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# Innovation 2010

Innovation Survey final report

# Innovation involves the whole value chain, customers and users included in development

Forty-six per cent of enterprises had innovation activity related to products and processes in 2008-2010. Innovations are developed throughout the value chain, but the most frequent reporters of innovation activity were system suppliers. Altogether 15 per cent of the total turnover of enterprises in 2010 came from product innovations launched on the market during 2008-2010. These data derive from a survey of Statistics Finland concerning innovation activity among enterprises.



Prevalence of adoption of innovations in production value chain by main position 2008–2010, share of enterprises

Between 2008 and 2010, the general characteristics of innovation activity related to products and services remained quite unchanged from the 2006-2008 period. One-third of enterprises launched product innovations on the market. Sixty per cent of these enterprises brought out products that were new to their market. One enterprise in six that had made product innovations reckoned that they had brought on the market an innovation with characteristics that were the world's first. Innovation expenditure reported by enterprises totalled EUR 7.3 billion in 2010.

The innovation survey now also studied for the first time innovation activity in human health and social work activities. The share of enterprises having made product or process innovations was 44 per cent, i.e. almost the same as the average for other industries. Enterprises in human health and social work activities reported their total expenditure on innovation activity as EUR 80 million in 2010. They reported more often than other enterprises activities like outsourcing of expertise, and training related to innovation activity. Nearly one-half of the enterprises had adopted marketing and organisational innovations and 57 per cent had engaged in broadly defined innovation activity.

The vast majority of all enterprises having engaged in innovation activity reported that they had incorporated user information, users or users' product ideas into their innovation activity and production of innovative products. The exploitation of information from customer feedback systems, market surveys or studies of user needs, for instance, and joint development with users become more common as the enterprise size grows. By contrast, the integration of products modified or developed by users into production is nearly equally widespread irrespective of enterprise size.

The survey covered enterprises employing at least ten persons in manufacturing (incl. mining and quarrying, electricity, gas and air conditioning supply, and water supply and waste management) and in certain services.

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#### 1. Introduction

The Innovation Survey 2010 was part of the joint Community Innovation Survey (CIS 2010) project of the EU Member States co-ordinated by Eurostat, the Statistical Office of the European Communities, which means that a corresponding survey has been conducted in other EU Member States as well. The survey makes use of a harmonised data collection questionnaire and uniform definitions and methods.

In addition to harmonised EU data, the Finnish survey collected other types of data that were considered important for the description of innovation activity. The questions asked at the national level related to topics such as the enterprise's main position in the production value chain as well as procedures used by enterprises to integrate user orientation in their innovation activity and in the manufacture of innovative products.

The majority of the results by size category and industry are available in the database tables on the statistics website. The tables also present the corresponding data from the previous survey. The results on human health and social work activities are reported in separate tables, since they are not included in the population of the harmonised EU survey.

# 2. Innovation activity related to product and process innovations 2008-2010

A total of 46 per cent of the surveyed enterprises reported innovation activity related to product and process innovations between 2008 and 2010. The majority of these enterprises had also launched product innovations on the market or adopted process innovations.

As before, innovation activity related to goods, services and processes was more common in manufacturing enterprises than in service enterprises. Enterprises with innovation activity accounted for 52 per cent of manufacturing and for 41 per cent of service enterprises.



### Prevalence of innovation activity by size category of personnel 2008–2010, share of enterprises

### Prevalence of innovation activity by industry in manufacturing 2008–2010, share of enterprises



### Prevalence of innovation activity by industry in services 2008–2010, share of enterprises



As in the previous results, innovation activity was more common in group enterprises than in independent enterprises. Furthermore, the launching of product innovations on the market was much more common among enterprises belonging to foreign groups than among those belonging to Finnish groups.

In relative terms, enterprises acting as system suppliers in the production value chain were more likely to report that they had adopted innovations; 43 per cent had launched product innovations on the market,

and a total of 58 per cent reported innovation activity connected with product and process innovations. As for main suppliers, the percentages were slightly lower, 38 and 51 per cent, respectively. Slightly more than one-fifth of sub-contractors reported product innovations and a total of 38 per cent reported innovation activity connected with product and process innovations.

#### Launching of product innovations on the market

One in three of the surveyed enterprises reported that they had launched product innovations on the market between 2008 and 2010. In manufacturing, this applied to 35 per cent and in services to 31 per cent of enterprises.



Enterprises with product innovations in manufacturing and services 2008–2010, share of enterprises

Three out of four enterprises that had launched goods innovations on the market reported having developed new or significantly altered goods in-house. Nearly one-half of the enterprises had engaged in development work jointly with other enterprises or institutions. More than a quarter of the enterprises that had launched innovative goods on the market reported that they had modified goods originally developed by other parties, and for 15 per cent of these enterprises, the actual innovations had been developed by other parties.

Sixty-nine per cent of the enterprises that had launched service innovations on the market reported having developed the innovations in-house. More than half, or 55 per cent, of the enterprises had engaged in development work jointly with other enterprises or institutions. More than one-third of the enterprises had modified services originally developed by other parties, and approximately one-fifth of the enterprises having reported service innovations had launched novelties developed by other parties on the market.

In all, 58 per cent of the enterprises with product innovations between 2008 and 2010 reported having launched such product innovations that were new to their market. Around three out of four of the innovating enterprises reported innovations that were new only to their enterprise. Approximately one enterprise in three having reported product innovations could offer to the market products that were either new or essentially improved to both their own enterprise and the market.

In 2010, around 25 per cent of the total turnover of innovating enterprises came from innovations launched on the market between 2008 and 2010.

The turnover from innovations made up around 15 per cent of the total turnover of the surveyed enterprises. In manufacturing, turnover from innovations accounted for around 25 per cent of the total turnover of the enterprises. In services, the respective share was only four per cent.

More than one-fifth of the enterprises that had launched product innovations believed that one of their innovations was the first of its kind in Finland. Fewer, or six per cent, of the enterprises estimated that one of their innovations was the first of its kind in Europe. By contrast, one in six of the enterprises having

reported product innovations considered that they had launched on the market an innovation with globally unique characteristics between 2008 and 2010.

#### Adoption of process innovations

Around 30 per cent of enterprises had adopted process innovations between 2008 and 2010. In manufacturing, this was the case with 34 per cent and in services with 25 per cent of enterprises. As in previous years, process innovations most often concerned manufacturing and production methods and supporting activities related to processes.



Enterprises with process innovations in manufacturing and services 2008–2010, share of enterprises

Half of the enterprises that had adopted process innovations had developed the processes in-house. Another half of the enterprises had developed process innovations jointly with other enterprises and institutions. More than one-fifth had adapted or modified processes developed by other parties, and less than one-fifth had adopted processes developed by other parties.

# Innovation projects interrupted during the survey period and innovation projects ongoing at the end of the survey period

Between 2008 and 2010, one-quarter of all enterprises reported innovation activities or projects that had either been interrupted or not been completed by the end the survey period.

In manufacturing, around 12 per cent of the enterprises had interrupted projects, and 30 per cent reported projects that had not been completed by the end of the survey period. In services, seven per cent of the enterprises had interrupted projects, and 19 per cent reported projects that had not been completed by the end of 2010.

#### Innovation activities and expenditure

The majority, or 79 per cent, of the enterprises having developed products and processes between 2008 and 2010 had engaged in research and development activities. Slightly over half of them said their R&D activity had been regular. About half of those with innovation activity had outsources research and development activities, and two out of three had purchased machinery, equipment and software to develop and implement innovative products and processes.

A total of 43 per cent of those having developed products and processes had acquired competence, such as patents and non-patented inventions or know-how and other competence. Around one-third had organised or commissioned training related to innovation activity. Four out of ten enterprises reported activities

related to the launching of innovations on the market, such as market research and advertising. With one-quarter of the enterprises, the innovation activity also included design not related to R&D activity. More than one-third of the enterprises reported that they had considered other actions to adopt new or improved products and processes, such as feasibility studies and technical preparation work.



# Innovation activities 2008–2010, share of enterprises with innovation activity relating to product and process innovations

Enterprises reported innovation expenditure to the tune of EUR 7.3 billion in 2010. The expenditure covers their own research and development activities (a total of almost EUR 4.7 billion), research and development activities commissioned from outside the enterprise (more than EUR 1.3 billion), machinery, equipment and software purchases related to innovation activity (good EUR 1 billion) and EUR 160 million spent on the acquisition of know-how.

In manufacturing, the total innovation expenditure of enterprises was nearly EUR 6 billion in 2010, and in the services examined in the survey, a good EUR 1 billion.

# Distribution of innovation expenditure in manufacturing 2010



#### Distribution of innovation expenditure in services 2010



More than one-third of the enterprises with innovation activity had received public funding for their activity between 2008 and 2010. In manufacturing, 43 per cent had received funding and in services, 26 per cent.

The State is the most important source of public funding, since a total of 31 per cent of the innovating enterprises had received financial support from the State. A total of seven per cent of the enterprises had received funding from local or regional authorities, and six per cent from the European Union.

#### Information sources for innovation activity

Between 2008 and 2010, manufacturing enterprises were a little more likely than service enterprises to use different sources of information in their innovation activity.

Own enterprise or group is still one of the most significant information sources for innovation activity. From the enterprises' viewpoint, the customers also play an important role: for 75 per cent of innovating enterprises, customers were significant or moderately significant information sources for development work.

In relative terms, the least mentioned information sources were universities, polytechnics as well as public and private non-profit research institutes.

Information sources for innovation activities in manufacturing and services 2008–2010, share of enterprises with innovation activities related to product and process innovations



#### Co-operation in innovation activity

A total of 40 per cent of the enterprises having developed and adopted product and process innovations had engaged in co-operation related to innovation activity between 2008 and 2010. In manufacturing 44 per cent and in services 35 per cent of enterprises had engaged in such co-operation.

For group enterprises, the group and the other enterprises within the group are naturally important partners. As in previous surveys, the other most important reported partners were customers and equipment and material suppliers.

In relative terms, the public sector was the least mentioned in terms of collaboration.



Co-operation partners for innovation activities in manufacturing and services 2008–2010, share of enterprises with innovation activities

Nearly all innovating enterprises reported having co-operated with Finnish partners. Two out of three had partners in Europe and nearly one in three in the United States. Twenty per cent co-operated with partners in China, and nine per cent of the enterprises having engaging in co-operation reported partners in India. Under one-fifth engaged in co-operation in other regions.





#### Obstacles to innovation activity

Between 2008 and 2010, enterprises having engaged in innovation activity related to products and processes regarded lack of their own funding and lack of qualified personnel as the most important obstacles to innovation activity. Development is particularly complicated by the uncertainty of demand for innovative products and excessive cost of innovation activity. The disadvantages were considered quite similar in both manufacturing and services although a relatively higher number of manufacturing enterprises reported on obstacles to innovation activity.

#### Factors hampering innovation activities in manufacturing and services 2008–2010, share of enterprises with innovation activitiy related to product and process innovations



For enterprises that had not engaged in innovation activity related to products and processes between 2008 and 2010, the most important obstacles to innovation activity related to the uncertainty or lack of demand and to the fact that there was simply no need for innovations. For nearly one-half of the enterprises, lack of qualified personnel was an obstacle to innovation. The availability of funding or the cost of innovation may be a critical factor for many enterprises, since one in ten considered the lack of their own funding a major obstacle to innovation. Likewise, 10 per cent of the non-innovating enterprises considered excessive cost an obstacle to innovation.

#### 3. Marketing and organisational innovations 2008-2010

A total of 40 per cent of the surveyed enterprises reported that they had adopted marketing or organisational innovations between 2008 and 2010. In manufacturing, 40 per cent of enterprises had adopted marketing or organisational innovations, whereas in services the share was 41 per cent.



Prevalence of marketing and organisational innovations in manufacturing and services 2008–2010, share of enterprises

Innovations were most commonly adopted in enterprises belonging to foreign groups. Fifty-four per cent reported marketing or organisational innovations. Around one-half of enterprises belonging to Finnish groups and one-third of independent enterprises had significantly developed or renewed their organisation or marketing.

Fifty-two per cent of system suppliers and slightly fewer (45%) of main suppliers had developed their activities through organisational and marketing reforms. Thirty-one per cent of sub-contractors reported adoptions of such innovations.



### Prevalence of marketing and organisational innovations by industry in manufacturing 2008-2010, share of enterprises

### Prevalence of marketing and organisational innovations by industry in services 2008-2010, share of enterprises



If both product and process innovations, and activities aimed at such innovations, as well as marketing and organisational innovations are included in innovation activity, a total of 56 per cent of Finnish enterprises with at least 10 employees in the examined industries had engaged in innovation activity between 2008 and 2010. In manufacturing, this applied to 59 per cent and in services to 53 per cent of enterprises.

#### Organisational innovations

A total of 32 per cent of enterprises had adopted organisational innovations between 2008 and 2010. This applies to 31 per cent of manufacturing and 32 per cent of service enterprises. The most commonly reported organisational innovations were related to business practices, and procedures for the organisation of responsibilities and decision-making processes.



Enterprises with organisational innovations 2008–2010, share of enterprises

#### Marketing innovations

A total of 27 per cent of enterprises reported having adopted marketing innovations. In manufacturing, this had been done by 27 per cent and in services by 28 per cent of enterprises. Marketing innovations most commonly related to promotion of product sales and to product pricing.



Enterprises with marketing innovations 2008–2010, share of enterprises

#### 4. Creativity

Innovating enterprises reported having used procedures supporting creativity more often than enterprises that did not engage in innovation activity between 2008 and 2010. The majority of the enterprises having used such procedures reported that they had worked successfully, or that no actual information was available on their functionality. Only a fraction of the enterprises reported that the used procedures had been unsuccessful.

For instance, 61 per cent of the enterprises with innovation activity had organised brainstorming sessions. More than two out of three estimated that the procedure had been successful. By contrast, around one-fifth of the non-innovating enterprises had organised brainstorming sessions, and just half of them estimated that the procedure had been successful.

# Methods to stimulate new ideas or creativity 2008–2010, share of enterprises with innovation activities



### Methods to stimulate new ideas or creativity 2008–2010, share of enterprises with no innovation activities



Method used; no knowlegde if successful

# 5. User orientation in corporate innovation activity and the production of innovative products 2008–2010

A total of 80 per cent of the enterprises with innovation activity reported having incorporated user information or users in their innovation activity during the survey period. The majority of them estimated that the procedure was significantly or moderately important.

Seven out of ten had utilised information received from customer feedback systems and half of those which practised innovation activity reported that they had made use of information obtained from market surveys, consumer panels or similar means. Good one-third of enterprises had used more scientific methods in ascertaining user needs.

One-third of the enterprises practising innovation activity had done so together with users by involving them direct in the search for ideas, development and in, for example, production of contents. Approximately one-half of the enterprises reported output (including possible follow-up development and product launch on the market) based on products modified by customers, and approximately 30 per cent reported output based on products developed by customers.

Naturally, the enterprises that reported product innovations reported inclusion of user orientation much more often than enterprises, which innovated without product novelties between 2008 and 2010. The inclusion of user orientation was most common among enterprises that reported having launched new products on the market during the examined period.





The exploitation of user information and joint development were slightly more common among service enterprises than manufacturing enterprises. By contrast, the production of products adapted by users or based on products developed by users was more common in manufacturing.

Like other types of innovation activity, the exploitation of user information and joint development also increase as the enterprise size grows. However, the integration of products adapted and developed by users into production occurs with almost the same frequency among small and large enterprises.

# 6. Innovation activity in human health and social work activities 2008–2010

On the average, enterprises in human health and social work activities engaged in innovation activity related to products and processes as frequently as enterprises in other industries between 2008 and 2010. A total of 44 per cent of enterprises engaged in innovation activity.

A total of 28 per cent of enterprises brought product innovations on the market between 2008 and 2010. The majority of innovating enterprises only reported service innovations. The turnover from innovations launched on the market between 2008 and 2010 accounted for around 10 per cent of the total turnover of enterprises in human health and social work activities in 2010.

The share of enterprises having adopted process innovations was 31 per cent. Enterprises most commonly reported innovative supporting activities related to processes.

Eighty-two per cent of the enterprises in human health and social work activities that had developed products and processes had engaged in or outsourced research and development activity. For instance, procurement of competence and training related to innovation activity was reported more commonly in human health and social work activities than in other industries on the average.

The enterprises reported having spent a total of EUR 80 million on innovation activity in 2010. The share of human health services was 90 per cent of this.



## Innovation expenditure in human health and social work activities 2010, EUR million

Between 2008 and 2010, a total of 17 per cent of the enterprises in human health and social work activities that had developed products and processes received public funding for their innovation activity. Ten per cent received funding from local or regional authorities, and another 10 per cent received State funding. Three per cent received funding from the EU.

As in other industries, the most important source of information for innovation activity in human health and social work activities is the enterprise or the group itself. Universities and public and private non-profit research institutes were named as the least important information sources in the survey.

For group enterprises, the other enterprises within the group are important partners. For enterprises in human health and social work activities, customers and equipment suppliers are also important partners. The public sector is viewed as an important point of reference and a key partner by many enterprises.

The lack of their own funding and the high expenditure required for innovation activity are great challenges to enterprises engaged in innovation activity related to product and process innovations. The lack of qualified personnel and particularly the uncertainty in the demand for innovative products are obstacles to innovation activity. The main reason for not engaging in innovation between 2008 and 2010 was that the enterprise regarded no new innovations necessary thanks to its previous innovations.

In human health and social work activities, the percentage of enterprises reporting marketing and organisation innovations between 2008 and 2010 was higher than in the other industries on the average, or a total of 48 per cent of enterprises. The share of enterprises having adopted organisational innovations was 40 per cent, and a total of twenty-nine per cent of enterprises had made marketing reforms. A total of 57 per cent of the surveyed enterprises in human health and social work activities had engaged in broadly defined innovation activity.

It was quite common for the enterprises that had engaged in innovation activity to report integration of users and user information in their development work. Enterprises in human health and social work activities exploited customer feedback systems more actively than enterprises in other industries. In other respects, the adoption of user orientation seemed, on the average, similar to other industries.

#### Appendix tables

### Appendix table 1. Prevalence of innovation activity by form of enterprise, 2008–2010, share of enterprises

Industry	Form of enterprise	Number of enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements
			%	%	%	%	%	%
All NACE - Total	Independent enterprise	4711	28,5	26,1	38,6	21,5	41,8	10,9
	Part of domestic group	2173	33,6	34,4	44,3	31,8	49,7	16,9
	Part of foreign group	1197	47,6	33,3	54,3	29,9	58,8	16,8
Manufacturing	Independent enterprise	2452	31,1	30,2	43,2	25,4	46,4	12,6
	Part of domestic group	1049	39,4	41,4	52,3	40,8	60,2	21,0
	Part of foreign group	392	47,6	40,8	58,6	42,9	65,2	21,3
Services	Independent enterprise	2259	25,7	21,8	33,6	17,3	36,8	9,1
	Part of domestic group	1124	28,2	28,0	36,8	23,5	39,9	13,0
	Part of foreign group	805	47,6	29,7	52,2	23,6	55,7	14,6

### Appendix table 2. Prevalence of innovation activity by enterprise's primary position in the production value chain, 2008–2010, share of enterprises

Industry	Position in production value chain	Number of enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements
			%	%	%	%	%	%
ALL NACE -	Main supplier	4503	38,3	32,3	47,8	27,9	51,1	15,9
Total	System provider	703	43,0	37,9	52,4	37,0	57,5	20,7
	Subcontractor	2657	22,2	23,8	32,7	19,6	37,5	8,0
	Undefined position	218	12,9	12,8	19,7	11,8	22,9	3,8
	Total	8081	32,7	29,4	42,4	25,5	46,4	13,4
Manufacturing	Main supplier	2111	41,8	36,5	52,5	34,9	56,6	18,9
	System provider	316	45,0	46,6	58,3	41,4	64,2	22,9
	Subcontractor	1393	23,4	29,2	37,5	24,4	43,6	10,0
	Undefined position	73	15,8	13,5	27,5	15,9	27,5	1,8
	Total	3893	35,0	34,3	47,2	31,3	52,0	15,7

Industry	Position in production value chain	Number of enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements	
			%	%	%	%	%	%	
Services	Main supplier	2391	35,1	28,6	43,6	21,8	46,2	13,2	
	System provider	388	41,4	30,9	47,5	33,4	52,1	18,9	
	Subcontractor	1264	20,9	17,7	27,3	14,3	30,9	5,8	
	Undefined position	144	11,4	12,5	15,7	9,7	20,6	4,8	
	Total	4188	30,6	25,0	38,1	20,2	41,3	11,2	

### Appendix table 3. Prevalence of innovation activity in human health and social work activities by industry, 2008–2010, share of enterprises

Industry	Number of enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements
		%	%	%	%	%	%
Human health activities	207	21,8	43,8	47,8	19,9	50,7	7,9
Residential care activities	421	31,6	27,6	37,5	18,6	42,8	10,9
Social work activities without accommodation	115	26,8	22,2	32,1	11,0	38,8	3,4
Human health and social work activities, total	743	28,1	31,3	39,5	17,8	44,4	8,9

### Appendix table 4. Prevalence of innovation activity in human health and social work activities by form of enterprise, 2008–2010, share of enterprises

····· ,	Form of enterprise	rprise enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements
			%	%	%	%	%	%
Human health and social work activities	Independent enterprise	617	27,1	27,0	35,5	13,9	39,4	6,5
	Part of group	126	33,2	52,1	59,2	36,8	68,8	20,6

# Appendix table 5. Prevalence of innovation activity in human health and social work activities by enterprise's primary position in the production value chain, 2008–2010, share of enterprises

Industry	Position in production value chain	Number of enterprises	Product innovations (goods and services)	Process innovations	Product or process innovations	Innovation projects	Innovation activity	All elements
			%	%	%	%	%	%
Human	Main supplier	590	28,7	31,4	39,9	18,9	45,2	8,8
health and	System provider	77	30,1	45,6	54,3	13,6	54,3	10,4
social	Subcontractor	49	21,5	12,3	21,5	12,3	21,5	12,3
work activities	Undefined position	26	22,0	22,0	22,0	17,2	39,2	0,0
	Total	743	28,1	31,3	39,5	17,8	44,4	8,9

Appendix table 6. Prevalence of product (good or service) innovations in human health and social work activities, 2008–2010, share of enterprises

Industry	Number of enterprises	Product innovations (goods and services)	Only innovations for a new or improved good	Only innovations for a new or improved service		Product innovations for a new or improved good	Product innovations for a new or improved service
		%	%	%	%	%	%
Human health activities	207	21,8	0,0	17,8	4,0	4,0	21,8
Residential care activities	421	31,6	0,0	23,0	8,6	8,6	31,6
Social work activities without accommodation	115	26,8	0,0	13,9	12,9	12,9	26,8
Human health and social work activities, total	743	28,1	0,0	20,1	8,0	8,0	28,1

#### Appendix table 7. Prevalence of process innovations in human health and social work activities, 2008–2010, share of enterprises

Industry	Number of enterprises	Process innovations	New methods of manufacturing or producing products	New logistics, delivery or distribution methods	New supporting activities for processes
		%	%	%	%
Human health activities	207	43,8	17,1	4,6	35,3
Residential care activities	421	27,6	18,7	4,5	22,0
Social work activities without accommodation	115	22,2	3,4	0,0	18,8
Human health and social work activities, total	743	31,3	15,9	3,8	25,2

#### Appendix table 8. Developers of goods innovations by size category of personnel, 2008–2010, share of enterprises with innovations

Industry	Size category of personnel	Number of enterprises		Own enterprise together with others	Own enterprise by adapting or modifying goods developed by others	Other enterprises or institutions
			%	%	%	%
ALL NACE -	10-49	1305	72,3	43,4	29,2	16,3
Total	50-249	424	82,5	54,2	22,7	10,3
	250-	198	85,8	63,1	23,4	13,1
	Total	1927	75,9	47,8	27,2	14,7
Manufacturing	10-49	735	80,8	43,6	27,0	7,2
	50-249	329	86,2	53,1	18,2	9,0
	250-	161	86,9	65,0	21,0	10,8
	Total	1225	83,1	49,0	23,9	8,2
Services	10-49	570	61,3	43,1	32,0	28,1
	50-249	95	69,8	58,1	38,3	14,7
	250-	37	80,9	54,7	33,9	23,4
	Total	702	63,5	45,7	32,9	26,0

# Appendix table 9. Developers of goods innovations by industry, 2008–2010, share of enterprises with innovations

Industry	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying goods developed by others	Other enterprises or institutions	
		%	%	%	%	
Mining and quarrying	.1)					
Food products and beverages	144	87,5	53,5	18,9	4,9	
Textiles	10	100,0	73,9	16,3	0,0	
Wearing apparel	10	100,0	0,0	37,4	0,0	
Leather and related products						
Wood, products of wood, and cork	67	62,3	52,3	40,7	11,5	
Paper and paper products	24	76,6	81,0	35,8	8,8	
Printing and reproduction of recorded media	11	87,6	12,4	72,5	0,0	
Chemicals and chemical products	61	86,0	64,6	38,7	20,3	
Rubber and plastic products	80	76,9	67,8	27,2	5,8	
Other non-metallic mineral products	42	85,7	33,7	3,2	16,7	
Basic metals	13	49,6	65,9	41,9	8,5	
Fabricated metal products, except machinery and equipment	212	73,3	48,6	28,4	11,1	
Computer, electronic and optical products	76	89,5	43,7	30,3	9,2	
Electrical equipment	81	85,0	38,7	13,4	3,0	
Machinery and equipment n,e,c,	227	92,7	46,3	14,7	7,6	
Motor vehicles, trailers and semi-trailers	30	89,5	35,9	10,5	0,0	
Other transport equipment	31	72,2	39,1	3,2	3,2	
Furniture	37	84,5	22,7	19,1	15,5	
Other manufacturing	37	100,0	61,6	30,8	0,0	
Repair and installation of machinery and equipment						
Electricity, gas, steam and air conditioning supply						
Water collection, treatment and supply						
Sewerage, waste treatment						
Wholesale trade, except of motor vehicles and motorcycles	410	52,7	37,2	24,8	28,0	
Transportation and storage	30	100,0	76,1	76,1	76,1	
Postal and courier activities						
Publishing activities	45	87,4	23,5	33,9	2,2	
Telecommunications						
Computer programming, consultancy and related activities	120	84,1	57,8	42,4	32,9	
Information service activities						
Financial service activities						
Insurance, reinsurance and pension funding						
Activities auxiliary to financial services and insurance activities						
Architectural and engineering activities; technical testing and analysis	57	60,3	75,4	36,8	0,0	
All NACE - Total	1927	75,9	47,8	27,2	14,7	
Manufacturing	1225	83,1	49,0	23,9	8,2	
Services	702	63,5	45,7	32,9	26,0	

### Appendix table 10. Developers of goods innovations in human health and social work activities by industry, 2008–2010, share of enterprises with innovations

Industry	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying goods developed by others	Other enterprises or institutions
		%	%	%	%
Human health activities	8	12,0	30,1	82,0	0,0
Residential care activities	36	100,0	0,0	0,0	0,0
Social work activities without accommodation	15	21,4	100,0	6,7	6,7
Human health and social work activities, total	59	68,1	29,2	13,2	1,7

### Appendix table 11. Developers of service innovations by size category of personnel, 2008–2010, share of enterprises with innovations

Industry	Size category of personnel	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying services developed by others	Other enterprises or institutions
			%	%	%	%
ALL NACE -	10-49	993	69,1	55,3	34,5	22,3
Total	50-249	300	62,6	50,4	37,5	18,6
	250-	157	78,8	63,8	35,1	13,6
	Total	1450	68,8	55,2	35,2	20,6
Manufacturing	10-49	291	75,5	61,9	39,1	20,2
	50-249	116	66,2	52,0	43,2	25,0
	250-	90	82,3	57,1	31,9	15,6
	Total	497	74,5	58,7	38,7	20,5
Services	10-49	702	66,5	52,6	32,6	23,1
	50-249	184	60,3	49,4	33,8	14,5
	250-	67	74,0	73,0	39,4	10,9
	Total	953	65,8	53,4	33,3	20,6

# Appendix table 12. Developers of service innovations by industry, 2008–2010, share of enterprises with innovations

Industry	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying services developed by others	Other enterprises or institutions
		%	%	%	%
Mining and quarrying	.1)				
Food products and beverages	42	74,1	34,0	40,4	37,6
Textiles	_2)	-	-	-	-
Wearing apparel					
Leather and related products	-	-	-	-	-
Wood, products of wood, and cork	37	88,3	19,9	15,0	11,6
Paper and paper products	20	82,1	84,1	28,0	43,5
Printing and reproduction of recorded media	28	60,7	44,4	24,7	0,0
Chemicals and chemical products	24	90,8	78,9	68,9	4,2
Rubber and plastic products	24	47,2	47,5	4,1	18,8
Other non-metallic mineral products	26	77,0	66,7	20,7	0,0
Basic metals					
Fabricated metal products, except machinery and equipment	74	80,0	58,6	57,9	43,5
Computer, electronic and optical products	35	85,4	58,7	44,1	9,5
Electrical equipment	28	73,8	47,5	8,4	0,0
Machinery and equipment n,e,c,	64	82,2	58,6	52,0	10,8
Motor vehicles, trailers and semi-trailers					
Other transport equipment					
Furniture					
Other manufacturing					
Repair and installation of machinery and equipment	12	100,0	80,2	80,2	0,0
Electricity, gas, steam and air conditioning supply	20	55,5	77,8	22,4	0,0
Water collection, treatment and supply					
Sewerage, waste treatment	16	67,2	76,2	60,2	33,8
Wholesale trade, except of motor vehicles and motorcycles	243	62,1	51,9	34,2	36,1
Transportation and storage	122	77,0	48,4	45,4	23,1
Postal and courier activities					
Publishing activities	39	78,9	68,4	40,0	13,1
Telecommunications	23	39,0	65,3	49,6	4,3
Computer programming, consultancy and related activities	219	70,6	49,8	29,3	15,2
Information service activities	21	88,1	28,6	28,6	16,7
Financial service activities	87	45,7	64,6	33,7	28,4
Insurance, reinsurance and pension funding	20	34,8	77,5	16,4	0,0
Activities auxiliary to financial services and insurance activities	43	64,8	54,7	34,3	10,2
Architectural and engineering activities; technical testing and analysis	135	69,3	53,6	25,5	6,4
All NACE - Total	1450	68,8	55,2	35,2	20,6
Manufacturing, total	497	74,5	58,7	38,7	20,5

Industry			enterprise together with others	Own enterprise by adapting or modifying services developed by others	Other enterprises or institutions
		%	%	%	%
Services, total	953	65,8	53,4	33,3	20,6

1) .. = data subject to secrecy

2) - = none

#### Appendix table 13. Developers of service innovations in human health and social work activities by industry, 2008–2010, share of enterprises with innovations

Industry	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying services developed by others	Other enterprises or institutions
		%	%	%	%
Human health activities	45	50,3	52,5	42,3	0,0
Residential care activities	133	91,6	15,6	31,2	9,1
Social work activities without accommodation	31	87,4	35,5	28,5	3,2
Human health and social work activities, total	209	82,0	26,5	33,2	6,3

# Appendix table 14. Enterprises with product innovations by degree of novelty of innovations and size category of personnel, 2008–2010, share of enterprises with product innovations

Industry	Size category of personnel	Number of enterprises		Only new to enterprise	Both new to market and to enterprise	New to market	New to enterprise
			%	%	%	%	%
ALL NACE -	10-49	1816	28,8	43,4	27,8	56,6	71,2
Total	50-249	574	22,0	42,9	35,2	57,1	78,0
	250-	253	12,8	31,1	56,1	68,9	87,2
	Total	2643	25,8	42,1	32,1	57,9	74,2
Manufacturing	10-49	842	32,0	44,5	23,5	55,5	68,0
	50-249	348	24,4	38,3	37,3	61,7	75,6
	250-	172	9,3	25,4	65,3	74,6	90,7
	Total	1362	27,2	40,5	32,3	59,5	72,8
Services	10-49	974	25,9	42,5	31,5	57,5	74,1
	50-249	225	18,1	50,0	31,9	50,0	81,9
	250-	82	20,4	42,9	36,7	57,1	79,6
	Total	1281	24,2	43,9	31,9	56,1	75,8

# Appendix table 15. Enterprises with product innovations by degree of novelty of innovations and industry, 2008–2010, share of enterprises with product innovations

Industry	Number of enterprises		Only new to enterprise	Both new to market and to enterprise	New to market	New to enterprise
		%	%	%	%	%
Mining and quarrying	11	9,0	71,1	19,9	28,9	91,0
Food products and beverages	150	11,2	55,2	33,5	44,8	88,8
Textiles	10	9,8	73,9	16,3	26,1	90,2
Wearing apparel	10	12,6	74,7	12,6	25,3	87,4
Leather and related products	1)					
Wood, products of wood, and cork	73	29,1	33,6	37,3	66,4	70,9
Paper and paper products	37	28,2	47,9	23,9	52,1	71,8
Printing and reproduction of recorded media	28	19,6	19,6	60,7	80,4	80,4
Chemicals and chemical products	61	15,2	47,2	37,6	52,8	84,8
Rubber and plastic products	82	30,9	40,9	28,2	59,1	69,1
Other non-metallic mineral products	47	37,6	30,8	31,6	69,2	62,4
Basic metals	16	0,0	53,0	47,0	47,0	100,0
Fabricated metal products, except machinery and equipment	236	42,0	35,5	22,5	64,5	58,0
Computer, electronic and optical products	82	32,4	20,8	46,8	79,2	67,6
Electrical equipment	86	25,4	43,8	30,8	56,2	74,6
Machinery and equipment n,e,c,	227	34,8	33,3	31,9	66,7	65,2
Motor vehicles, trailers and semi-trailers	32	21,4	34,4	44,3	65,6	78,6
Other transport equipment	31	33,1	52,4	14,5	47,6	66,9
Furniture	43	5,4	45,0	49,6	55,0	94,6
Other manufacturing	37	11,5	46,7	41,8	53,3	88,5
Repair and installation of machinery and equipment	18	33,3	60,1	6,6	39,9	66,7
Electricity, gas, steam and air conditioning supply	20	11,2	55,5	33,3	44,5	88,8
Water collection, treatment and supply						
Sewerage, waste treatment	16	0,0	42,3	57,7	57,7	100,0
Wholesale trade, except of motor vehicles and motorcycles	478	24,1	40,8	35,1	59,2	75,9
Transportation and storage	130	24,2	56,0	19,8	44,0	75,8
Postal and courier activities						
Publishing activities	64	18,5	40,8	40,7	59,2	81,5
Telecommunications	23	25,8	30,9	43,3	69,1	74,2
Computer programming, consultancy and related activities	248	26,0	39,6	34,4	60,4	74,0
Information service activities	21	47,6	47,6	4,8	52,4	52,4
Financial service activities	87	17,5	54,5	28,0	45,5	82,5
Insurance, reinsurance and pension funding	22	16,6	77,8	5,6	22,2	83,4
Activities auxiliary to financial services and insurance activities	43	7,0	65,7	27,3	34,3	93,0
Architectural and engineering activities; technical testing and analysis	164	30,4	36,9	32,7	63,1	69,6
All NACE - Total	2643	25,8	42,1	32,1	57,9	74,2
Manufacturing, total	1362	27,2	40,5	32,3	59,5	72,8
Services, total	1281	24,2	43,9	31,9	56,1	75,8

1) .. = data subject to secrecy

Appendix table 16. Enterprises with product innovations in human health and social work activities by degree of novelty of innovations and industry, 2008–2010, share of enterprises with product innovations

Industry	Number of enterprises		-	Both new to market and to enterprise	New to market	New to enterprise	
		%	%	%	%	%	
Human health activities	45	46,4	36,0	17,6	64,0	53,6	
Residential care activities	133	31,2	63,2	5,7	36,8	68,8	
Social work activities without accommodation	31	51,9	25,2	22,9	74,8	48,1	
Human health and social work activities, total	209	37,5	51,7	10,8	48,3	62,5	

### Appendix table 17. Proportions of product innovations and unchanged products of turnover by size category of personnel, 2010

Industry	Size category	•	the total turnov th product inno		Proportions of the total turnover of all enterprises			
	of personnel	Products new to the market		Unchanged products	Products new to the market	Products new only to the enterprise	Unchanged products	
		%	%	%	%	%	%	
ALL NACE - Total	10–49	8,5	9,4	82,1	2,5	2,7	94,8	
	50–249	4,5	5,8	89,7	2,1	2,7	95,1	
	250–	15,4	12,0	72,6	11,9	9,2	78,9	
	Total	13,3	10,9	75,9	8,4	6,9	84,7	
Manufacturing	10–49	8,7	9,3	81,9	3,0	3,1	93,9	
	50–249	8,7	7,2	84,1	3,5	2,9	93,7	
	250–	18,7	13,7	67,5	17,5	12,8	69,8	
	Total	17,5	13,0	69,5	13,6	10,2	76,2	
Services	10–49	8,2	9,4	82,3	2,1	2,4	95,4	
	50–249	1,9	4,9	93,1	1,0	2,6	96,3	
	250–	3,0	5,4	91,5	1,4	2,5	96,1	
	Total	3,4	5,8	90,8	1,5	2,5	96,0	

# Appendix table 18. Proportions of product innovations and unchanged products of turnover by industry, 2010

Industry	Proportions enterprises with product	of the total tur innovations	nover of	Proportions of the total turnover of all enterprises			
	Products new to the market	Products new only to the enterprise	Unchanged products	Products new to the market	Products new only to the enterprise	Unchanged products	
	%	%	%	%	%	%	
Mining and quarrying	18,4	1,2	80,5	9,1	0,6	90,3	
Food products and beverages	4,1	18,0	77,9	3,3	14,4	82,3	
Textiles	10,9	14,6	74,5	5,6	7,5	87,0	
Wearing apparel	41,9	11,4	46,7	13,1	3,6	83,4	
Leather and related products	1)						
Wood, products of wood, and cork	3,4		91,5	2,0		94,8	
Paper and paper products	2,7	10,6		2,6		87,5	
Printing and reproduction of recorded media	0,7	1,4	98,0	0,3			
Chemicals and chemical products	48,5	1,9	49,6	41,7	1,6	56,7	
Rubber and plastic products	9,1	7,1	83,9	7,1	5,5	87,4	
Other non-metallic mineral products	7,1	12,2	80,6	3,9	6,7	89,4	
Basic metals	0,9	4,0	95,1	0,8	3,6	95,6	
Fabricated metal products, except machinery and equipment	19,2	4,8	76,0	8,6	2,2	89,2	
Computer, electronic and optical products	27,3	26,8	45,9	26,4	25,9	47,7	
Electrical equipment	16,0	17,3	66,7	13,5	14,6	71,9	
Machinery and equipment n,e,c,	11,1	10,3	78,6	8,5	7,9	83,7	
Motor vehicles, trailers and semi-trailers	11,6	4,4	84,0	5,0	1,9	93,0	
Other transport equipment	31,7	11,3	57,1	24,0	8,6	67,4	
Furniture	10,7	9,3	80,0	5,0	4,3	90,7	
Other manufacturing Repair and installation of	11,8	10,4	77,9	8,3	7,3	84,4	
machinery and equipment	11,0	0,7	88,3	2,5	0,2	97,4	
Electricity, gas, steam and air conditioning supply	3,7	1,1	95,2	2,0	0,6	97,4	
Water collection, treatment and supply							
Sewerage, waste treatment	2,4			0,9		97,3	
Wholesale trade, except of motor vehicles and motorcycles	2,8					96,9	
Transportation and storage	2,0					97,5	
Postal and courier activities	2,0			1,8			
Publishing activities	4,4					94,3	
Telecommunications	1,8	4,2	94,0			97,2	
Computer programming, consultancy and related activities	6,9	11,1	82,0	5,0	8,1	86,8	
Information service activities	0,9	10,4	88,7	0,4	4,4	95,2	
Financial service activities	2,3	2,4	95,3	1,6	1,7	96,6	
Insurance, reinsurance and pension funding	3,5	6,2		1,4			

Industry	Proportions enterprises with product	of the total tur innovations	nover of	Proportions of the total turnover of all enterprises		
	Products new to the market	Products new only to the enterprise	Unchanged products	Products new to the market	Products new only to the enterprise	Unchanged products
	%	%	%	%	%	%
Activities auxiliary to financial services and insurance activities	7,7	2,3	89,9	6,0	1,8	92,2
Architectural and engineering activities; technical testing and analysis	9,3	11,7	79,1	5,2	6,5	88,3
ALL NACE-Total	13,3	10,9	75,9	8,4	6,9	84,7
Manufacturing, total	17,5	13,0	69,5	13,6	10,2	76,2
Services, total	3,4	5,8	90,8	1,5	2,5	96,0

1) .. = data subject to secrecy

### Appendix table 19. Proportions of product innovations and unchanged products of turnover in human health and social work activities by industry, 2010

Industry	Proportions of with product in		r of enterprises	Proportions of the total turnover of all enterprises			
	Products new to the market	Products new only to the enterprise	Unchanged products	Products new to the market	Products new only to the enterprise	Unchanged products	
	%	%	%	%	%	%	
Human health activities	3,8	11,2	84,9	2,8	8,1	89,1	
Residential care activities	3,7	4,0	92,4	1,7	1,8	96,4	
Social work activities without accommodation	7,6	1,8	90,6	3,3	0,8	95,9	
Human health and social work activities, total	3,9	10,3	85,8	2,6	7,0	90,4	

## Appendix table 20. Enterprise's innovation as first by largest area and size category of personnel, 2008-2010, share of enterprises with product innovations

Industry	Size category of personnel	Number of enterprises	First in Finland	First in Europe	World first
			%	%	%
ALL NACE -	10-49	1816	21,0	6,3	14,2
Total	50-249	574	27,2	5,5	19,3
	250-	253	29,1	10,0	24,8
	Total	2643	23,1	6,5	16,3
Manufacturing	10-49	842	20,6	7,6	15,2
	50-249	348	26,3	6,2	23,4
	250-	172	25,7	13,6	30,3
	Total	1362	22,7	8,0	19,2
Services	10-49	974	21,4	5,1	13,4
	50-249	225	28,6	4,3	12,9
	250-	82	36,2	2,5	13,1
	Total	1281	23,6	4,8	13,3

# Appendix table 21. Developers of process innovations by size category of personnel, 2008–2010, share of enterprises with innovations

Industry	Size category of personnel	Number of enterprises	Own enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying processes developed by others	Other enterprises or institutions
			%	%	%	%
ALL NACE -	10-49	1597	47,8	45,6	21,5	18,9
Total	50-249	555	54,1	55,6	23,2	14,5
	250-	227	65,0	73,3	31,5	17,6
	Total	2379	50,9	50,6	22,8	17,7
Manufacturing	10-49	840	49,7	44,5	17,8	15,8
	50-249	346	53,9	64,0	19,0	13,2
	250-	147	64,7	79,8	29,8	17,2
	Total	1334	52,5	53,5	19,5	15,3
Services	10-49	757	45,6	46,9	25,6	22,3
	50-249	208	54,4	41,7	30,1	16,8
	250-	80	65,6	61,3	34,6	18,2
	Total	1046	48,9	47,0	27,2	20,9
### Appendix table 22. Developers of process innovations by industry, 2008–2010, share of enterprises with process innovations

Industry	Number of enterprises	enterprise by itself	Own enterprise together with others	Own enterprise by adapting or modifying processes developed by others	Other enterprises or institutions
		%	%	%	%
Mining and quarrying	13	33,7	90,8	7,7	7,7
Food products and beverages	115	61,3	46,8	29,3	31,1
Textiles	22	12,1	26,8	53,5	7,6
Wearing apparel	12	69,5	51,0	8,2	0,0
Leather and related products	_1)	-	-	-	-
Wood, products of wood, and cork	98	54,8	44,0	8,9	11,5
Paper and paper products	38	38,5	54,7	12,5	30,1
Printing and reproduction of recorded media	36	63,8	44,9	12,5	36,2
Chemicals and chemical products	58	58,8	57,4	18,6	6,6
Rubber and plastic products	72	48,4	45,1	19,2	9,6
Other non-metallic mineral products	65	55,3	45,8	28,4	4,6
Basic metals	21	68,6	46,1	36,6	19,8
Fabricated metal products, except machinery and equipment	274	48,8	67,4	17,9	15,1
Computer, electronic and optical products	64	54,1	44,1	30,3	17,6
Electrical equipment	52	72,2	36,9	16,3	9,3
Machinery and equipment n,e,c,	171	57,6	56,3	12,3	12,0
Motor vehicles, trailers and semi-trailers	25	56,3	43,7	0,0	12,8
Other transport equipment	23	45,5	89,3	34,2	4,3
Furniture	32	52,1	56,3	18,8	0,0
Other manufacturing	2)				
Repair and installation of machinery and equipment	24	80,5	47,9	19,5	0,0
Electricity, gas, steam and air conditioning supply	53	33,9	51,0	19,0	21,7
Water collection, treatment and supply	27	29,5	45,5	29,5	47,7
Sewerage, waste treatment	26	47,3	32,8	17,6	19,9
Wholesale trade, except of motor vehicles and motorcycles	329	51,9	57,4	28,1	17,0
Transportation and storage	178	53,6	35,0	34,3	19,9
Postal and courier activities					
Publishing activities	72	43,2	44,1	27,6	24,8
Telecommunications	36	41,6	45,5	36,3	5,5
Computer programming, consultancy and related activities	177	62,3	36,8	17,9	24,9
Information service activities					
Financial service activities	57	25,6	57,8	13,6	20,4
Insurance, reinsurance and pension funding	15	36,4	36,4	27,3	23,3
Activities auxiliary to financial services and insurance activities	30	56,1	46,0	60,7	0,0
Architectural and engineering activities; technical testing and analysis	137	36,1	51,4	21,8	29,1

Industry		Number of Own C enterprises enterprise by itself t		Own enterprise by adapting or modifying processes developed by others	Other enterprises or institutions	
		%	%	%	%	
All NACE - Total	2379	50,9	50,6	22,8	17,7	
Manufacturing, total	1334	52,5	53,5	19,5	15,3	
Services, total	1046	48,9	47,0	27,2	20,9	

1) - = none

2) .. = data subject to secrecy

### Appendix table 23. Developers of process innovations in human health and social work activities by industry, 2008–2010, share of enterprises with innovations

Industry	Number of enterprises		Own enterprise together with others	Own enterprise by adapting or modifying processes developed by others	Other enterprises or institutions	
		%	%	%	%	
Human health activities	91	45,3	26,1	30,2	25,6	
Residential care activities	116	67,0	20,9	19,1	19,5	
Social work activities without accommodation	25	76,2	23,8	0,0	15,2	
Human health and social work activities, total	232	59,6	23,2	21,3	21,4	

#### Appendix table 24. Prevalence of ongoing and abandoned innovation activities in human health and social work activities by industry, 2008–2010, share of enterprises

Industry	Number of enterprises		Projects/activities abandoned or suspended before completion	Projects/activities not completed by the end of 2010	
		%	%	%	
Human health activities	207	19,9	8,3	17,1	
Residential care activities	421	18,6	4,2	17,3	
Social work activities without accommodation	115	11,0	3,4	7,6	
Human health and social work activities, total	743	17,8	5,2	15,7	

Industry	Position in production value	Number of enterprises	In-house R&D	Continuous in-house R&D	Occasional in-house R&D	External R&D	In-house or external R&D
	chain		%	%	%	%	%
ALL NACE -	Main supplier	2301	80,0	39,9	40,1	57,0	82,3
Total	System provider	405	85,0	39,9	45,2	58,4	87,2
	Subcontractor	997	76,2	32,0	44,2	49,7	78,8
	Undefined position	50	55,5	33,4	22,1	30,3	55,5
	Total	3753	79,2	37,7	41,5	54,9	81,5
Manufacturing	Main supplier	1195	86,6	50,1	36,4	65,1	88,2
	System provider	202	80,9	40,8	40,0	64,6	84,6
	Subcontractor	607	78,4	32,4	45,9	49,1	79,5
	Undefined position	20	56,1	30,7	25,4	40,7	56,1
	Total	2025	83,2	43,7	39,5	60,0	84,9
Services	Main supplier	1106	72,8	28,9	44,0	48,3	76,0
	System provider	202	89,2	38,9	50,3	52,3	89,8
	Subcontractor	390	72,8	31,4	41,4	50,7	77,6
	Undefined position	30	55,1	35,2	19,9	23,3	55,1
	Total	1728	74,4	30,7	43,7	48,9	77,6

Appendix table 25. Prevalence of R&D by enterprise's primary position in the production value chain, 2006–2008, share of enterprises with innovation activity

## Appendix table 26. Prevalence of other innovation activities by enterprise's primary position in the production value chain, 2006–2008, share of enterprises with innovation activity

Industry	Position in production value chain	Number of enterprises	Acquisition of machinery and equipment	Acquisition of external knowledge	Training for innovation activities	Market introduction of innovations	Design	Other innovation activities
			%	%	%	%	%	%
ALL NACE -	Main supplier	2301	64,5	43,2	35,5	43,4	30,1	39,3
Total	System provider	405	70,2	47,4	44,7	43,7	29,1	34,3
	Subcontractor	997	70,1	38,1	28,3	28,5	12,3	36,8
	Undefined position	50	62,4	40,9	45,3	35,7	23,8	26,2
	Total	3753	66,6	42,3	34,7	39,3	25,2	37,9
Manufacturing	Main supplier	1195	68,3	44,6	35,4	47,4	39,2	44,5
	System provider	202	71,2	54,8	43,0	45,0	31,2	33,1
	Subcontractor	607	71,1	36,0	26,4	23,6	14,3	33,0
	Undefined position	20	73,2	30,7	40,7	30,7	30,7	30,7
	Total	2025	69,5	42,9	33,5	39,9	30,9	39,7
Services	Main supplier	1106	60,3	41,8	35,7	39,0	20,3	33,7
	System provider	202	69,3	40,0	46,4	42,4	27,0	35,5
	Subcontractor	390	68,6	41,3	31,3	36,1	9,2	42,9
	Undefined position	30	55,1	47,7	48,4	39,0	19,0	23,1
	Total	1728	63,1	41,6	36,1	38,7	18,6	35,8

#### Appendix table 27. Prevalence of R&D in human health and social work activities by industry, 2006–2008, share of enterprises with innovation activity

Industry	Number of enterprises	In-house R&D	Continuous in-house R&D	Occasional in-house R&D	External R&D	In-house or external R&D
		%	%	%	%	%
Human health activities	105	72,3	42,9	29,4	36,5	83,4
Residential care activities	180	89,3	25,8	63,5	28,6	89,3
Social work activities without accommodation	45	50,6	10,9	39,7	24,5	50,6
Human health and social work activities, total	330	78,6	29,2	49,4	30,6	82,2

#### Appendix table 28. Prevalence of other innovation activities in human health and social work activities by industry, 2006–2008, share of enterprises with innovation activity

Industry	Number of enterprises	Acquisition of machinery and equipment	Acquisition of external knowledge	Training for innovation activities	Market introduction of innovations	Design	Other innovation activities
		%	%	%	%	%	%
Human health activities	105	78,6	47,1	75,2	28,1	21,4	19,4
Residential care activities	180	72,5	60,2	71,9	37,4	15,1	14,6
Social work activities without accommodation	45	45,8	41,9	45,8	26,1	17,4	8,7
Human health and social work activities, total	330	70,8	53,5	69,4	32,9	17,4	15,3

Industry	In-house R&D	External R&D	Acquisition of machinery, equipment and software	Acquisition of external knowledge	Total expenditure
Mining and quarrying (TOL 05-09)	10,2	2,7	0,8	2,0	15,8
Food products and beverages (TOL 10-11)	61,0	4,8	140,7	2,1	208,6
Textile, clothing, leather and footwear industry (TOL 13-15)	7,4	0,9	0,7	2,1	11,1
Wood and paper industry (TOL 16-18)	115,3	23,0	302,5	21,9	462,7
Chemical industry (TOL 19-22)	293,3	63,4	40,1	8,1	404,8
Metal and engineering industry (TOL 24-25, 28-30)	550,4	102,5	110,7	16,0	779,6
Electrical and electronics industry (TOL 26-27)	2753,4	748,8	112,9	32,8	3647,9
Other manufacturing (TOL 23, 31-33)	53,1	11,0	40,9	2,7	107,7
Energy and waste management (TOL 35-39)	70,5	174,5	80,1	12,0	337,2
Wholesale trade, except of motor vehicles and motorcycles (TOL 46)	105,3	50,1	49,4	16,2	221,0
Transportation and storage (TOL 49-53)	22,4	4,8	75,9	2,7	105,8
Publishing activities (TOL 58)	73,6	6,6	8,5	2,3	91,0
Telecommunications (TOL 61)	47,4	1,8	50,4	7,6	107,3
Computer programming, consultancy and related activities (TOL 62)	344,3	74,9	19,7	6,6	445,5
Information service activities (TOL 63)	7,7	1,4	1,1	0,5	10,6
Financial and insurance activities (TOL 64)	60,7	33,3	39,7	13,1	146,8
Architectural and engineering activities; technical testing and analysis(TOL 71)	93,7	24,6	17,7	11,4	147,4
All NACE - Total	4669,7	1329,1	1091,8	160,1	7250,7
Manufacturing, total	3914,6	1131,7	829,4	99,7	5975,4
Services, total	755,1	197,4	262,4	60,4	1275,3

### Appendix table 30. Public financing of innovation activity in human health and social work activities by industry, 2008–2010, share of enterprises with innovation activity

Industry	Number of enterprises	Local or regional authorities	Central government	The European Union (EU)	EUs framework programmes	Received financial support
		%	%	%	%	%
Human health activities	105	2,4	10,4	0,0	0,0	10,4
Residential care activities	180	15,1	9,8	2,5	0,0	22,4
Social work activities without accommodation	45	8,7	10,9	8,7	0,0	10,9
Human health and social work activities, total	330	10,2	10,1	2,6	0,0	17,0

Appendix table 31. Information sources for innovation activity in human health and social work activities, 2008–2010, importance of sources, share of enterprises with innovation activity

Industry	Information source	Degr	ee of imp	ortan	се
		High	Mediun	Low	Not used
		%	%	%	%
Human	Own enterprise or enterprise group	61,2	20,3	11,8	6,7
health and	Suppliers of equipment, materials, components or software	13,3	41,3	24,0	21,5
social	Clients or customers	34,2	24,8	21,2	19,8
work activities	Competitors or other enterprises in the sector	6,5	24,8	53,2	15,6
activities	Consultants, commercial labs or private R&D institutes	2,8	18,8	37,4	41,1
	Universities	3,3	17,3	23,4	56,1
	Polytechnics	2,8	21,2	39,9	36,1
	Government or public research institutes	5,9	10,2	24,4	59,5
	Conferences, trade fairs, exhibitions	7,5	16,9	48,6	27,0
	Scientific journals and trade/technical publications	7,2	27,7	41,1	24,0
	Professional and industry associations	4,4	13,7	45,9	36,1

### Appendix table 32. Co-operation in innovation activity by location of co-operating partner, 2008–2010, share of enterprises with innovation activity

Industry	Co-operation partner	Location of co-operation partner							
		Finland	Other Europe	United States	China	India	All other countries	Co- operation	
		%	%	%	%	%	%	%	
Total	Other enterprises within your enterprise group $^{1)} \ensuremath{}$	30,4	25,6	9,0	5,5	2,2	4,1	46,5	
	Suppliers of equipment, materials, components or software	27,2	16,7	4,9	2,4	0,7	2,2	34,8	
	Clients or customers	34,3	17,8	7,4	4,4	2,5	4,4	38,0	
	Competitors or other enterprises in your sector	23,7	16,0	5,7	2,9	0,4	2,5	31,1	
	Consultants, commercial labs or private R&D institutes	28,0	7,6	1,8	0,8	0,3	0,9	30,1	
	Universities or other higher education institutions	29,3	5,0	1,5	0,4	0,3	0,8	30,3	
	Government or public research institutes	22,6	3,7	1,3	0,3	0,2	1,0	23,3	
Manufacturing	Other enterprises within your enterprise group	35,2	30,6	10,7	7,7	2,7	4,9	55,9	
	Suppliers of equipment, materials, components or software	31,3	20,1	4,9	3,5	0,9	1,9	39,1	
	Clients or customers	37,0	23,0	8,6	6,0	3,3	5,1	41,9	
	Competitors or other enterprises in your sector	25,5	19,1	5,9	4,6	0,5	3,5	34,4	
	Consultants, commercial labs or private R&D institutes	34,2	9,2	1,8	1,2	0,4	1,3	35,4	
	Universities or other higher education institutions	35,2	5,1	1,9	0,4	0,3	1,2	35,2	
	Government or public research institutes	25,0	4,6	1,6	0,6	0,4	1,8	25,6	
Services	Other enterprises within your enterprise group	25,7	20,6	7,4	3,4	1,6	3,4	37,1	
	Suppliers of equipment, materials, components or software	22,4	12,6	4,8	1,2	0,4	2,5	29,8	
	Clients or customers	31,1	11,6	5,9	2,6	1,5	3,6	33,5	
	Competitors or other enterprises in your sector	21,6	12,5	5,4	0,9	0,3	1,4	27,2	
	Consultants, commercial labs or private R&D institutes	20,7	5,8	1,9	0,3	0,3	0,3	23,8	
	Universities or other higher education institutions	22,4	4,8	1,0	0,3	0,3	0,4	24,6	
	Government or public research institutes	19,8	2,7	1,1	0,0	0,0	0,0	20,7	

1) Enterprise groups and enterprises belonging to the group (same in manufacturing and in services).

Appendix table 33. Co-operation in innovation activity in human health and social work activities by significance of co-operating partner, 2008–2010, share of enterprises with innovation activity relating to product and process innovations

Industry	Co-operation partner	Degree of importance					
		High	Mediun	Low	Not used		
		%	%	%	%		
Human	Other enterprises within enterprise group <sup>1)</sup>	31,1	18,2	5,7	45,0		
health and	Suppliers of equipment, materials, components or software	7,5	6,6	13,4	72,6		
social	Clients or customers	10,9	8,4	14,8	65,9		
work activities	Competitors or other enterprises in the sector	1,4	7,7	22,0	68,9		
	Consultants, commercial labs or private R&D institutes	1,4	1,9	21,9	74,9		
	Universities	2,0	6,3	18,7	73,1		
	Polytechnics	3,2	7,8	14,4	74,6		
	Government or public research institutes	3,2	4,2	11,0	81,6		
	Other public sector (i.e. central and local government, excl. government or public research institutes)	6,7	11,2	5,3	76,9		

1) Enterprise groups and enterprises belonging to the group

Industry	Barrier	Degr	ee of imp	ortan	се
		High	Mediun	Low	Not used
		%	%	%	%
ALL NACE -	Lack of funds within your enterprise or group	10,2	15,6	17,1	57,1
Total	Lack of finance from sources outside your enterprise	6,4	11,2	17,8	64,6
	Innovation costs too high	10,2	17,7	14,7	57,4
	Lack of qualified personnel	6,1	20,9	22,0	51,0
	Lack of information on technology	3,1	15,0	26,5	55,4
	Lack of information on markets	2,8	13,1	28,1	55,9
	Difficulty in finding cooperation partners for innovation	5,3	14,1	22,4	58,2
	Market dominated by established enterprises	7,5	15,9	20,9	55,6
	Uncertain demand for innovative goods or services	11,6	18,9	18,6	50,9
	No need due to prior innovations by your enter-prise	8,0	19,6	19,9	52,5
	No need because of no demand for innovations		20,9	22,7	47,7
-	Lack of funds within your enterprise or group	15,0	20,3	19,4	45,3
	Lack of finance from sources outside your enterprise	8,7	14,7	21,9	54,7
	Innovation costs too high	13,5	22,4	16,6	47,4
	Lack of qualified personnel	6,2	27,3	24,1	42,4
	Lack of information on technology	5,0	18,8	30,3	45,8
	Lack of information on markets	4,1	16,4	33,5	45,9
	Difficulty in finding cooperation partners for innovation	6,1	17,5	27,0	49,5
	Market dominated by established enterprises	7,6	21,4	24,2	46,9
	Uncertain demand for innovative goods or services	12,6	22,6	22,0	42,8
	No need due to prior innovations by your enter-prise	9,0	19,0	25,5	46,4
	No need because of no demand for innovations	8,9	23,9	25,9	41,2
Services	Lack of funds within your enterprise or group	6,5	12,0	15,4	66,1
	Lack of finance from sources outside your enterprise	4,7	8,5	14,8	72,1
	Innovation costs too high	7,7	14,1	13,3	65,0
	Lack of qualified personnel	6,0	16,1	20,5	57,5
	Lack of information on technology	1,6	12,1	23,6	62,6
	Lack of information on markets	1,8	10,6	24,0	63,5
	Difficulty in finding cooperation partners for innovation	4,7	11,5	19,0	64,8

Market dominated by established enterprises

Uncertain demand for innovative goods or services

No need due to prior innovations by your enter-prise No need because of no demand for innovations

### Appendix table 34. Factors preventing/hampering product and process innovation activities, 2008–2010, importance of factors, share of non-innovative enterprises

7,5

10,9

7,2

8,5

11,7 18,5

16,0 16,0

20,0 15,6

18,5 20,3

62,3

57,1

57,2

52,7

Appendix table 35. Factors hampering product and process innovation activities in human health and social work activities, 2008–2010, importance of factors, share of enterprises with innovation activities

Industry	Hampering factor	Degr	ee of imp	ortand	e
		High	Medium	Low	Not relevant
		%	%	%	%
Human	Lack of funds within your enterprise or group	19,6	45,0	13,2	22,2
health and	Lack of finance from sources outside your enterprise	17,0	35,6	13,6	33,8
social	Innovation costs too high	22,7	28,0	22,5	26,8
work activities	Lack of qualified personnel	6,9	29,7	37,5	25,8
activities	Lack of information on technology	4,4	27,1	32,8	35,7
	Lack of information on markets	3,7	23,6	31,8	40,8
	Difficulty in finding cooperation partners for innovation	3,8	25,2	39,8	31,2
	Market dominated by established enterprises	1,2	23,5	35,8	39,4
	Uncertain demand for innovative goods or services	10,7	27,0	30,7	31,5
	No need due to prior innovations by your enter-prise	8,9	16,6	33,7	40,8
	No need because of no demand for innovations	4,8	25,0	27,0	43,2

# Appendix table 36. Factors preventing/hampering product and process innovation activities in human health and social work activities, 2008–2010, importance of factors, share of non-innovative enterprises

Industry	Barrier	Degree of importance					
		High	Medium	Low	Not relevant		
		%	%	%	%		
Human	Lack of funds within your enterprise or group	15,0	14,0	15,9	55,0		
health and	Lack of finance from sources outside your enterprise	10,6	15,0	12,3	62,1		
social	Innovation costs too high	10,2	14,1	12,9	62,8		
work activities	Lack of qualified personnel	3,9	11,7	29,4	55,1		
activities	Lack of information on technology	0,0	9,8	22,1	68,1		
	Lack of information on markets	0,0	10,0	23,6	66,4		
	Difficulty in finding cooperation partners for innovation	7,4	6,4	18,8	67,5		
	Market dominated by established enterprises	7,8	18,8	14,3	59,1		
	Uncertain demand for innovative goods or services	4,9	18,1	19,2	57,8		
	No need due to prior innovations by your enter-prise	13,8	12,6	16,9	56,7		
	No need because of no demand for innovations	8,2	15,2	18,1	58,5		

#### Appendix table 37. Prevalence of marketing and organisational innovations by form of enterprise, 2008–2010, share of enterprises

Industry	Form of enterprise	Number of enterprises	Organisational innovations	Marketing innovations	Marketing or organisational innovations	Product, process, marketing or organisational innovations	Innovation activity, broadly defined	All elements
			%	%	%	%	%	%
ALL NACE - Total	Independent enterprise	4711	24,3	22,7	33,2	48,4	50,5	6,0
	Part of domestic group	2173	39,7	34,5	48,6	57,4	60,5	11,4
	Part of foreign group	1197	45,0	33,2	53,5	67,5	71,2	10,4
Manufacturing	Independent enterprise	2452	22,1	22,3	31,2	50,1	52,2	6,4
	Part of domestic group	1049	46,1	35,6	54,0	65,2	69,6	14,5
	Part of foreign group	392	45,4	30,7	56,2	70,3	75,3	11,0
Services	Independent enterprise	2259	26,7	23,2	35,5	46,6	48,6	5,5
	Part of domestic group	1124	33,7	33,5	43,6	50,1	52,1	8,5
	Part of foreign group	805	44,8	34,4	52,2	66,1	69,1	10,1

#### Appendix table 38. Prevalence of marketing and organisational innovations by enterprise's primary position in the production value chain 2008–2010, share of enterprises

Industry	Position in production value chain	Number of enterprises	Organisational innovations	Marketing innovations	Marketing or organisational innovations	Product, process, marketing or organisational innovations	Innovation activity, broadly defined	All elements
			%	%	%	%	%	%
ALL NACE -	Main supplier	4503	35,6	32,2	45,1	58,4	60,5	5 10,1
Total	System provider	703	41,5	37,1	52,3	66,5	69,3	15,2
	Subcontractor	2657	23,6	17,8	30,8	44,2	. 47,5	5 3,3
	Undefined position	218	11,4	15,9	19,8	28,2	31,5	5 1,1
•	Total	8081	31,5	27,5	40,4	53,7	56,2	8,1
Manufacturing	Main supplier	2111	35,0	32,8	45,2	60,8	63,1	11,2
	System provider	315	42,7	33,3	50,7	68,7	71,0	16,7
	Subcontractor	1393	23,5	16,5	30,3	47,3	51,7	4,5
	Undefined position	73	6,1	17,9	17,9	39,4	. 39,4	1,8
	Total	3893	30,9	26,7	39,8	56,2	59,2	9,0
Services	Main supplier	2391	36,2	31,7	45,0	56,4	58,3	9,2
	System provider	388	40,4	40,3	53,6	64,6	67,9	14,0
	Subcontractor	1264	23,7	19,2	31,4	40,8	42,9	2,1
	Undefined position	144	14,1	14,9	20,7	22,5	27,5	0,7
	Total	4188	32,0	28,1	40,9	51,3	53,5	5 7,2

Appendix table 39. Prevalence of marketing and organisational innovations in human health and social work activities by industry, 2008–2010, share of enterprises

Industry	Number of enterprises	Organisational innovations		Marketing or organisational innovations	Product, process or mark/org innovations	Innovation activity, broadly defined	All elements
		%	%	%	%	%	%
Human health activities	207	43,4	30,7	52,3	54,7	56,4	4,3
Residential care activities	421	38,4	31,0	46,0	52,7	57,0	6,6
Social work activities without accommodation	115	38,8	16,3	45,6	59,5	59,5	0,0
Human health and social work activities, total	743	39,9	28,6	47,7	54,3	57,2	5,0

#### Appendix table 40. Prevalence of organisational innovations in human health and social work activities, 2008–2010, share of enterprises

Industry	Number of enterprises	Organisational innovations	New business practices	New methods of organising work responsibilities and decision making	New methods of organising external relations
		%	%	%	%
Human health activities	207	43,4	38,2	33,0	22,7
Residential care activities	421	38,4	22,0	28,3	13,0
Social work activities without accommodation	115	38,8	14,8	32,1	14,4
Human health and social work activities, total	743	39,9	25,4	30,2	15,9

#### Appendix table 41. Prevalence of marketing innovations in human health and social work activities, 2008–2010, share of enterprises

Industry	Number of enterprises	Marketing innovations	Changes to the aesthetic design or packaging	New media or techniques for product promotion	New methods for product placement or sales channels	New methods of pricing
		%	%	%	%	%
Human health activities	207	30,7	8,7	19,4	9,5	9,5
Residential care activities	421	31,0	0,3	20,0	4,8	17,0
Social work activities without accommodation	115	16,3	0,9	12,9	7,6	6,8
Human health and social work activities, total	743	28,6	2,7	18,8	6,6	13,3

### Appendix table 42. Methods used to stimulate new ideas and creativity, 2008–2010, success of method, share of enterprises with innovation activities

Industry	Method	Method use	d		Method
		Successful		Don't know if successful	not used
		%	%	%	%
ALL NACE -	Brainstorming sessions	39,2	3,1	14,6	43,1
Total	Multidisciplinary or cross-functional work teams	17,7	2,4	11,5	68,4
	Job rotation of staff to different departments or other parts of your en-terprise group	21,2	2,6	11,5	64,7
	Financial incentives for employees to develop new ideas	10,4	7,5	12,8	69,3
	Non-financial incentives for employees to develop new ideas	10,6	4,1	15,0	70,3
	Training employees on how to develop new ideas or creativity	16,5	3,0	18,4	62,0
-	Brainstorming sessions	35,6	3,1	15,6	45,7
	Multidisciplinary or cross-functional work teams	16,4	2,5	10,9	70,2
	Job rotation of staff to different departments or other parts of your en-terprise group	20,5	2,4	11,3	65,8
	Financial incentives for employees to develop new ideas	11,3	9,1	13,7	66,0
	Non-financial incentives for employees to develop new ideas	7,8	4,1	13,5	74,6
	Training employees on how to develop new ideas or creativity	12,3	3,3	19,7	64,7
Services	Brainstorming sessions	42,9	3,0	13,6	40,5
	Multidisciplinary or cross-functional work teams	19,0	2,2	12,2	66,6
	Job rotation of staff to different departments or other parts of your en-terprise group	21,8	2,7	11,8	63,6
	Financial incentives for employees to develop new ideas	9,4	6,0	11,8	72,7
	Non-financial incentives for employees to develop new ideas	13,6	4,2	16,5	65,8
	Training employees on how to develop new ideas or creativity	20,9	2,8	17,0	59,4

### Appendix table 43. Methods used to stimulate new ideas and creativity, 2008–2010, success of method, share of non-innovative enterprises

Industry	Method	Method use	d		Method
		Successful		Don't know if successful	not used
		%	%	%	%
ALL NACE -	Brainstorming sessions	8,6	1,3	8,2	81,8
Total	Multidisciplinary or cross-functional work teams	2,6	0,7	4,0	92,6
	Job rotation of staff to different departments or other parts of your en-terprise group	8,5	1,7	5,8	84,0
	Financial incentives for employees to develop new ideas	3,2	3,3	6,1	87,4
	Non-financial incentives for employees to develop new ideas	2,9	2,0	5,8	89,3
	Training employees on how to develop new ideas or creativity	3,1	1,5	8,3	87,1
Manufacturing	Brainstorming sessions	8,2	1,6	7,9	82,3
	Multidisciplinary or cross-functional work teams	3,4	0,8	4,0	91,8
	Job rotation of staff to different departments or other parts of your en-terprise group	10,1	1,4	5,5	82,9
	Financial incentives for employees to develop new ideas	4,7	2,9	6,6	85,8
	Non-financial incentives for employees to develop new ideas	3,7	2,2	4,1	90,0
	Training employees on how to develop new ideas or creativity	2,5	1,1	7,7	88,6
Services	Brainstorming sessions	9,0	1,1	8,5	81,4
	Multidisciplinary or cross-functional work teams	2,0	0,5	4,1	93,3
	Job rotation of staff to different departments or other parts of your en-terprise group	7,2	1,9	6,1	84,8
	Financial incentives for employees to develop new ideas	1,9	3,7	5,8	88,6
	Non-financial incentives for employees to develop new ideas	2,3	1,9	7,2	88,7
	Training employees on how to develop new ideas or creativity	3,6	1,7	8,9	85,8

#### Appendix table 44. Methods used to stimulate new ideas and creativity in human health and social work activities, 2008–2010, success of method, share of enterprises with innovation activities

Industry	Method	Method use	Method			
		Successful		Don't know if successful	not used	
		%	%	%	%	
Human	Brainstorming sessions	52,8	1,4	6,8	39,0	
health and social work	Multidisciplinary or cross-functional work teams	24,9	1,1	10,6	63,4	
	Job rotation of staff to different departments or other parts of your en-terprise group	29,2	5,8	14,1	50,9	
activities	Financial incentives for employees to develop new ideas	10,6	4,1	9,9	75,4	
	Non-financial incentives for employees to develop new ideas	23,7	3,6	12,1	60,5	
	Training employees on how to develop new ideas or creativity	49,7	2,0	15,6	32,7	

#### Appendix table 45. Methods used to stimulate new ideas and creativity in human health and social work activities, 2008–2010, success of method, share of non-innovative enterprises

Industry	Method	Method use	Method			
		Successful		Don't know if successful	not used	
		%	%	%	%	
Human health and social work activities	Brainstorming sessions	14,7	0,0	12,3	73,0	
	Multidisciplinary or cross-functional work teams	9,3	0,0	1,4	89,2	
	Job rotation of staff to different departments or other parts of your en-terprise group	25,2	0,0	4,2	70,6	
	Financial incentives for employees to develop new ideas	4,7	0,0	3,1	92,3	
	Non-financial incentives for employees to develop new ideas	12,0	0,0	8,4	79,6	
	Training employees on how to develop new ideas or creativity	26,3	2,4	11,7	59,7	

#### Appendix table 46. Incorporation of users and user information in enterprises' innovation activities, methods and their importance, 2008–2010, share of enterprises with innovation activity

Industry	Method	Degree of importance				
		High	Medium	Low	Not used	
		%	%	%	%	
All NACE -	User needs and user information; customer feedback systems	20,1	31,3	17,1	31,5	
Total	User needs and user information; market surveys, consumer panels, etc,	9,9	Medium Low   % %   31,3 17,   20,9 19,   16,7 14,   13,3 14,   21,7 17,   39,1 16,   32,0 18,   19,2 19,   31,3 14,   32,0 18,   19,2 19,   313,8 14,   10,2 13,   10,2 13,   10,3 17,   30,5 16,   22,7 19,   19,7 14,   16,6 16,   18,3 19,	19,4	49,8	
	User needs and user information; ascertaining unconscious needs and other user observation	6,2	16,7	14,4	62,7	
	Joint development; e,g, development platforms for collecting ideas and producing contents	4,2	13,3	14,9	67,6	
	Products modified by users, enterprise responsible for the production and market launch	8,0	21,7	17,2	53,1	
	Products developed by users, enterprise responsible for the production and market launch	3,8	9,1	16,6	70,5	
Manufacturing	User needs and user information; customer feedback systems	17,0	32,0	18,1	32,9	
	User needs and user information; market surveys, consumer panels, etc,	7,4	19,2	19,7	53,7	
	User needs and user information; ascertaining unconscious needs and other user observation	6,3	13,8	14,3	65,6	
	Joint development; e,g, development platforms for collecting ideas and producing contents	3,6	10,2	13,7	72,5	
	Products modified by users, enterprise responsible for the production and market launch	8,9	25,0	15,0	51,1	
	Products developed by users, enterprise responsible for the production and market launch	4,9	10,3	17,7	67,1	
Services	User needs and user information; customer feedback systems	23,3	30,5	16,1	30,1	
	User needs and user information; market surveys, consumer panels, etc,	12,5	22,7	19,1	45,7	
	User needs and user information; ascertaining unconscious needs and other user observation	6,1	19,7	14,4	59,8	
	Joint development; e,g, development platforms for collecting ideas and producing contents	4,7	16,6	16,1	62,6	
	Products modified by users, enterprise responsible for the production and market launch	7,1	18,3	19,5	55,1	
	Products developed by users, enterprise responsible for the production and market launch	2,7	7,8	15,6	73,9	

Appendix table 47. Incorporation of users and user information in enterprises' innovation activities, methods and their importance in human health and social work activities, 2008–2010, share of enterprises with innovation activity

Industry	Method	Degree of importance				
		High	Medium	Low	Not used	
		%	%	%	%	
Human	User needs and user information; customer feedback systems	36,9	38,3	14,0	10,8	
health and	User needs and user information; market surveys, consumer panels, etc,	5,2	18,3	22,5	54,0	
social work activities	User needs and user information; ascertaining unconscious needs and other user observation	6,2	16,6	19,0	58,3	
	Joint development; e,g, development platforms for collecting ideas and producing contents	2,6	18,4	15,6	63,3	
	Products modified by users, enterprise responsible for the production and market launch	8,9	20,7	17,2	53,2	
	Products developed by users, enterprise responsible for the production and market launch	0,9	11,7	17,4	70,0	

Appendix table 48. Incorporation of users and user information in enterprises' innovation activities by size category of personnel, 2008–2010, share of enterprises with innovation activity

Industry	Size category of personnel	Number of enterprises	Customer feedback systems	surveys,	Research methods, observation	Joint development	Products modified by users	Products developed by users	Used at least one method
			%	%	%	%	%	%	%
ALL NACE -	10-49	3258	64,2	43,9	33,6	29,0	46,4	29,0	77,1
Total	50-249	968	76,5	60,5	40,3	36,1	47,1	30,2	85,4
	250-	318	87,9	83,9	65,7	55,1	51,9	33,2	92,0
	Total	4544	68,5	50,2	37,3	32,4	46,9	29,5	79,9
Manufacturing	10-49	1515	59,8	35,4	29,5	22,1	49,6	33,0	76,2
	50-249	589	77,6	60,7	36,7	32,4	46,7	32,4	86,1
	250-	202	91,6	85,3	64,6	53,7	50,0	33,9	94,4
	Total	2306	67,1	46,3	34,4	27,5	48,9	32,9	80,3
Services	10-49	1744	68,0	51,2	37,2	35,0	43,5	25,5	78,0
	50-249	379	74,8	60,0	45,9	42,0	47,9	26,7	84,4
	250-	116	81,5	81,6	67,5	57,5	55,3	31,9	87,7
	Total	2239	69,9	54,3	40,2	37,4	44,9	26,1	79,6

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