

# Software Product Industry Survey 2006

## Finnish software product business in 2005

22.8.2006

Researcher Aki Lassila, professor Markku Maula, professor Jyrki Kontio

HELSINKI UNIVERSITY OF TECHNOLOGY  
Software Business Laboratory,  
Institute of Strategy and International Business



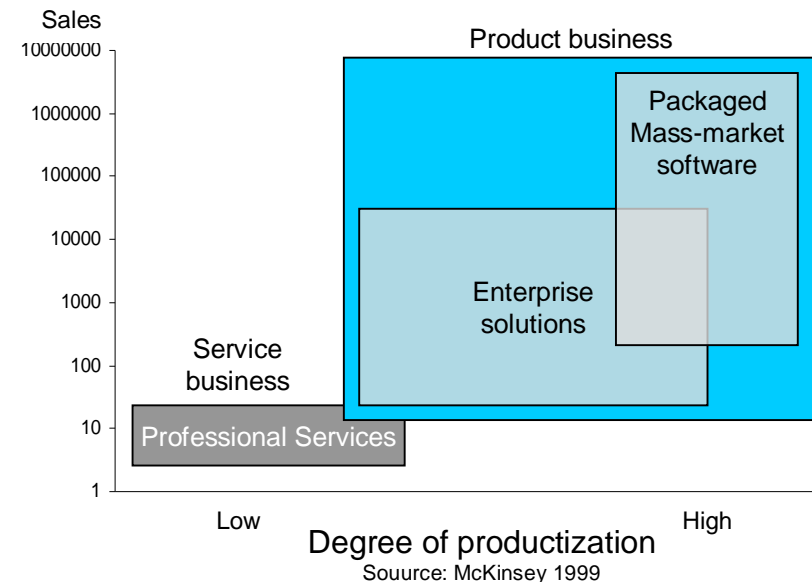
HELSINKI UNIVERSITY OF TECHNOLOGY



Centre of Expertise  
for Software Product Business

# The focus of the survey: software product business

- **Software product** is an application that is productized and can be customized to suit the customers' needs by configuration
- **Software product business** is business concerning software products where the customer tailored parts are not an essential part of the whole software
- **Own software product business** is software product business, which is based on company's own, in-house developed and maintained software products
- **In Finland the software product industry** generates approximately 30 % of the whole software industry's revenues



Decisions concerning SW product business are made:  
in Finland      Abroad

	in Finland	Included	Included
SW development is done:	Abroad	Included	Not included



## Background and implementation of the research

- This was the ninth time the Software product industry survey was conducted
- The research was commissioned by the Centre of Expertise Software Product Business and Federation of The Finnish Information Industries in co-ordination with Software Entrepreneurs Association, Ministry of Trade and Industry and National Technology Agency
- The survey was conducted during May-June 2006 using a web-questionnaire
- Invitations to participate in the survey were sent to 1 1863 companies
  - Sources: company classification of Itella Finland and contact lists of the Centre of Expertise for Software Product Business
  - Software product companies can be found under several industry classification codes, e.g. software design, databases, telecommunication etc.
  - We received 233 (285 in 2004) responses, of which 184 (220) did software product business in 2005
- According to the estimates of different industry and research institutions there were approximately 1 100 software product companies in Finland at the end of 2005 (1 100 in 2004)
- We received responses from 184 software product companies i.e. from ca. 17% of the companies in the industry
  - Responding companies generated over 68% of the whole industry's revenues and over 80% of the international revenues (estimation)



## Current state of the software product industry in Finland

- The software product revenue grew by 9.2% reaching 1.3 billion € in 2005 (1.19 billion in 2004)
  - International business increased significantly by 24.2% (7.1%) amounting to 504 million € (406 M €)
  - Domestic revenues grew by 1.4% (29.7%) and was 798 M € (786 M €)
- Profitability (profit/revenue) increased from the previous year to 2.8% (2.2%)
- The industry employs ca. 12 340 software professionals (12 400), the amount stayed on the last year's level
- Over half of the companies (59%) have international operations but most of them receive only a small share of their revenues from abroad
- Vast majority of the companies (69%) are owned their founders; VC and foreign ownership is relatively low but increased from last year's level



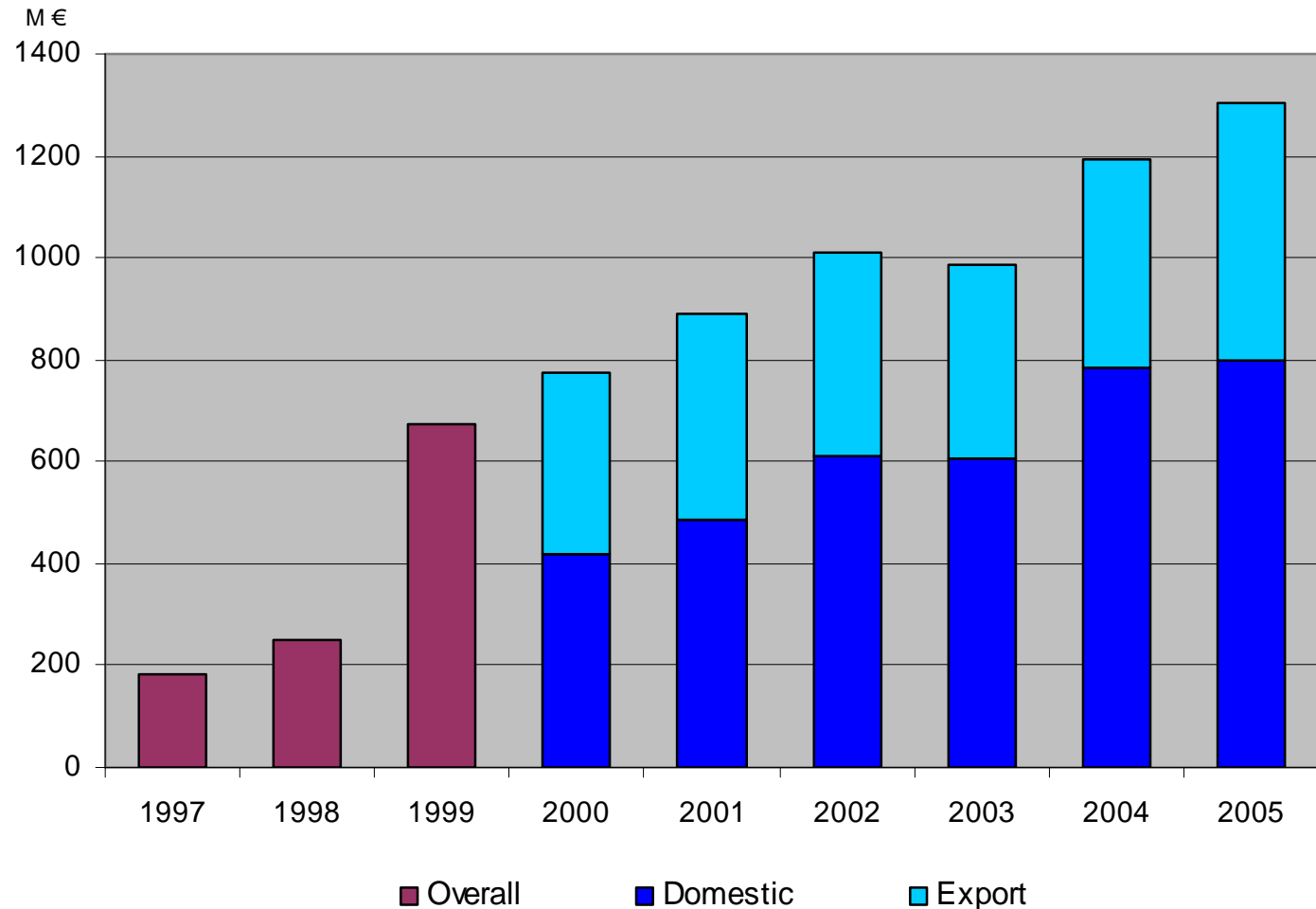
## Basic information of the companies who responded to the survey

- Size: most of the companies are small or mid-size
  - 30% of the companies generated less than 200 000 € on software product business in 2005 (31% in 2004)
  - Average share of software product business was 68% of the overall revenue (58% in 2004)
  - Average revenue per employee was 109 000 € (111 000 € in 2004)
  - 32% of the companies employed 5 people or less (31% in 2004)
- Age of the companies
  - Average age is 13 years (median 11 years) and average age of the software product business is 10 years (median 7 years)
  - Older companies are usually more profitable
- Profitability has improved from last year's 2.2% to 2.8%
  - 24% of the companies had profitability over 15% (27% in 2004)
  - 15% of the responding companies were unprofitable in 2005 (14% in 2004)
- Financing: external finance is sought in order to facilitate growth
  - 36% of firms intended to seek external financing in 2006-2007 (36% in 2004, 41% in 2003)
- Location: industry is geographically very concentrated
  - 86% of the companies are located in the proximity of technology centres and universities
  - 52% of all the companies are located in the capital region, 72% of the larger companies (software product business revenue >3 million €)



# Development of the Finnish software product business revenue 1997-2005 <sup>1)</sup>

- Software product business revenue grew by 9.2% (21.0%) amounting to 1.3 billion € (1.19 in 2004)
- International business grew by 24.2% (7.1%) and was 39% (34%) of the overall revenue
- Domestic revenue grew by 1.4% (29.7%)
- Mainly large companies' revenues grew
- The most internationalized business areas: mobile sector and games & media

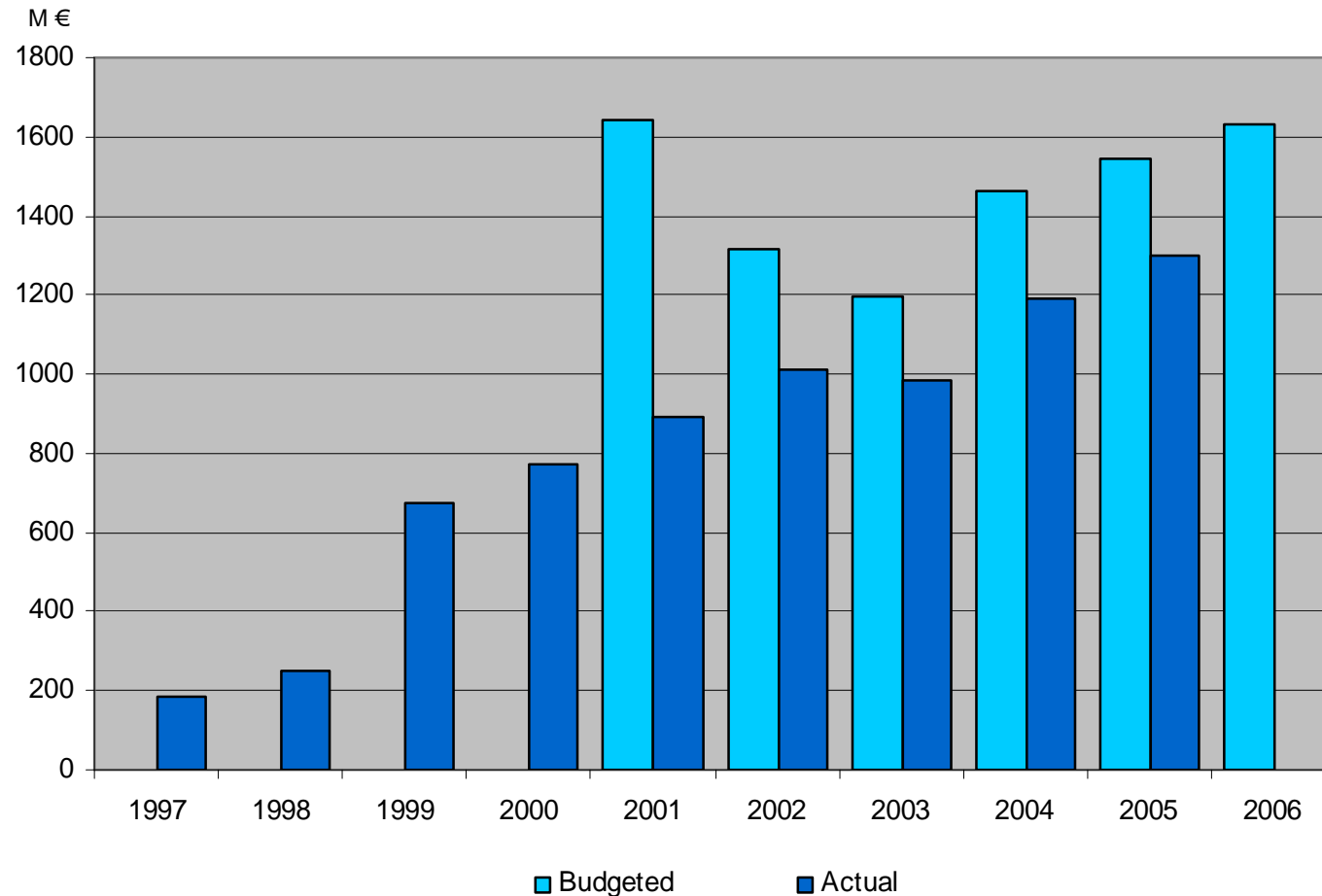


<sup>1)</sup> Extrapolated to the industry level



# Development of the Finnish software product business revenue <sup>1)</sup>

- Companies's budgeted revenues have risen for the past three years
- Actual revenues have followed the budgeted figures, which predicts growth also for this year
- Companies' estimations are more realistic now than in the beginning of the millennia
- 31% (24%) of the firms stated that their biggest client represented for more than a third of their revenue

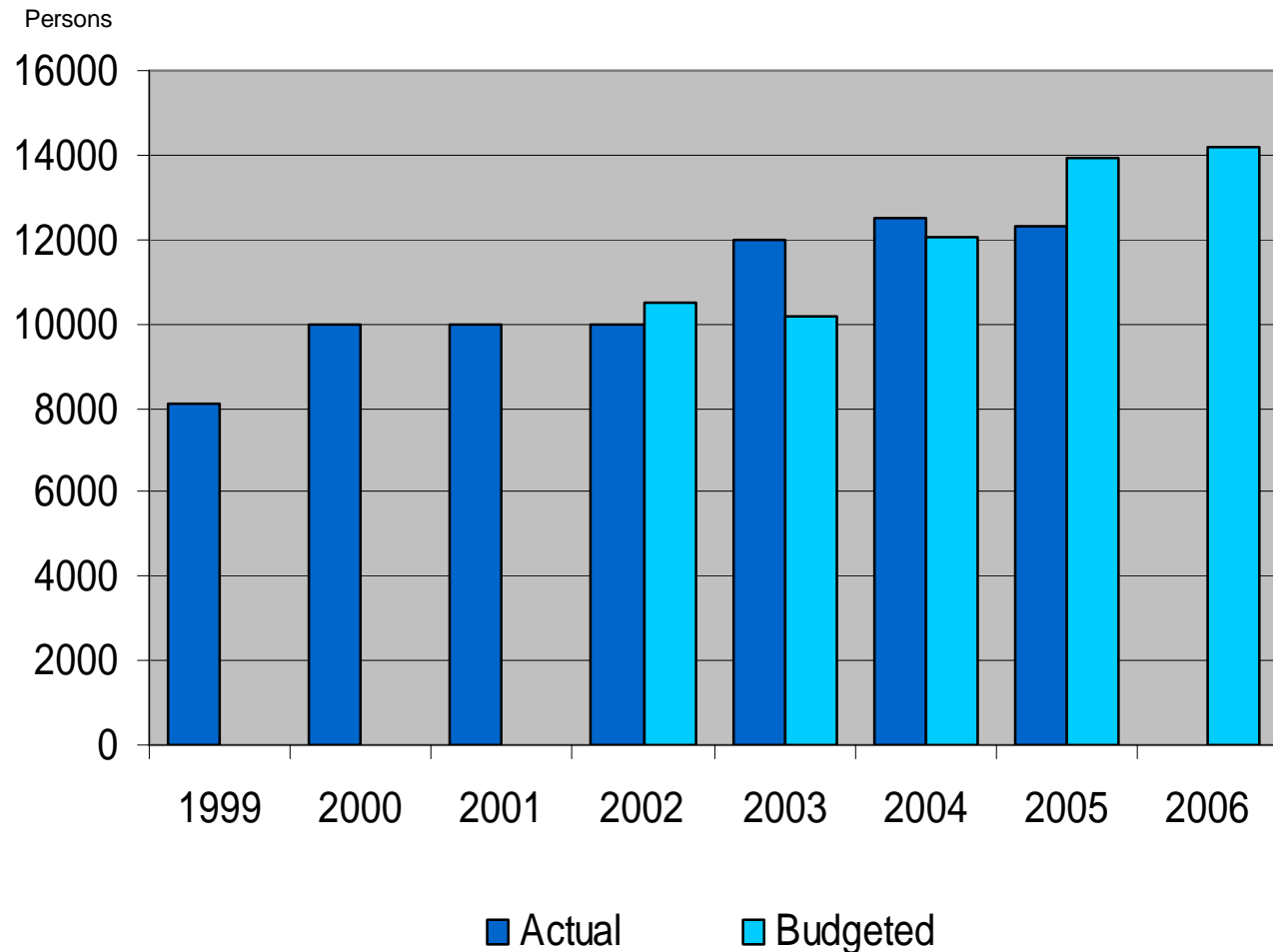


<sup>1)</sup> Extrapolated to the industry level



# Software product business personnel <sup>1)</sup>

- The amount of personnel in software product business stayed on last year's level
- Software product business employs approximately 12 340 persons
- Mainly larger companies increased the number of their personnel
- Smaller companies fell behind their last year's budgeted personnel figures



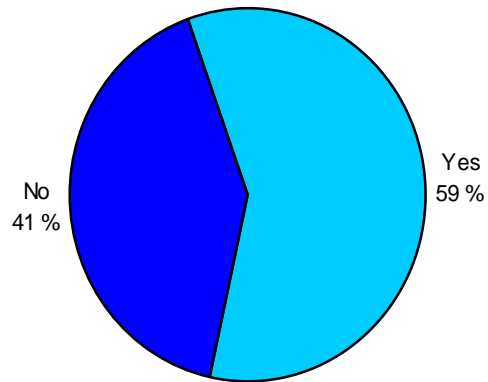
<sup>1)</sup> Extrapolated to the industry level



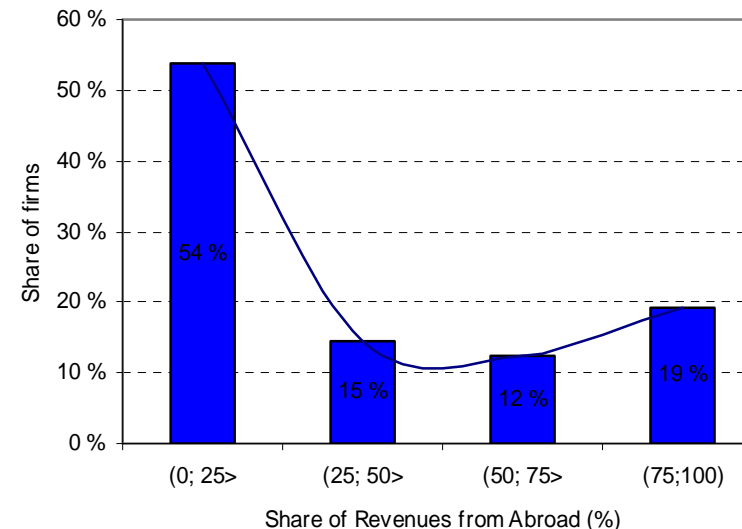


# International operations

Revenues from Abroad?



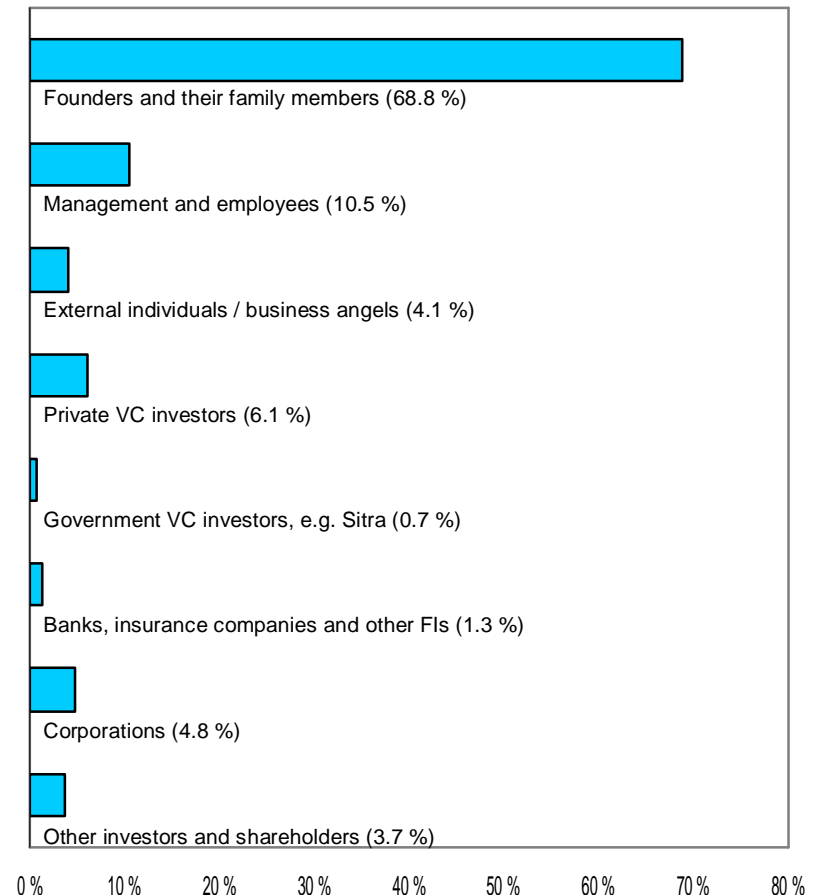
Foreign Revenues Share Histogram



- 59% of companies reported receiving revenues from abroad (46% 2004, 50% 2003)
- Most of the companies are in the beginning of the internationalization process, however some are very internationalized
  - 19% of internationalized firms receive over 75% of their revenues from abroad, 33% of the intl. firms receive less than 5% from abroad
  - Average share of revenues from abroad 33% (31% 2004, 31% 2003)
- Type of the software significantly affects the internationalization rate of the companies: companies who sell software licences are more internationalized, whereas when the level of customer specific customization increases also the internationalization becomes more difficult
  - Vertical/Target customer segment reflects on the economies of scale, which in turn affects the internationalization efforts of the company
  - More internationalized companies invest more in R&D expenditure
- Geographic coverage 7.8 countries on average (9.4 in 2004, 6.3 in 2003)
  - The most common export countries were Sweden, Germany and USA (same as in 2002-2004)
- The most common international sale channels were own direct sales and reseller/agent (same as in 2002-2004)

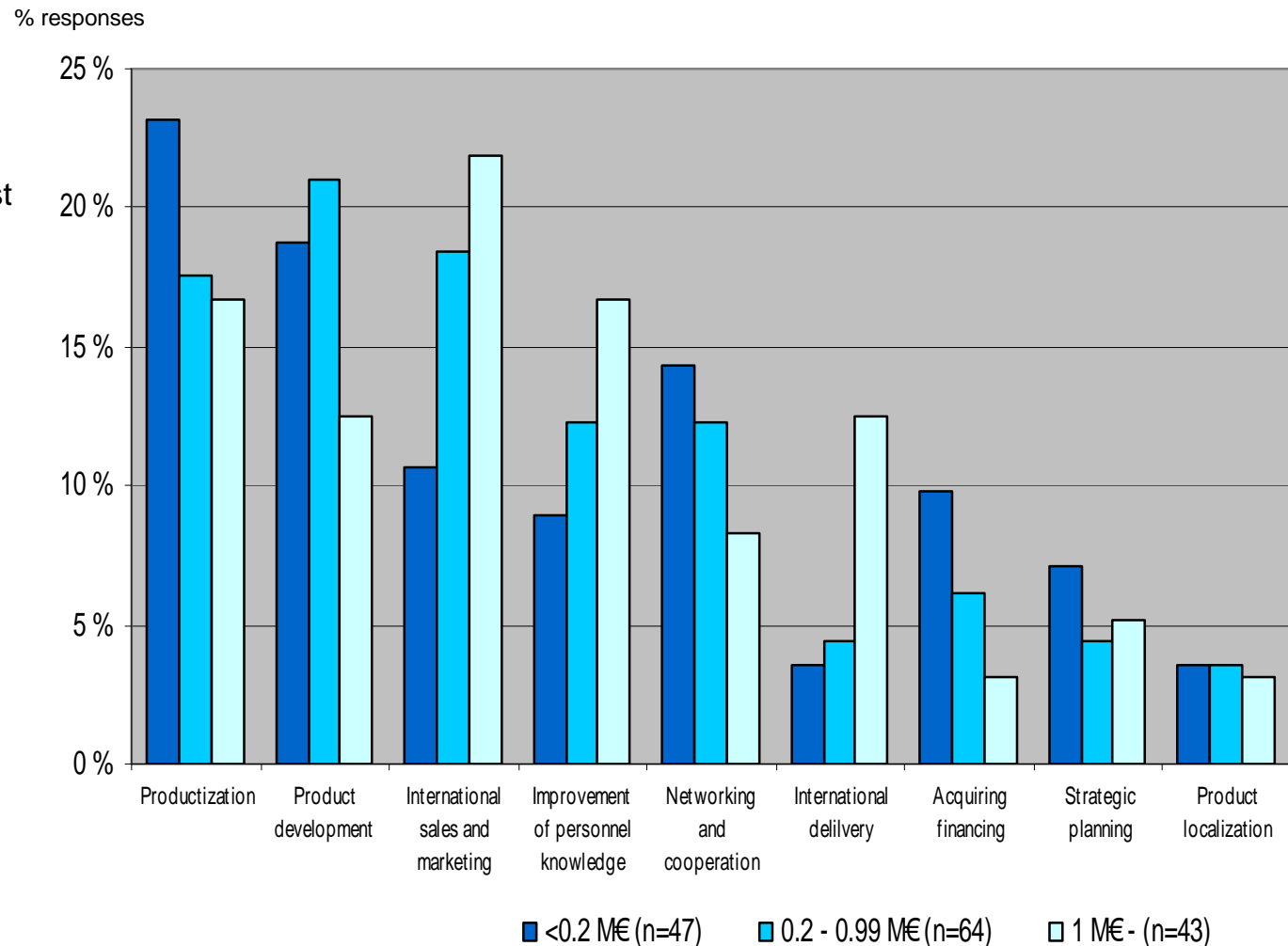
# Ownership and financing

- 69% of the companies are owned by the founders and their family members (73% in 2004)
- Share of VC ownership was 6.1% (3.7% in 2004, 7% in 2003)
  - 15% of companies had private VC owners
- Over 80% of the firms were wholly owned by Finns
  - Average share of foreign ownership was 6.1% (4.2% in 2004)
- 36% of firms intended to seek external financing in the next two years (36% in 2004, 41% in 2003)
  - 27% of the firms plan to raise equity financing, 16% capital loans and 11% dept finance
  - External finance was sought approximately 300 M € as equity, 80 M € as capital loans and 60 M € as debt
  - Equity finance preference to the other financing means is in line with current finance theories and software industry segment's features
  - Strong growth seeking focus and unprofitability are the major characteristics that distinguish companies seeking financing
- Significant number of companies (31%) seeking external financing had to change business plans due to problems with availability of financing (31% in 2004, 25% in 2003)
  - Usually meant reducing internationalization attempts
- Young firms still find availability of risk finance as a significant barrier for the emergence of new software product companies (67% of <2 year old firms, 64% in 2004, 57% in 2003)



# Improvement areas

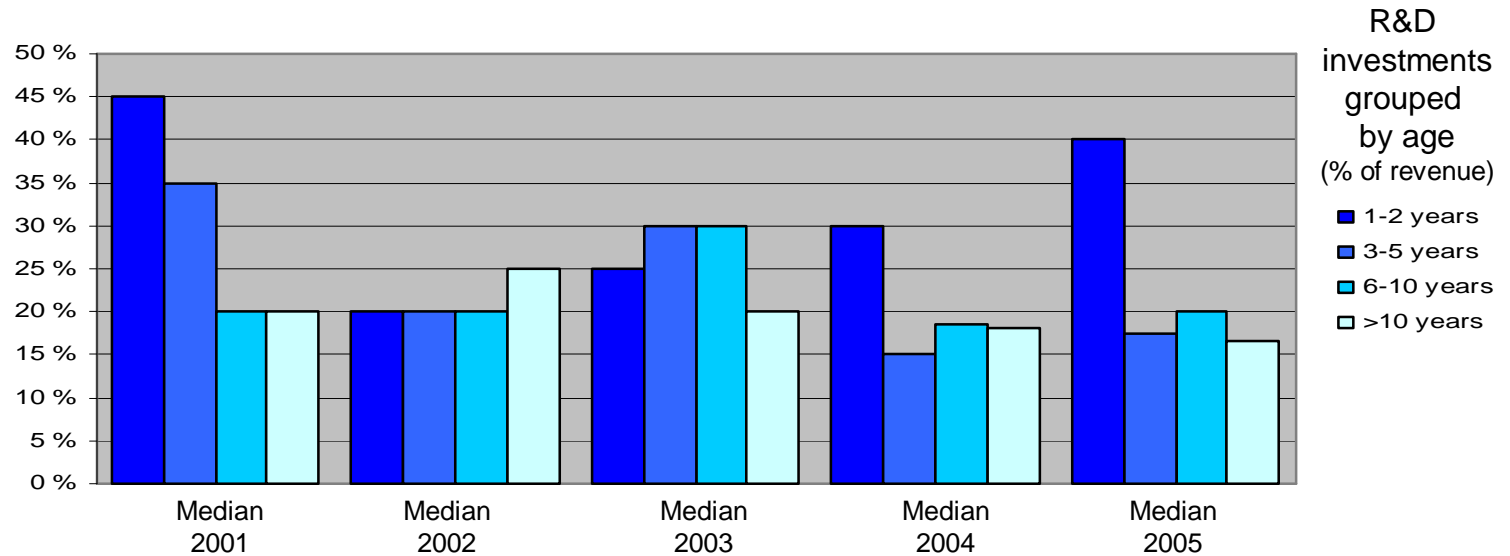
- The most important improvement areas were productization and product development, which have risen from last year's 4th and 5th place
- Companies are concentrating on scalability of the business related issues
- Focus of the small companies was in productization and product development
- Focus of the large companies was in international sales and marketing, productization and improvement of personnel's skills and knowledge



Companies are grouped according to revenue size



# Product development



- R&D investments of young firms increased for the third consecutive year
  - Companies with age of software product business 1-2 years invested in R&D on average 40% of turnover (30% in 2004, 25% in 2003)
  - Average R&D investment of the companies is 31% of the overall revenue
- The most important R&D focus areas for both small and large companies were the development of value-added services and raising of the degree of productization
  - 40% of the companies are investing in the development of new products (33% in 2004)
- The usage of subcontracting is growing
  - 35% of responding companies subcontracted significant amounts of R&D from domestic market (25% in 2004)
  - 16% of responding companies subcontracted significant amounts of R&D from abroad (12% in 2004)
- Open source software is used by the companies
  - 12% of the companies use significant number of open source components in their own software products



## Offering software as a service

- Offering Software as a Service i.e. usage of SaaS business model has grown: 53% of the respondents offered their software as a service (35% in 2004)
- Below are some basic figures shown in comparison between the companies who offer SaaS services and those who do not:

	SaaS	Non-SaaS
Average revenue related to software	5,8 M €	2,8 M €
Software product business's share of the overall revenue	77%	73%
Average profit	2,7 M €	0,2 M €
Average profitability (profit/revenue)	6,2%	8,6%
Percentage of companies conducting international business	60%	49%

- In the international markets offering software as a service has been a growing trend for the past few years – now also the Finnish companies have noticed the growth potential of offering services to the customers



# Summary

## Current state

- International business is growing fast
  - Finnish companies's revenues from abroad grew by 24,2%, whereas international markets grew by 1%
  - Especially the larger companies grew in the international markets
  - Mobile sector and games & media were the most internationalized verticals
- Companies have started to pay attention on the scalability of their business models and are investing in the future
  - Productization has gained importance of the improvement areas
  - Offering software as a service has increased
  - Young firms' R&D investments have risen for the third consecutive year

## Development areas

- Increasing the internationalization rate of their business is a challenge for most of the companies
  - Further improvement of the knowledge and skills related to internationalization especially in case of the SMEs
- Improvement of the knowledge and skills needed in software productization and product management
- The support efforts should be concentrated on the most promising clusters in order to develop internationally capable and competitive companies
  - The strengthening and development of networks and supporting services especially in case of small companies is important



**This survey was funded by the Center of Expertise for Software Product Business / Technopolis Ventures Oy and Federation of The Finnish Information Industries**

This survey was part of the National clusters project of the Center of Expertise for Software Product Business in which the other centers of expertise for software product business from Jyväskylä, Lahti, Oulu, Tampere, Turku, and Uusimaa also participated.

**For further information contact:**

Program Director Irmeli Lamberg  
Center of Expertise for Software Product Business  
Technopolis Ventures Oy  
irmeli.lamberg@technopolis.fi  
+358-(0)400-883 822



## Contact information

- Researcher Aki Lassila (software product industry survey)
  - aki.lassila@tkk.fi
  - +358-(0)50-357 6049
- Professor Jyrki Kontio (software product business)
  - jyrki.kontio@tkk.fi
  - +358-(0)40-8232 800
- Professor Markku Maula (finance and international business)
  - markku.maula@tkk.fi
  - +358-(0)9-451 3085
- Web: [www.sbl.tkk.fi/oskari/](http://www.sbl.tkk.fi/oskari/)

