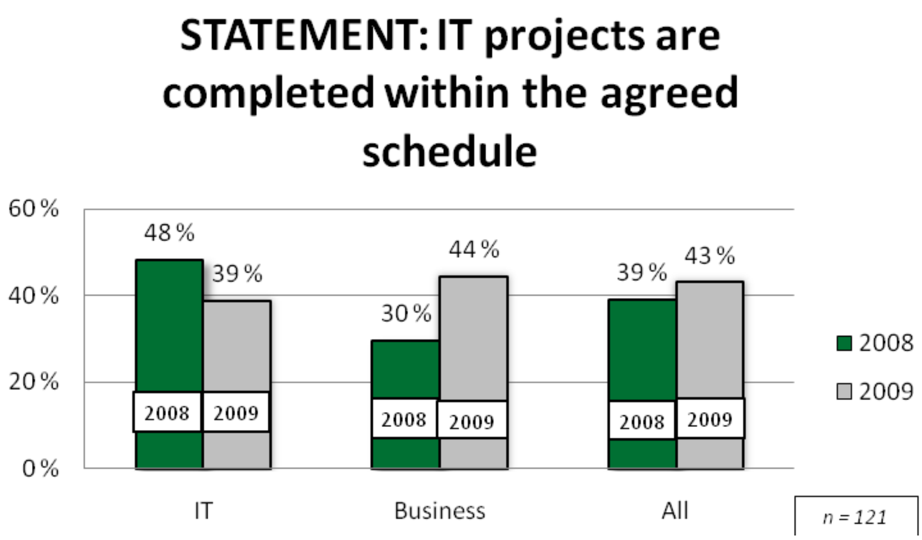
The respondents' view on whether the outcomes of projects match the agreed plans.

The results shown in the above bar charts clearly indicate that there are still differences between the views of the business management and the IT management about the success of IT projects, even though the differences are smaller than last year.

The views of the respondents about the success of the IT projects have also become more positive. The business management was in part even more positive about the success of IT projects than the IT management. Still the amount of respondents who thought IT projects stay within budget was less than 50%.



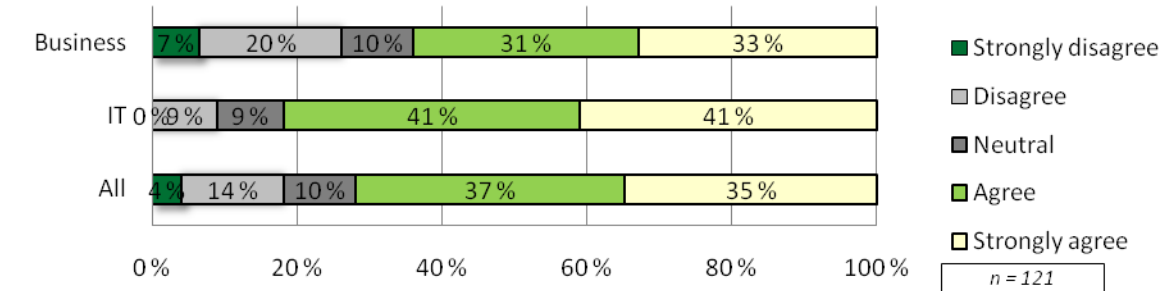
The perception among respondents on whether IT projects are realised within budget.



The perception among the respondents on whether IT projects are realised within schedule.

For the project schedules, the situation is similar. Less than 50% of the respondents think that IT projects are realised within schedule. It is interesting to see that the faith of the IT management in the project schedules has decreased significantly from the previous year. This may be related to the financial recession. During a recession or when preparing for recession, IT projects may be given even tighter schedules than usual.

STATEMENT: IT projects achieve the business goals set for them



The results show that IT management considers that IT projects usually reach the business goals set for them. The business management is more sceptical. The respondents think that approximately 70% of the organisations reach the business goals set for IT projects well or fairly well.

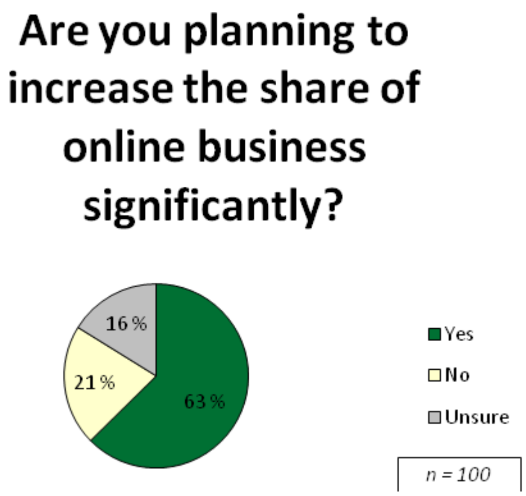
It is worth noting that according to the previously reported results, 2/3 of the companies set goals for IT acquisitions, and only half of the companies use reliable measurements to monitor the reaching of the goals. Therefore the extremely positive views of the IT project success are more likely to reflect beliefs than reliably measured results.

7. Utilisation of Peer Media and the Internet

In almost all industries, online business has become an integral part of the business. Utilising the Internet makes managing logistics easier, brings the customers close to the company, and enables management of complicated value chains. Almost all organisations do online business in one form or another.

Web 2.0 technologies, i.e. peer media, have recently received a lot of attention in the media. With peer media, the Internet is more interactive than ever and at least a part of the content production has become the responsibility of the users. The IT barometer examined how Finnish companies are prepared for this change and how they utilise the peer media and the Internet.

7.1. Increasing Online Business

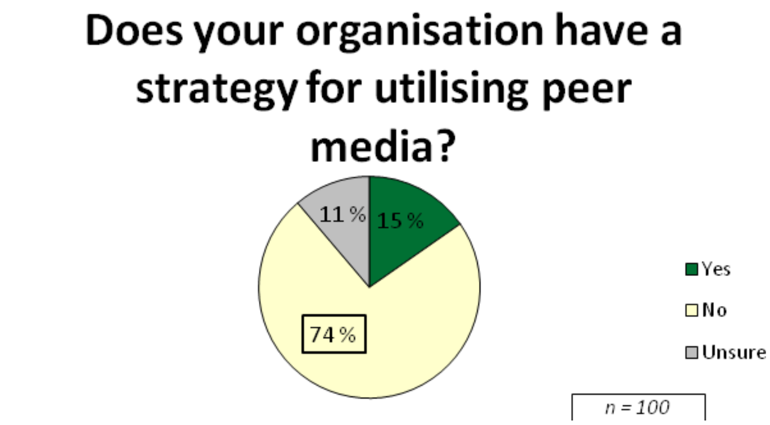


The distribution of companies that intend to increase the share of online business and have an online business strategy.

We asked the respondents to evaluate the importance of the Internet as a business channel. Two thirds of the respondents estimated that their company aims to increase the amount of online business significantly. The results reflect the expectations of the growing importance of the Internet in business. Only 20% of the respondents said that their company is not aiming at a significant increase in the share of online business. At the same time, the novelty of the question is reflected in the fact that approximately one in six respondents could not answer the question.

According to the results, the companies are fairly well prepared for the change. The respondents estimate that more than half of Finnish companies have an online business strategy. However, this result should be interpreted carefully, as some of the respondents may have interpreted the question as referring only to a separate online business strategy, whereas in reality the question could be understood to refer to either a separate strategy or a part of a larger strategy. Therefore the actual share of companies with an online business strategy may be larger than the barometer shows.

7.2. Peer Media

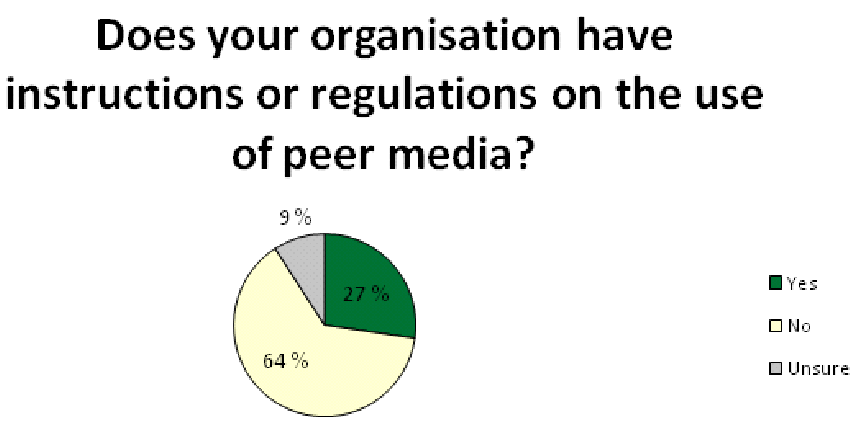


Share of companies with a strategy for utilising peer media of all companies, according to the respondents.

The result changed when it was studied whether the companies have a strategy for utilising peer media. According to the results, only one sixth of Finnish companies have a peer media strategy. However, the amount can be seen as relatively high, as the changes in technology and its use have been extremely rapid. Some Finnish companies have considered the importance of peer media for business as a strategic question, and we estimate that the share will grow significantly in the future. This result should also be interpreted carefully, as some of the respondents may have interpreted the question as referring only to a separate peer media strategy, whereas in reality the question could be understood to refer to either a separate strategy or a part of a larger strategy.

Peer media is significantly different from traditional Internet technology. Utilising peer media may require new behavioural and operational models from the organisation. According to the results, more than 25% of Finnish companies have created instructions or regulations for the use of peer media. This share is seen as small, and we estimate that more and more companies will have to create these kinds of instructions within the following years.

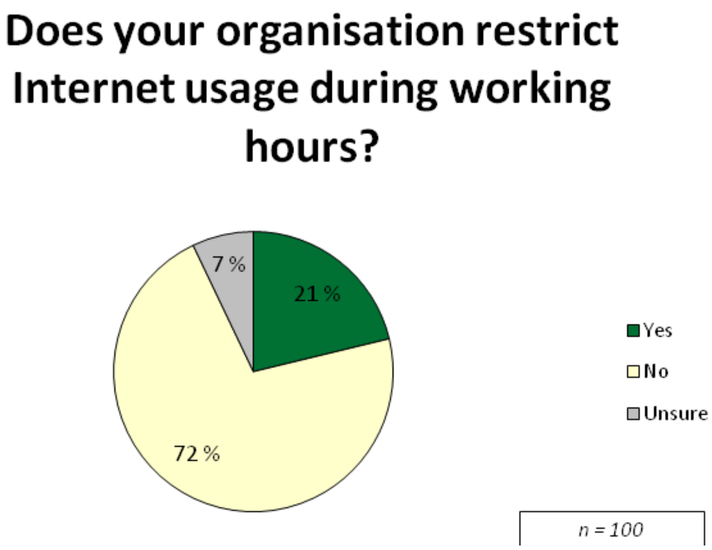
If the companies wish to increase their online business significantly, they must also take into account the growth of peer media. It is only possible to create online business through peer media if the company knows the operating models related to peer media.



Share of companies with a strategy for utilising peer media of all companies, according to the respondents.

7.3. Restricting the Use of the Internet

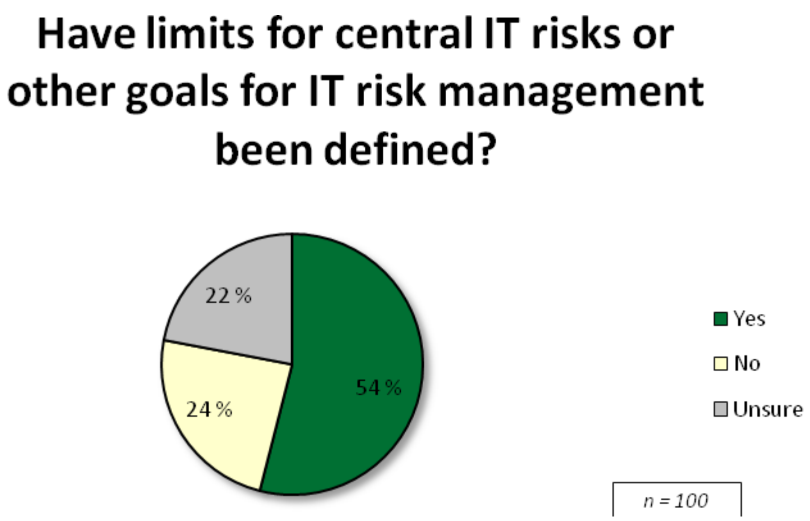
The IT barometer also studied whether Internet use has been restricted in Finnish companies. According to the results, 20% of the companies restrict Internet usage.



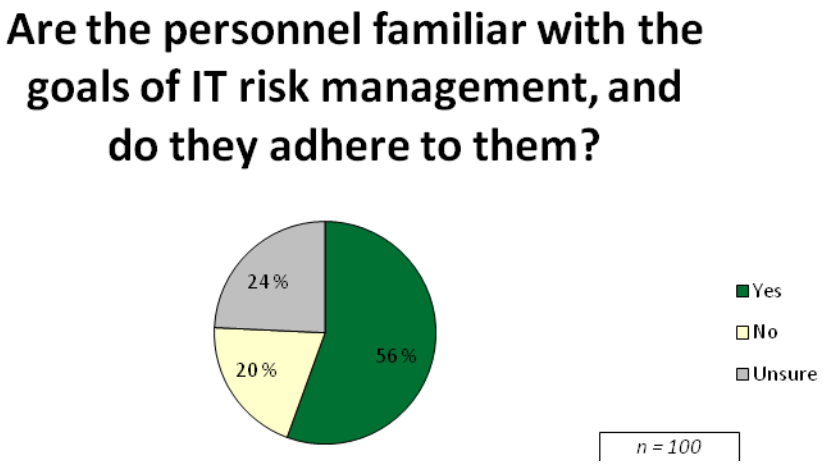
Restrictions on Internet use during working hours.

8. IT Risk Management and IT Governance

The business of organisations is more often than before dependent on the continuous use of data communication connections, local networks, databanks, and information systems, or in other words, on the fluency and compliance to the agreed level of service of IT services. The important status of IT in organisations highlights the importance of IT risk management and the management of the continuity of IT services. Risk management refers to identifying the risks, estimating their probability and business impact, and planning corrective actions for selected risks. Due to the growing importance of IT risk management, both IT risk management and IT governance were included in the IT barometer this year. These are subjects that have been widely discussed. Varying opinions about the risk management ability of Finnish companies have been expressed.



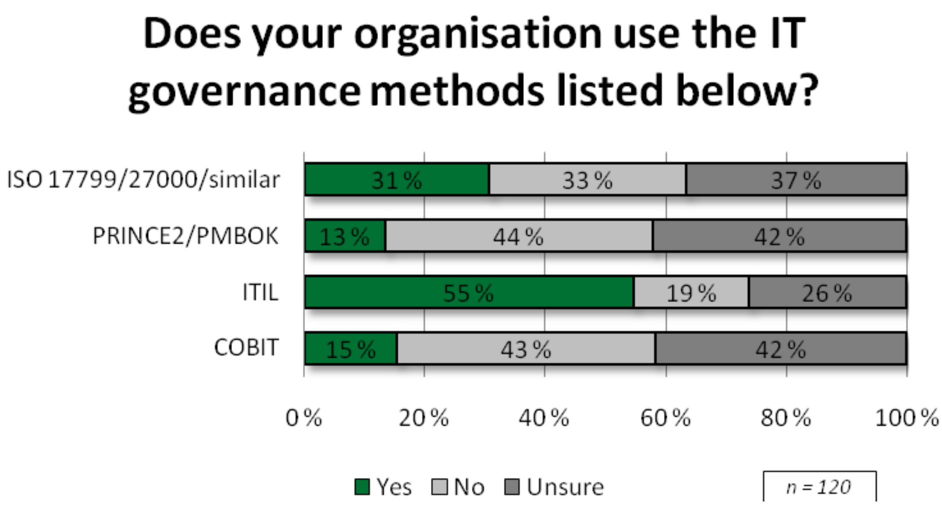
For IT risk management, it is central to define limiting values or other goals for recognised risks and to ensure proper actions, if these are not kept. According to the results, only half of Finnish companies have done this. The share is alarmingly low, as IT almost always has a critical role for business, especially in production management, logistics, financial administration, and office work. According to the results, approximately 50% of Finnish companies have personnel that are aware of the goals of IT risk management and adhere to them. This is also quite low.



8.1. IT Governance

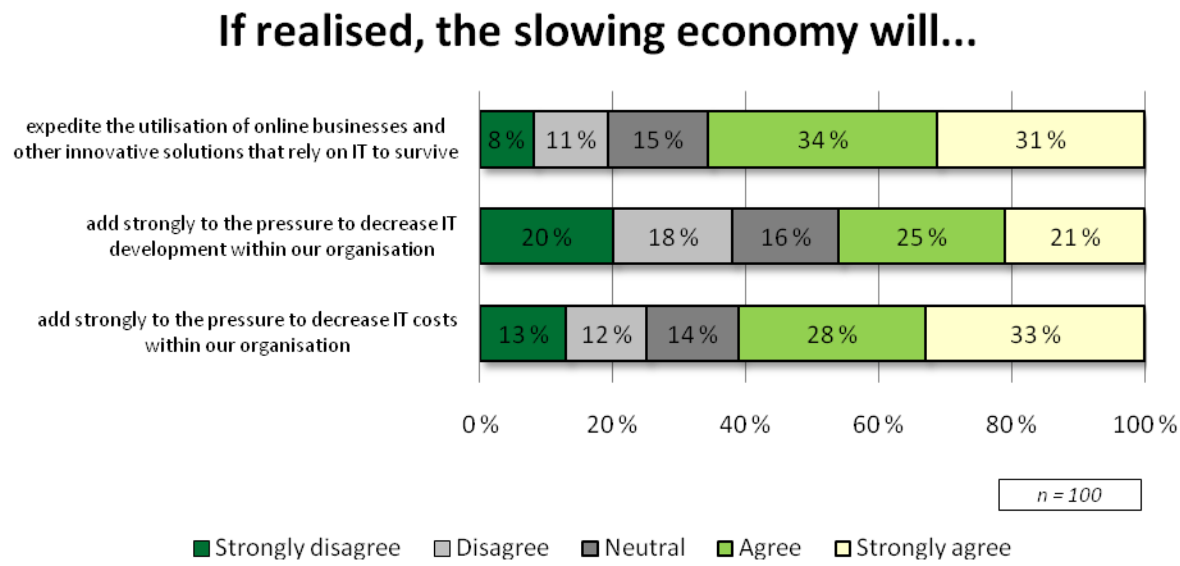
IT governance means the distribution of IT management work between the senior management, business management, and IT management, and carrying out IT-related operation methods that ensure that IT can produce a measurable value for the business. A significant portion of the questions in the IT barometer survey is related to these aspects.

Several methods, which assemble the best practices, have been developed to help in the development and production of IT services and IT risk management. The IT barometer survey also examined how widely these (operative level) IT governance methods are used.



The results show that by far the most often used IT service management method is ITIL. According to the results, more than half of the companies use ITIL in some form. A third of the companies of the respondents use ISO 17799 / 27000 or similar IT risk management standards. Altogether the usage of IT governance methods is still low, as the large amount of the "Unsure" answers shows.

9. Effects of the Recession



The effects of the slowing economy on the company's IT

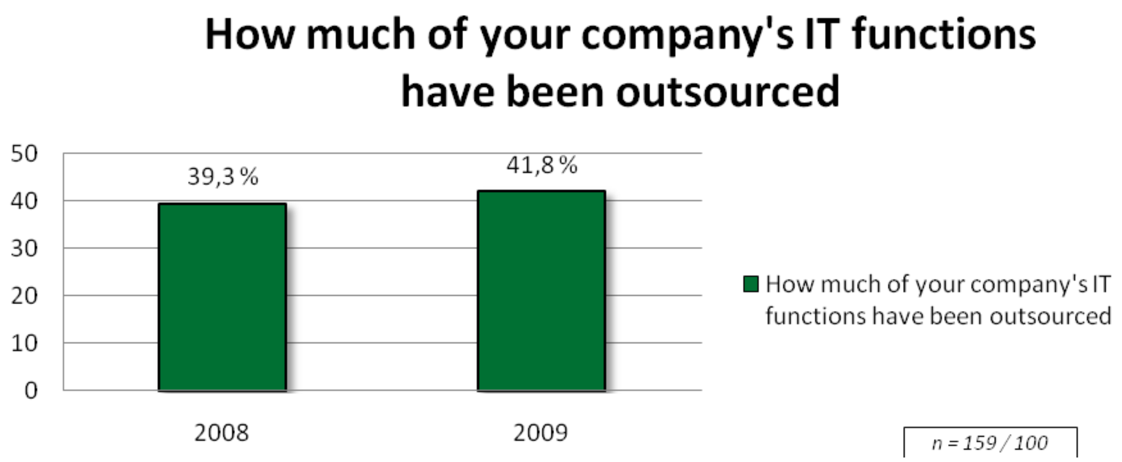
The financial recession and the threat and length of depression have dominated the news during the past year. Using the IT barometer, we wanted to find out what kind of effect the recession has on the utilisation of information technology. As noted earlier, the survey was conducted in the early stages of the recession, at the end of 2008.

Already then, the respondents considered the slowing economy to have considerable effects on the utilisation of information technology. More than 60% of the respondents thought that the recession would raise the pressure to decrease IT costs. In addition, 45% estimated that the recession would add to the pressure to decrease the development of IT in organisations. Both pressures are likely to have grown since the survey was conducted.

At the same time, two thirds of the respondents saw the utilisation of IT as one remedy in the fight against the recession. Utilisation of online business and other innovative solutions that use IT was seen as one of the ways to survive the recession. It will be interesting to see whether these visions will be true.

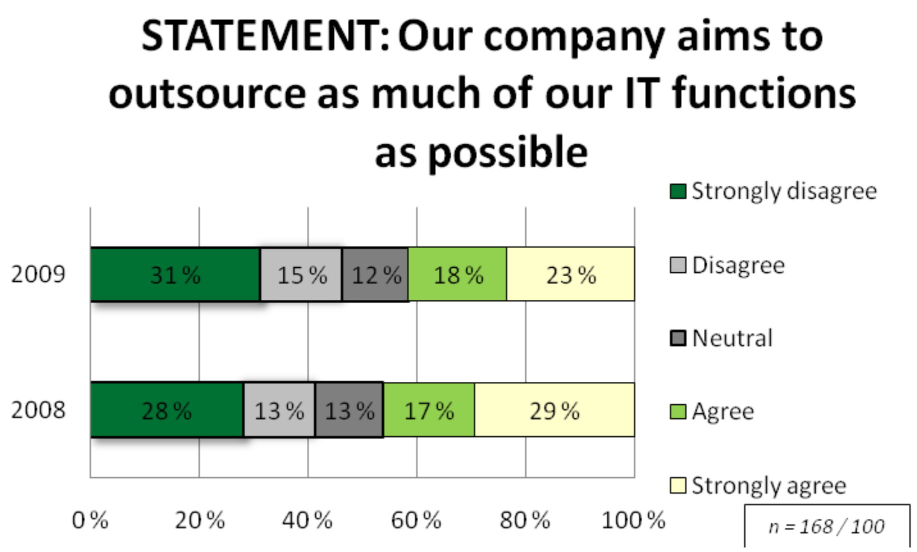
With the exception of the last one, none of the previously reported results about the impact of the recession carried any surprises. Our view, based on the results, is that the impact of IT on the productivity and development of business is understood better than before. Also the importance of IT as a tool for surviving the recession is now understood. However, it is far from clear that this understanding can be realised into action under the growing cost pressures. It is just as possible that the immediate pressure to lower costs through, for example, decreasing the development of IT will override it. The probability of the latter possibility is increased by the fact that the true ability of companies to measure the business impacts of IT is inadequate.

10. Outsourcing



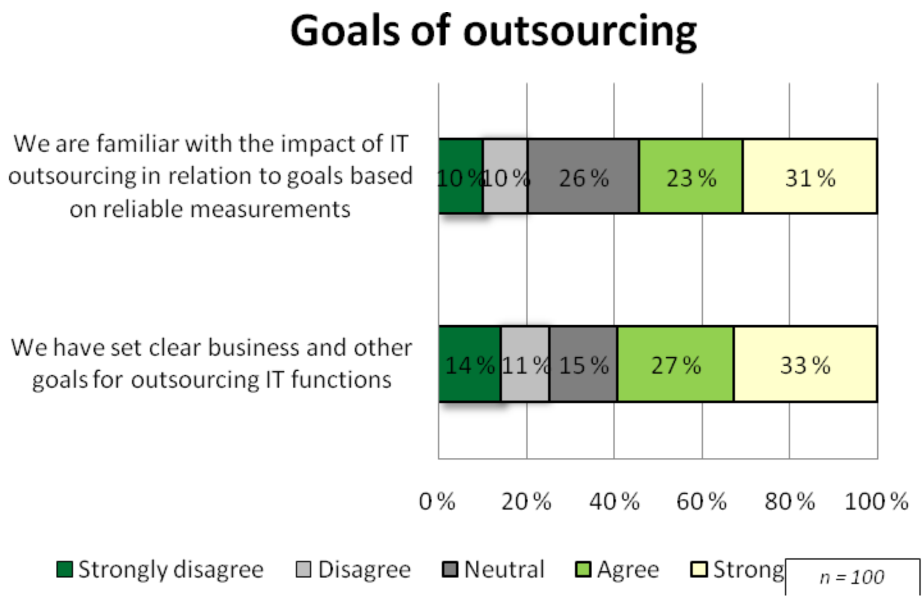
Outsourcing IT operations, average in all companies. The survey shows that outsourcing is growing slightly. Last year's barometer anticipated the change.

The survey examined IT outsourcing in Finnish companies and the effects of outsourcing on the operations of the companies. The results show that approximately 42% of IT operations in Finnish companies have been outsourced. The share of outsourced IT operations grew from 2008 with approximately 2.5%. The 2008 barometer predicted this change.



Attitude towards outsourcing.

The willingness to outsource seems to have decreased slightly. Compared to last year, considerably fewer respondents stated that their companies are trying to outsource as much of the IT operations as possible. The share of outsourcing-oriented companies is still slightly larger than the share of companies not aiming to outsource more operations. According to the barometer, outsourcing can be estimated to grow moderately in the future as well.



Goals of outsourcing and measuring the impact.

IT outsourcing was discussed widely in the 2008 barometer. One of the most important findings was the importance of the management of outsourcing on its success. Only a third of the respondents this year thought that clear goals are set for outsourcing and that these goals are monitored with measurements. The survey shows that just over 50% of Finnish companies know the impact of IT outsourcing well or fairly well, based on reliable measurements, and approximately 60% have clear business goals for outsourcing. These results describe the business impact of IT and are consistent with the results reported earlier.