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# Example Company

Analysis of your responses to Software Industry Survey 2009

Company code DEMO12345678

**Teknologia**  
teollisuus

  
**Tebes**

  
OHJELMISTOYRITTÄJÄT RY

 **HERMIA**

 **TTL** Tietotekniikan liitto ry

  
culminatum  
INNOVATION

 **COSS**

# 1 Introduction

This report contains an analysis of your responses to Software Industry Survey 2009. The data were collected during summer 2009 and analyzed during the summer and fall. The tables and figures in this report are based on comparing your responses to all other companies that responded to the survey. The tables and figures are correct only to the extent that your responses to the survey are accurate. If you notice errors in the report or have other feedback in its contents, we would appreciate to hear your comments (contact information provided at the end of this report).

The Software Industry Survey has followed the state of the Finnish software industry since 1997. The survey project is non-profit, and it is financed by Tekes and The Federation of Finnish Technology Industries and a few smaller sponsors including for example the Finnish Software Entrepreneurs Association. The results of the survey were published as a report, which can be downloaded at <http://www.softwareindustrysurvey.org/node/13.html>. The key results are summarized briefly in the box below, and the analysis of your responses starts on the next page. We wish to warmly thank you for taking the time to respond to the survey, and hope that you can also participate in the future.

## **Overview of the Finnish Software Industry**

- In general, the software industry has not been hit as hard by the recession as many other industries. All reports that we reviewed presented 2008 as a year of positive growth and 2009 at around zero depending on what was included in the estimate.
- There are several changes in the software industry that are challenging the current industry structures.
- The software industry is maturing and consolidating, strengthening the American dominance of the industry and creating further challenges for the European industry.

## **Industry Level Trends and Statistics**

- The size of the software industry in Finland in 2008 was approximately 3.1B€ of which 2.3B€ was produced by Finnish companies. The overall industry growth was approximately 4.3%.
- International revenue grew 5.9% approaching one billion euros with 40% of the responding firms having revenue outside Finland.
- The average profitability was 5.3% in 2008, while it was 6.4% in 2007.
- Product development investments have stayed on a healthy 15%-30% level for product firms over years.

## **Impacts of and Firm Response to Recession**

- For the great majority, the recession prompted little responses, though defensive measures (e.g. cost control, giving discounts) increased.
- Generally, companies that were already on an expansion track continued to expand, and expect to expand throughout 2009.
- Increasing sales and marketing is related to prior competence in these areas, not a sudden negative shock in financial performance.

## 2 Summary of key statistics

Table 1 and Table 2 list your responses to open questions and compare these to the other companies responding to the survey. The first table compares your responses to all companies who responded to the survey and the second table does the same comparison within the same age class (5-<10 ) and revenue class (0.3-<1 M€) as your firm. The tables contain comparisons on items where your company provided a response, and contain empty values otherwise.

Revenue and total personnel correspond to your responses, and productivity is the ratio of revenue and personnel. Profitability is the ratio of profits to revenue as percents. Growth is calculated by comparing responses over two consecutive years and is available only if you have responded both in 2009 and 2008. Expected growth is the ratio of revenue in 2008 and budgeted revenue for 2009.

The mean values are calculated for all data, which means that in some cases they can be biased due to few cases with extreme values. Most notably, this is the case for revenue growth among very small companies. The median values are more robust to these kinds of statistical distortions.

Table 1: Comparison of selected statistics

		All firms	
		Rank	Median
Revenue	301,500	310/619	301,500
Total personnel	4	305/619	4
Productivity	75,000	285/573	75,000
Profit	18,000	272/546	18,000
Profitability (%)	7.0	263/525	7.0
R&D / revenue (%)	10.0	245/504	10.0
Growth of revenue (%)	16.0	106/211	16.0
Expected growth (%)	10.0	287/580	10.0

Table 2: Comparison of selected statistics by revenue and age class

		Age 5-<10		Revenue 0.3-<1 M€	
		Rank	Median	Rank	Median
Revenue	301,500	97/141	630,000	134/144	500,000
Total personnel	4	90/140	7	107/139	7
Productivity	75,000	75/133	83,333	68/139	75,000
Profit	18,000	81/133	37,000	81/133	30,000
Profitability (%)	7.0	70/131	7.9	68/133	7.1
R&D / revenue (%)	10.0	62/123	10.0	68/127	10.7
Growth of revenue (%)	16.0	33/56	21.2	25/56	11.4
Expected growth (%)	10.0	60/136	8.8	76/141	12.2

### 3 Revenue and profitability

Figure 1 shows the firm size distribution over age. The lines in the figure are percentiles, which means that each line shows how large share of firms have a revenue below a particular level. For example, the 25% percentile means that a quarter of the firms have revenue below this line. If we have data for your company for multiple years, older observations are marked with a gray from. If you see the markers for your company climbing over the lines, this means that you have been growing faster than other companies at that age.

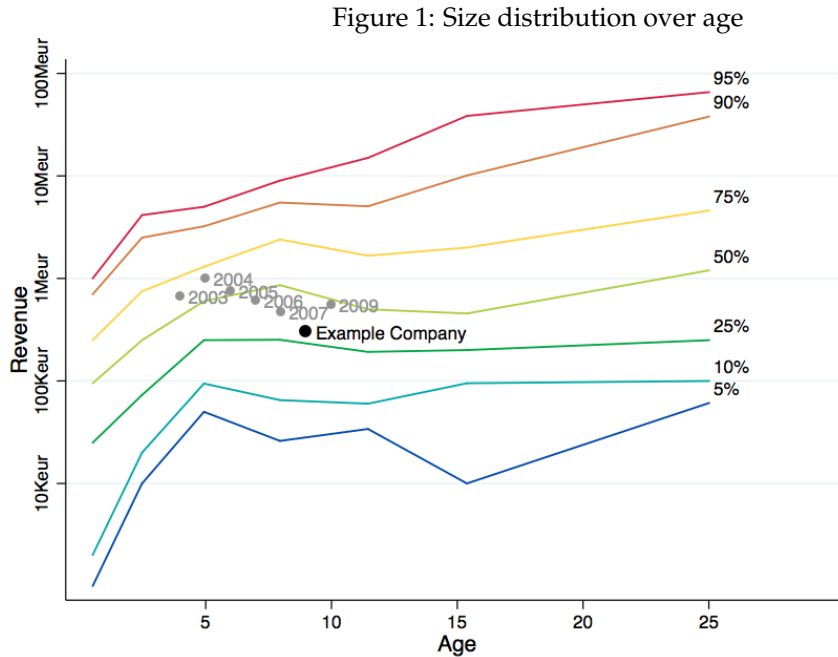
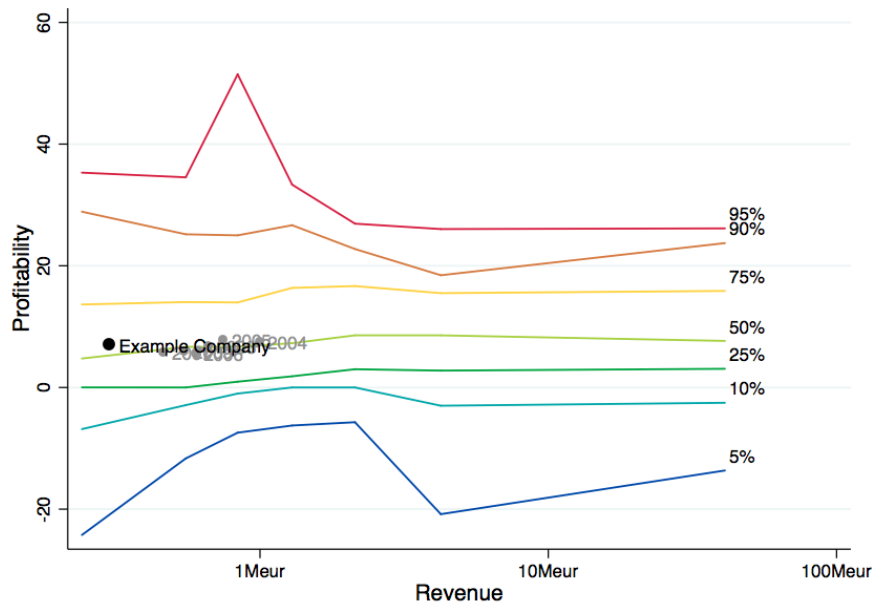


Figure 2 shows profitability differences between firms with different amounts of revenue. The variance in profitability is considerably larger in smaller firms. This is can be due to several factors. For instance, many of the smallest firms focus on product development and have yet to gain significant sales to offset the costs. For the larger firms, the differences are likely to decrease due to increasing competition and imitation as the firm becomes a notable player in its market. The second observation is that when we examine the trend lines and their relationship to the horizontal zero line, we can estimate how large a share of the firms were profitable in each revenue class. We can see that approximately 25 percent of the firms were either having zero profits or losses. This percent remains approximately the same in all revenue classes.

Figure 3 shows how you responded to question about revenue sources. For comparison, we have included three pie charts that show how typical firms in your age class and revenue class and firm type responded to this question. Among all responding firms, the provision of software development services is clearly the most significant source of revenue, amounting to nearly a third of all revenue (32%). Clearly smaller shares of revenue are generated by license sales (15%), followed by maintenance services (11%) and ASP/SaaS sales (11%). Together these intellectual property related sources of revenue account for 37% of revenue. On average, a Finnish software firms draw 13% of their revenue from non-software sources, such as hardware

Figure 2: Profitability distribution over firm size

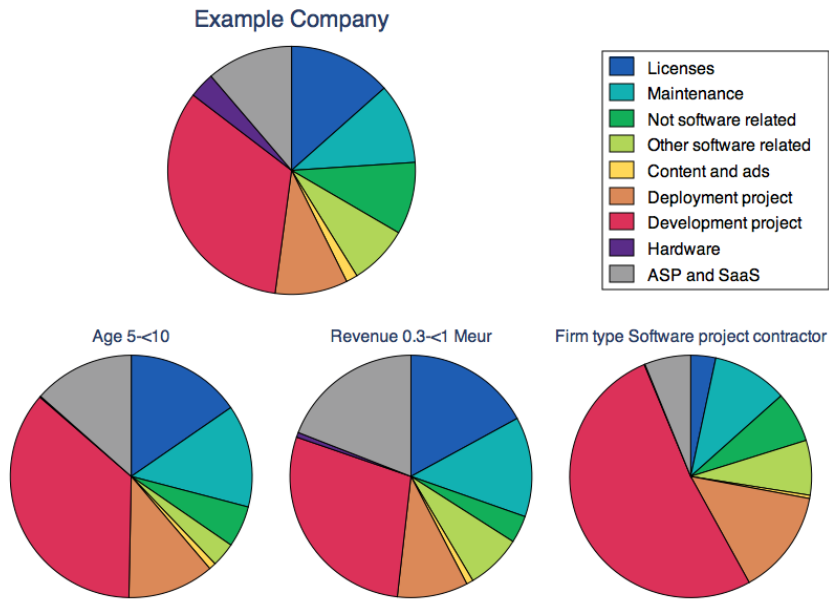


sales and other not software related sources. The rest is generated by various kinds of software related services.

In all, the revenue distributions tell us that a typical firm responding to the survey generated a third of its revenue from various development projects, which is in line with statements that software business is increasingly a service business<sup>1</sup> and does not differ from any other typical European software markets in this respect. Another observation is that the revenue from SaaS and ASP contracts and traditional license sales are roughly at the same level.

1. Michael A Cusumano, "The Changing Software Business: Moving from Products to Services," *IEEE Computer* 41, no. 1 (2008): 20-27

Figure 3: Revenue sources



## 4 Growth target and motivation

Growth and particularly growth motivation has been in the focus of the Software Industry survey for the last couple of years. During this year, we measured growth motivation from two perspectives. First, we asked what would be the ideal size of the company in five years in terms of revenue and personnel. These figures are shown in Figure 4 and Figure 5. Both graphs show percentile diagrams. Each line tells how many companies are below a particular level in their growth target. The figures have two interesting features. First, the revenue target for the very smallest firms seem to be really high. We assume that this is a trait partially caused by some startup companies that have very ambitious expectations. Second, the graph is calculated by first dividing the companies into seven size classes and then calculating the percentiles for these classes. Due to this, it looks like some of the larger companies would actually want to be smaller. The 5% fractile in 100M€ is at approximately 3M€ because this size class includes all firms over 3M€ and some of these want to stay the same size. Below 3M€, the figure is fairly accurate. The same applies to the largest size class in Figure 5.

Another way that we measured the growth motivation was a scale of eight statements describing the firm's willingness to grow. We aggregated these into three variables into Figure 6: The willingness to grow indicates how high the firm and its management prioritize growth among other possible targets, and tolerance of risk measures how much the firm is willing to take risks in order to grow. The willingness to go international measures how much emphasis the firm places on expanding and operating abroad. The responses are scaled so that the black marker in the middle means that you have responded like a median firm does. Extreme values on left and right are not absolute values: I.e. a value in the left does not mean that your firm would not want to grow at all, but that you responded to these questions more negatively than most other firms.

Figure 4: Targeted revenue over current revenue

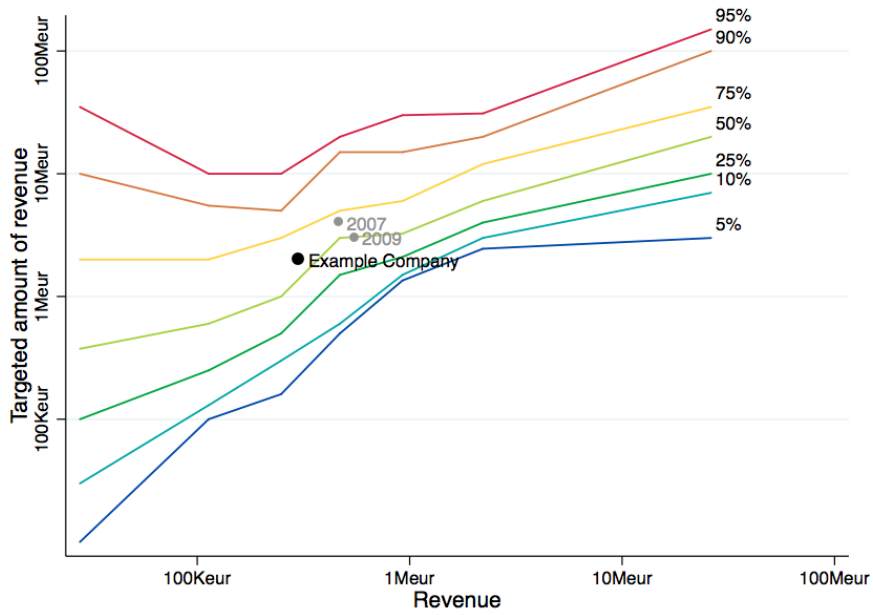


Figure 5: Targeted personnel over current personnel

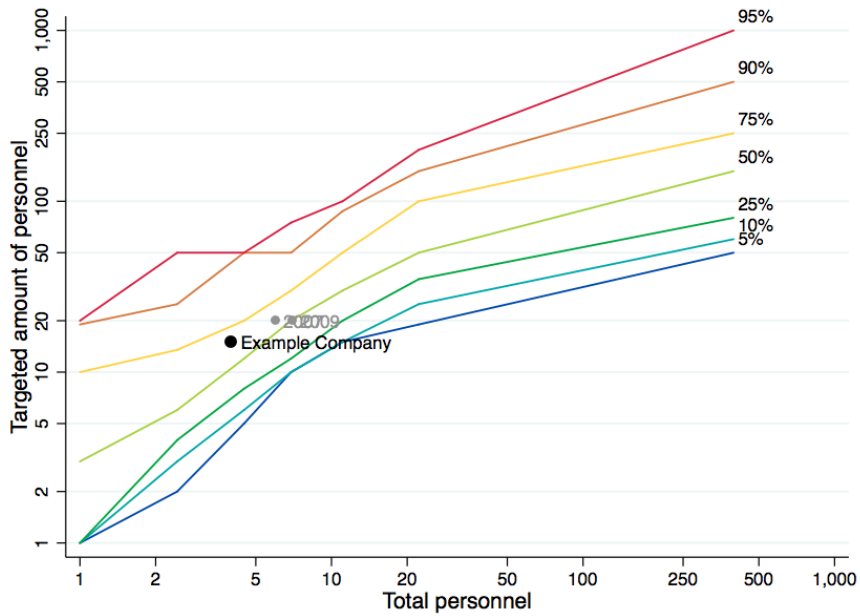
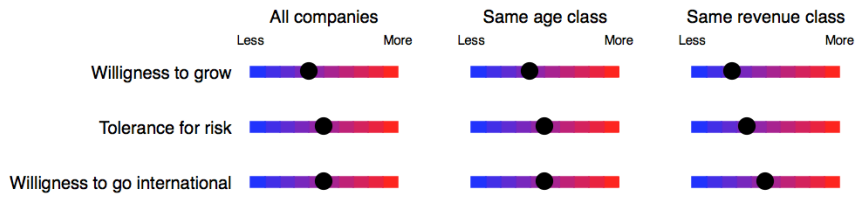


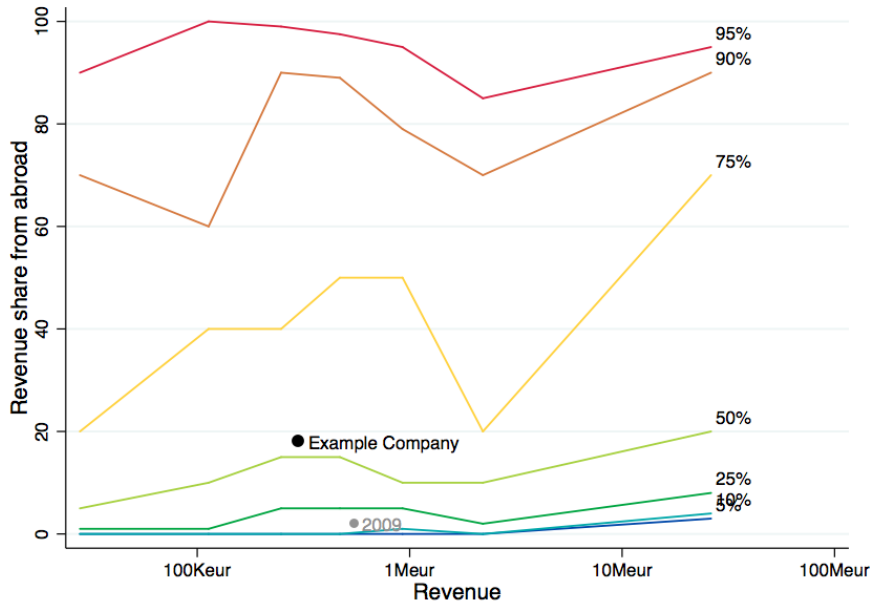
Figure 6: Comparison of willingness to grow



## 5 Internationalization

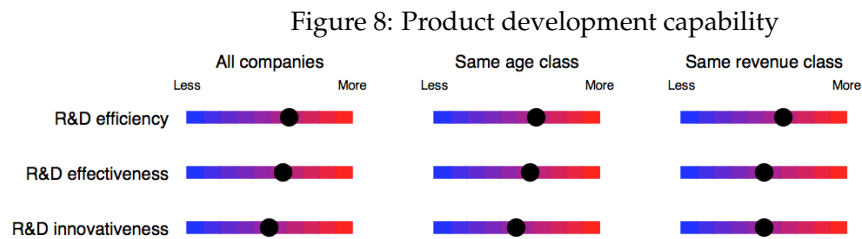
Figure 7 shows the relationship between international revenue and firm size. There are a few very international companies in each size class, but generally the number of internationalized companies increases by firm size.

Figure 7: International revenue by size class



## 6 Product development and innovations

The questionnaire included a scale of ten questions that measured product how well your company sees itself positioned against the competition in product development. We combined these two three different product development measures. Figure 8 shows how your responses to these questions compare against all other firms, firms in your age class, and firms in your revenue class.



In addition to measuring the R&D capability, the 2009 survey form contained a set of questions from the so-called innovation radar questionnaire. The idea of this set of scales is to measure 12 different dimensions of innovativeness related mainly to a firm's offering. Technological innovation is only but one way to innovate, and for example marketing innovation can often play a much larger role in success of a software firms. While technological innovation is often present in many companies, the ultimate winners are often determined by other types of innovations. Table 3 presents the innovation dimensions as presented in the original MIT Sloan Management Review article by Wolcott, Sawhney, and Arroniz<sup>2</sup>.

2. Robert C. Wolcott, Mohanbir Sawhney, and Inigo Arroniz, "The 12 Different Ways for Companies to Innovate," *MIT Sloan Management Review* 47, no. 3 (2006): 75, ISSN: 15329194, <http://proquest.umi.com/pqdweb?did=1020961481&Fmt=7&clientId=23406&RQT=309&VName=PQD>

Table 3: 12 different ways for companies to innovate

Dimension	Definition	Examples
Offerings	Develop innovative new products or services.	<ul style="list-style-type: none"> <li>• Gillette Mach3Turbo razor</li> <li>• Apple iPod music player and iTunes music service</li> </ul>
Platform	Use common components or building blocks to create derivative offerings.	<ul style="list-style-type: none"> <li>• General Motors OnStar telematics platform</li> <li>• Disney animated movies</li> </ul>
Solutions	Create integrated and customized offerings that solve end-to-end customer problems.	<ul style="list-style-type: none"> <li>• UPS logistics services Supply Chain Solutions</li> <li>• DuPont Building Innovations for construction</li> </ul>
Customers	Discover unmet customer needs or identify underserved customer segments	<ul style="list-style-type: none"> <li>• Enterprise Rent-A-Car focus on replacement car renters</li> <li>• Green Mountain Energy focus on “green power”</li> </ul>
Customer Experience	Redesign customer interactions across all touch points and all moments of contact.	<ul style="list-style-type: none"> <li>• Washington Mutual Occasio retail banking concept</li> <li>• Cabela’s “store as entertainment experience” concept</li> </ul>
Value Capture	Redefine how company gets paid or create innovative new revenue streams.	<ul style="list-style-type: none"> <li>• Google paid search</li> <li>• Blockbuster revenue-sharing with movie distributors</li> </ul>
Processes	Redesign core operating processes to improve efficiency and effectiveness.	<ul style="list-style-type: none"> <li>• Toyota Production System for operations</li> <li>• General Electric Design for Six Sigma (DFSS)</li> </ul>
Organization	Change form, function or activity scope of the firm.	<ul style="list-style-type: none"> <li>• Cisco partner-centric networked virtual organization</li> <li>• Procter &amp; Gamble front-back hybrid organization for customer focus</li> </ul>
Supply Chain	Think differently about sourcing and fulfillment.	<ul style="list-style-type: none"> <li>• Moen ProjectNet for collaborative design with suppliers</li> <li>• General Motors Celta use of integrated supply and online sales</li> </ul>
Presence	Create new distribution channels or innovative points of presence including the places where offerings can be bought or used by customers.	<ul style="list-style-type: none"> <li>• Starbucks music CD sales in coffee stores</li> <li>• Diebold RemoteTeller System for banking</li> </ul>
Networking	Create network-centric intelligent and integrated offerings.	<ul style="list-style-type: none"> <li>• Otis Remote Elevator Monitoring service</li> <li>• Department of Defense Network Centric Warfare</li> </ul>
Brand	Leverage a brand into new domains.	<ul style="list-style-type: none"> <li>• Virgin Group “branded venture capital”</li> <li>• Yahoo! as a lifestyle brand</li> </ul>

Source: Wolcott, Sawhney, and Arroniz 2006<sup>3</sup>

Figure 9: Innovation Radar all companies and same age class  
**All firms** **Age class 5-<10**

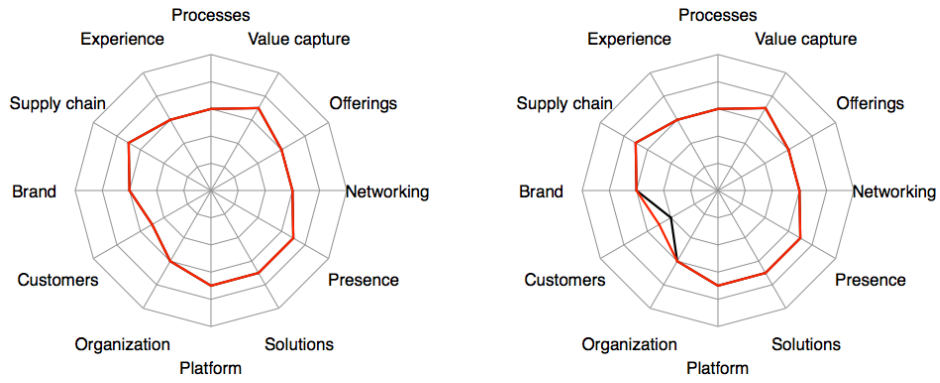
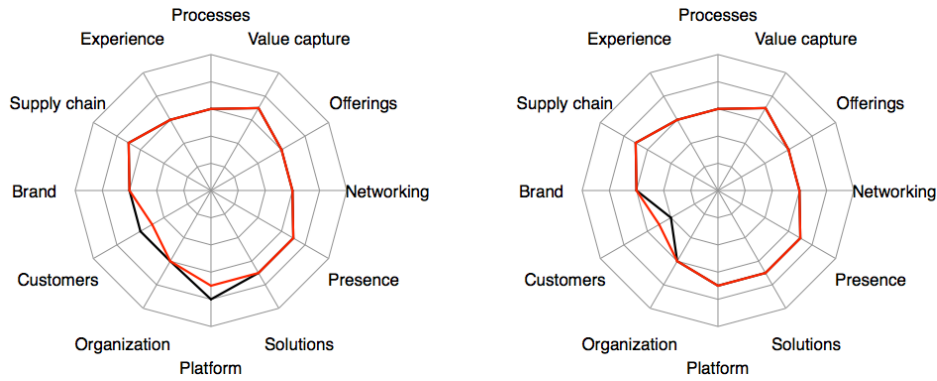


Figure 9 and Figure 10 show innovation radar diagram for your company. In each of the diagrams, the red line is your company and the black line is comparison group. In Figure 9 the comparison group is all companies and same age class (5-<10 ) and in Figure 10it is same revenue class (0.3-<1 M€) and the same firm type (Software project contractor ).

Figure 10: Innovation radar for the same revenue class and firm type  
**Revenue class 0.3-<1 M€**                      **Firm type Software project contractor**



## 7 Impacts and response to recession

Last year's survey revealed that the Finnish software industry in general suffered from the recession much less than many of its traditional industries. The questionnaire included several questions on how companies perceived and had reacted to the recession between summer 2008 to summer 2009. For example, the vast majority of respondents (87%) indicated that their target markets had not reduced, and over a half (58%) indicated that their amount of customers had increased.

The following two figures represent your company's responses compared to all responding companies and companies in the same revenue class. The closer the black dot is to the left hand side, the smaller your company's response was compared to the median of other respondents. Similarly, the more right the dot is placed, the greater your response was compared to the median of other responses. Figure7 summarizes your responses to four subjective questions on the impact of the recession. Figure7summarizes more detailed questions on your operational responses and changes in the business environment.

Figure 11: Preparedness for recession

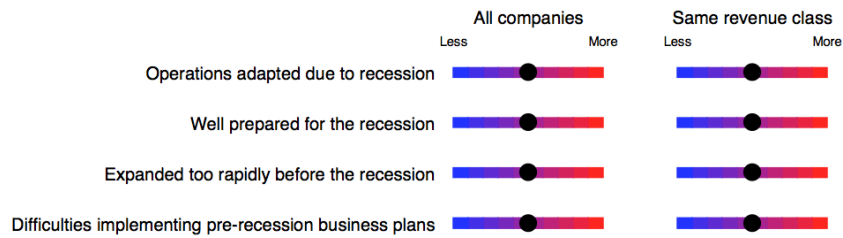
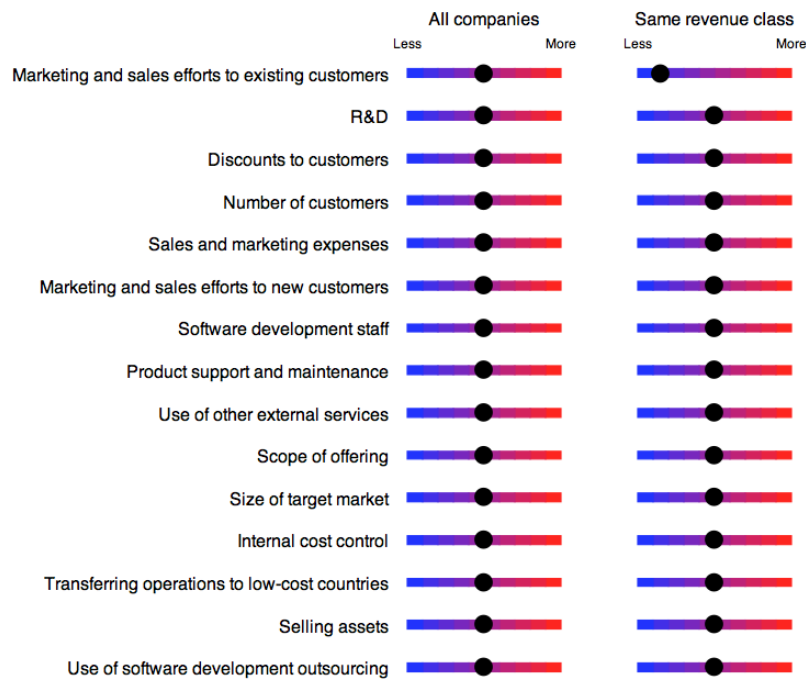


Figure 12: Impacts and actions due to recession



## **8 More information**

We thank you for your participation in Software Industry Survey 2009. If you have any questions about this project, company report, or want to give general feedback, please do not hesitate to email [mikko.ronkko@tkk.fi](mailto:mikko.ronkko@tkk.fi).