



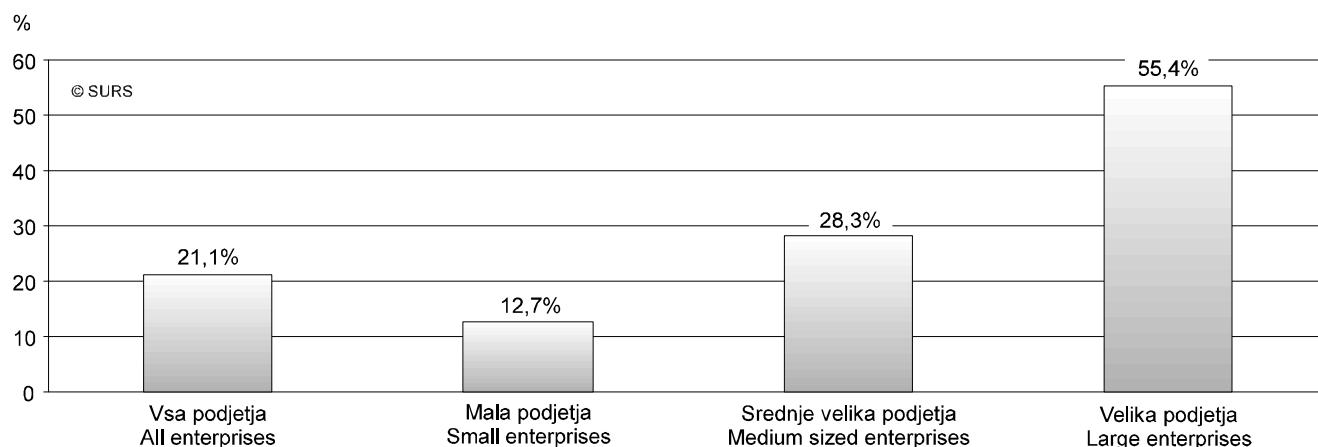
23 RAZISKOVANJE IN RAZVOJ, ZNANOST IN TEHNOLOGIJA
RESEARCH AND DEVELOPMENT, SCIENCE AND TECHNOLOGY

št./No 1

INOVACIJSKA DEJAVNOST V PREDELOVALNI DEJAVNOSTI IN IZBRANIH STORITVENIH DEJAVNOSTIH, SLOVENIJA, 2001-2002
INNOVATION ACTIVITY IN MANUFACTURING AND SELECTED SERVICES, SLOVENIA, 2001-2002

- ▶ V raziskovanje o inovacijski dejavnosti so bila vključena podjetja z 10 in več zaposlenimi v naslednjih dejavnostih SKD:
 - rudarstvo (10-14)
 - predelovalne dejavnosti (15-37)
 - oskrba z elektriko, plinom in vodo (40-41)
 - posredništvo in trgovina na debelo (51)
 - promet, skladiščenje in zveze (60-64)
 - finančno posredništvo (65-67)
 - obdelava podatkov in podatkovne baze (72)
 - raziskovanje in razvoj (73)
 - projektiranje in tehnično svetovanje (74.2)
 - tehnično preizkušanje in analiziranje (74.3)
- ▶ V obdobju 2001-2002 se je z inovacijsko dejavnostjo ukvarjalo 21,1 % podjetij; od teh je najmanj eno obliko inovacije uvedlo 20,2 % podjetij.
- ▶ V letu 2002 je bilo za inovacijsko dejavnost porabljenih 78 milijard SIT, od tega je bilo v predelovalno dejavnost vloženih 61 milijard SIT.
- ▶ Največji delež vlaganj v inovacijsko dejavnost so zavzemali notranji stroški za raziskovalno-razvojno dejavnost (44 %) in stroški za nakup strojev in opreme (28 %).
- ▶ The survey on innovation activity covered enterprises with 10 and more persons in paid employment in the following activities:
 - mining and quarrying (10-14)
 - manufacturing (15-37)
 - electricity, gas and water supply (40-41)
 - wholesale trade (51)
 - transport, storage and communication (60-64)
 - financial intermediation (65-67)
 - computer and related activities (72)
 - research and development (73)
 - architectural and engineering activities (74.2)
 - technical testing and analysis (74.3)
- ▶ In 2001-2002, 21.1% of the enterprises in manufacturing and selected services was engaged in innovation activity, of which 20.2% enterprises introduced at least one type of innovation.
- ▶ Total investment in innovation activity in 2002 was SIT 78 billion, of which SIT 61 billion was invested in manufacturing.
- ▶ The highest share of funds was invested in intramural R&D (44%) and in acquisition of machinery and equipment (28%).

Slika 1: Delež inovacijsko aktivnih podjetij v predelovalni dejavnosti in izbranih storitvenih dejavnostih, Slovenija, 2001-2002
Chart 1: Share of innovation active enterprises in manufacturing and selected services, Slovenia, 2001-2002



1. Inovacijsko aktivna in neinovativna podjetja v Sloveniji, po dejavnosti, 2001-2002

Innovation active and non-innovative enterprises in Slovenia, by activities, 2001-2002

Dejavnost	Vsa podjetja All enterprises	Inovacijsko aktivna podjetja ¹⁾ Innovation active enterprises ¹⁾		Inovatorji proizvoda in/ali postopka ²⁾ Product and/or process innovator ²⁾		Inovatorji proizvoda ³⁾ Product innovator ³⁾		Activity
		skupaj absolute value	% vseh podjetij % of all enter- prises	skupaj absolute value	% vseh podjetij % of all enter- prises	skupaj absolute value	% vseh podjetij % of all enter- prises	
SKUPAJ	2993	631	21,1	605	20,2	168	5,6	Total
C Rudarstvo	23	8	34,8	8	34,8	3	13,0	C Mining and quarrying
D Predelovalne dejavnosti	1596	450	28,2	434	27,2	116	7,3	D Manufacturing
DA Proizvodnja hrane, pijač, tobačnih izdelkov	126	37	29,4	36	28,6	6	4,8	DA Mfr. of food; beverages and tobacco
DB Proizvodnja tekstilij, tekstilnih, krznenih izdelkov	152	31	20,4	30	19,7	8	5,3	DB Mfr. of food, beverages and tobacco
17 Proizvodnja tekstilij	83	26	31,3	25	30,1	6	7,2	17 Manufacture of textiles
18 Proizvodnja oblačil; strojenje, dodelava krvna	69	5	7,2	5	7,2	2	2,9	18 Mfr. of wearing apparel; dress. of fur
DC Proizvodnja usnja, usnjensih izdelkov	22	7	31,8	7	31,8	4	18,2	DC Mfr.of leather and leather products
19 Proizvodnja usnja, usnjensih izdelkov	22	7	31,8	7	31,8	4	18,2	19 Leather tanning; mfr. of luggage, etc.
DD Obdelava in predelava lesa	99	19	19,2	19	19,2	6	6,1	DD Mfr. of wood and wood, cork,etc.goods
20 Obdelava predelava lesa	99	19	19,2	19	19,2	6	6,1	20 Mfr. of wood and wood, cork, etc. goods
DE Proizvodnja vlaknin, papirja ter izdelkov iz njih	125	19	15,2	16	12,8	2	1,6	DE Mfr.of pulp,paper; publishing and printing
21 Proizvodnja vlaknin, papirja ter izdelkov iz njih	35	3	8,6	3	8,6	0	0,0	21 Mfr. of pulp, paper and paper products
22 Založništvo, tiskarstvo	90	16	17,8	13	14,4	2	2,2	22 Publishing, printing and recorded media
DF+DG Pro.koksa naftnih deriv., jedrskega goriva; pro.kemik.,kem.izd.,umet.vlaken	61	29	47,5	29	47,5	11	18,0	DF+DG Mfr.of coke, petrol, prods.&nuc.fuel and chemicals &chemical products
23-24 Pro.kemi,kem.izd.,umet.,koksa in naftnih der.	61	29	47,5	29	47,5	11	18,0	23-24 Mfr. of coke, petrol. prods.&nuc.
DH Proizv.izdelkov iz gume in plastičnih mas	101	24	23,8	23	22,8	5	5,0	DH fuel and chemicals & chemical products
25 Proizv. izdelkov iz gume in plastičnih mas	101	24	23,8	23	22,8	5	5,0	25 Mfr. of rubber and plastic products
DI Proizvodnja nekovinskih mineralnih izdelkov	76	24	31,6	24	31,6	4	5,3	DI Mfr.other non-metal mineral products
26 Proizv. drugih nekovinskih mineralnih izdelkov	76	24	31,6	24	31,6	4	5,3	26 Mfr. of other non-metal.mineral products
DJ Proizvodnja kovin inkovinskih izdelkov	293	61	20,8	60	20,5	10	3,4	DJ Mfr.of basic metals & fabricated products
27 Proizvodnja kovin	30	9	30,0	9	30,0	2	6,7	27 Manufacture of basic metals
28 Proizv. kovinskih izdelkov brez strojev, naprav	263	52	19,8	51	19,4	8	3,0	28 Mfr. of fabricated metal, not machines
DK Proizvodnja strojev in naprav	166	58	34,9	58	34,9	24	14,5	DK Mfr.of machinery and equipment nec.
29 Proizvodnja strojev in naprav	166	58	34,9	58	34,9	24	14,5	29 Mfr. of machinery and equipment nec.
DL Proizvodnja električne in optične opreme	193	84	43,5	82	42,5	22	11,4	DL Mfr.of electrical and optical equipment
30 Proizvodnja pisarniških strojev, računalnikov	19	6	31,6	6	31,6	4	21,1	30 Mfr. of office machinery and computers
31 Proizvodnja električnih strojev, aparativ	90	38	42,2	37	41,1	8	8,9	31 Mfr. of electric. machinery etc. nec.
32 Proizv. RTV, komunikacijskih aparativ in opreme	38	17	44,7	16	42,1	2	5,3	32 Mfr. of radio, TV and equipment
33 Proizv. medicin., finomeh., optičnih instrumentov	46	23	50,0	23	50,0	8	17,4	33 Mfr. of medical & precision instruments
DM Proizvodnja vozil in plovil	50	25	50,0	21	42,0	8	16,0	DM Mfr.of transport equipment
34 Proizv. motornih vozil, prikolic, polpriklanic	36	14	38,9	12	33,3	5	13,9	34 Mfr. of motor vehicles, trailers, etc.
35 Proizvodnja drugih vozil, plovil	14	11	78,6	9	64,3	3	21,4	35 Mfr. of other transport equipment
DN Proizv. pohištva, druge pred. dejav., reciklaža	132	32	24,2	29	22,0	6	4,5	DN Manufacturing nec.
E Oskrba z električno energijo, plinom in vodo	60	5	8,3	4	6,7	0	0	E Electricity, gas and water supply
G Trgovina; popravlja motornih vozil	614	33	5,4	32	5,2	12	2,0	G Wholesale, retail; certain repair
51 Posredništvo, trg. na debelo, brez mot. vozil	614	33	5,4	32	5,2	12	2,0	51 Wholesale, commission, not motors
I Promet, skladiščenje; zveze	238	28	11,8	26	10,9	4	1,7	I Transport, storage and communication
60-63 Promet	216	21	9,7	20	9,3	3	1,4	60-63 Transport
64 Pošta in telekomunikacije	22	7	31,8	6	27,3	1	4,5	64 Post and telecommunications
J Finančno posredništvo	65	13	20,0	12	18,5	2	3,1	J Financial intermediation
65-67 Finančno posredništvo	65	13	20,0	12	18,5	2	3,1	65-67 Financial intermediation
K Nepremičnine, najem, poslovne storitve	397	94	23,7	89	22,4	31	7,8	K Real estate, renting &business activities
72 Obdelava podatkov, s tem povezane dejavnosti	113	35	31,0	32	28,3	7	6,2	72 Computer and related activities
73 Raziskovanje in razvoj	53	17	32,1	16	30,2	7	13,2	73 Research and development
74 Druge poslovne dejavnosti	231	42	18,2	41	17,7	17	7,4	74 Other business activities

1) Inovacijsko aktivna podjetja so podjetja, ki so uvedla inovacijo proizvoda (izdelka ali storitve) ali inovacijo postopka ali so imela nedokončano ali opuščeno inovacijsko dejavnost. / Innovation active enterprises are enterprises that have introduced product or process innovation or those that had ongoing or abandoned innovation activity.

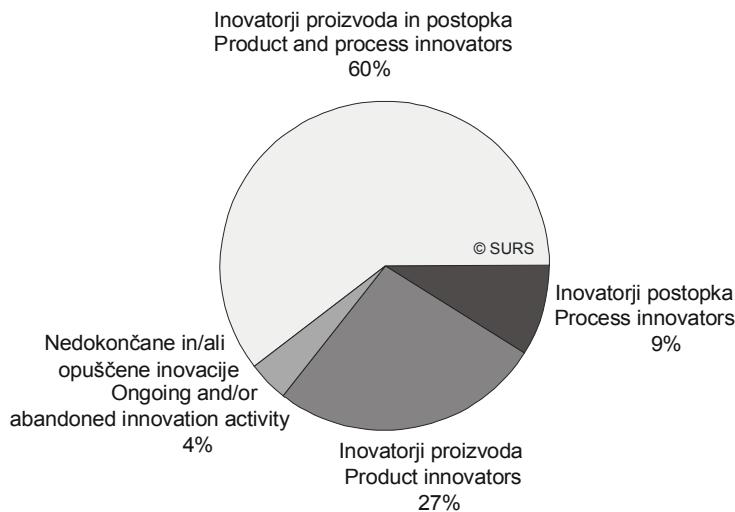
2) Inovatorji proizvoda in/ali postopka: podjetja, ki so uvedla inovacijo proizvoda ali inovacijo postopka ali oboje. / Product and/or process innovators: enterprises that have introduced product or process innovation or both

3) Inovatorji proizvoda: podjetja, ki so uvedla samo inovacijo proizvoda. / Product innovators: enterprises that have introduced only product innovation



Slika 2: Struktura inovacijsko aktivnih podjetij, Slovenija, 2001-2002

Chart 2: Structure of innovation active enterprises, Slovenia, 2001-2002

**2. Inovacijsko aktivna in neinovativna podjetja v Sloveniji, po dejavnosti in velikosti podjetja, 2001-2002**

Innovation active and non-innovative enterprises in Slovenia, by activities and enterprise size, 2001-2002

Dejavnost / velikost podjetja ¹⁾	Vsa podjetja All enterprises	Inovacijsko aktivna podjetja ²⁾ Innovation active enterprises ²⁾		Inovatorji proizvoda in/ali postopka ³⁾ Product and/or process innovator ³⁾		Inovatorji proizvoda ⁴⁾ Product innovator ⁴⁾		Activity / Enterprises size ¹⁾
		skupaj absolute value	% vseh podjetij % of all enterprises	skupaj absolute value	% vseh podjetij % of all enterprises	skupaj absolute value	% vseh podjetij % of all enterprises	
SKUPAJ	2993	631	21,1	605	20,2	168	5,6	SLOVENIJA-TOTAL
mala	1863	236	12,7	223	12,0	81	4,3	small
srednja	852	241	28,3	233	27,3	57	6,7	medium sized
velika	278	154	55,4	149	53,6	30	10,8	large
c_d_e INDUSTRIJA	1679	463	27,6	446	26,6	119	7,1	c_d_e Total industry
mala	818	115	14,1	108	13,2	44	5,4	small
srednja	633	207	32,7	201	31,8	48	7,6	medium sized
velika	228	141	61,8	137	60,1	27	11,8	large
d PREDELOVALNE DEJAVNOSTI	1596	450	28,2	434	27,2	116	7,3	d Manufacturing
mala	784	112	14,3	105	13,4	43	5,5	small
srednja	597	202	33,8	197	33,0	46	7,7	medium sized
velika	215	136	63,3	132	61,4	27	12,6	large
g_k STORITVENE DEJAVNOSTI	1314	168	12,8	159	12,1	49	3,7	g_k Services
mala	1045	121	11,6	115	11,0	37	3,5	small
srednja	219	34	15,5	32	14,6	9	4,1	medium sized
velika	50	13	26,0	12	24,0	3	6,0	large

1) Velikost podjetja je opredeljena s številom zaposlenih: / Size of enterprise is defined by the number of persons in paid employment:

- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjekvelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

2) Inovacijsko aktivna podjetja so podjetja, ki so uvedla inovacijo proizvoda (izdelka ali storitve) ali inovacijo postopka ali so imela nedokončano ali opuščeno inovacijsko dejavnost. / Innovation active enterprises are enterprises that have introduced product or process innovation or those that had ongoing or abandoned innovation activity.

3) Inovatorji proizvoda in/ali postopka: podjetja, ki so uvedla inovacijo proizvoda ali inovacijo postopka ali oboje. / Product and/or process innovators: enterprises that have introduced product or process innovation or both

4) Inovatorji proizvoda: podjetja, ki so uvedla samo inovacijo proizvoda. / Product innovators: enterprises that have introduced only product innovation

5) Inovatorji postopka: podjetja, ki so uvedla samo inovacijo postopka. / Process innovators: enterprises that have introduced only process innovation

6) Inovatorji proizvoda in postopka: podjetja, ki so uvedla inovacijo proizvoda in postopka. / Product and process innovators: enterprises that have introduced product and process innovation

7) Nedokončane in/ali opuščene inovacijske dejavnosti: podjetja, ki so imela nedokončane ali opuščene inovacijske dejavnosti in niso uvedla nobene inovacije. / Ongoing and/or abandoned innovation activity: Enterprises that had ongoing or abandoned innovation activity and have not introduced any type of innovation

8) Neinovativna podjetja: podjetja, ki niso uvedla nobene inovacije in se niso ukvarjala z inovacijsko dejavnostjo. / Non-innovative enterprises: Enterprises that have not introduced any type of innovation and had no innovation activity

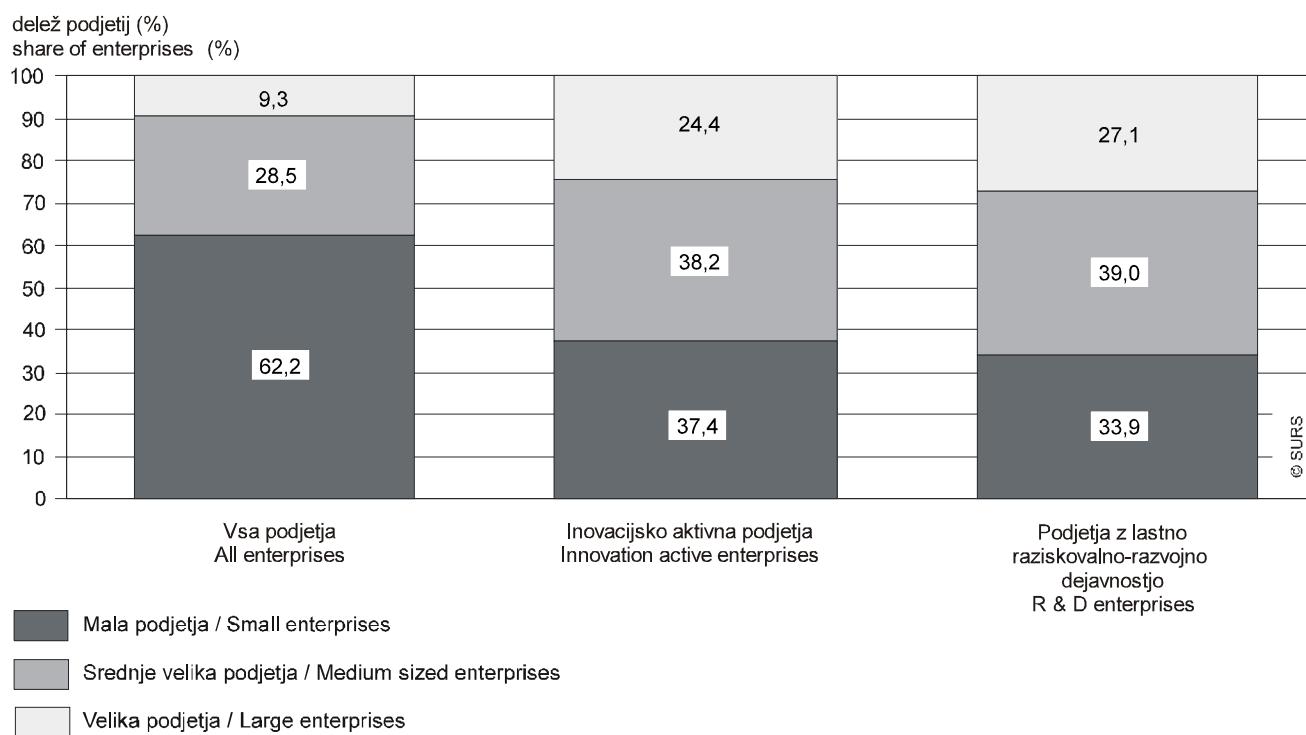
2. Inovacijsko aktivna in neinovativna podjetja v Sloveniji, po dejavnosti in velikosti podjetja, 2001-2002 (nadaljevanje)

Innovation active and non-innovative enterprises in Slovenia, by activities and enterprise size, 2001-2002 (continued)

Dejavnost	Inovatorji postopka ⁴⁾ Process innovators ⁴⁾		Inovatorji proizvoda in postopka ⁵⁾ Product and process innovator ⁵⁾		Nedokončane in/ali opuščene inovacijske dejavnosti ⁶⁾ Ongoing and/or abandoned innovation activities ⁶⁾		Neinovativna podjetja ⁷⁾ Non-innovative enterprises ⁷⁾		Activity
	skupaj absolute value	% vseh podjetij % of all enterprises	skupaj absolute value	% vseh podjetij % of all enterprises	skupaj absolute value	% vseh podjetij % of all enterprises	skupaj absolute value	% vseh podjetij % of all enterprises	
SKUPAJ	54	1,8	382	12,8	27	0,9	2362	78,9	SLOVENIJA-TOTAL
mala	16	0,9	126	6,8	13	0,7	1627	87,3	small
srednjivelika	27	3,2	149	17,5	8	0,9	611	71,7	medium sized
velika	11	4,0	107	38,5	6	2,2	124	44,6	large
c_d_e INDUSTRIJA	40	2,4	285	17,0	19	1,1	1216	72,4	c_d_e Total industry
mala	7	0,9	56	6,8	8	1,0	703	85,9	small
srednjivelika	23	3,6	130	20,5	6	0,9	426	67,3	medium sized
velika	10	4,4	99	43,4	5	2,2	87	38,2	large
d PREDELOVALNE DEJAVNOSTI	37	2,3	280	17,5	17	1,1	1146	71,8	d Manufacturing
mala	7	0,9	55	7,0	7	0,9	672	85,7	small
srednjivelika	22	3,7	129	21,6	5	0,8	395	66,2	medium sized
velika	8	3,7	96	44,7	5	2,3	79	36,7	large
g_k STORITVENE DEJAVNOSTI	14	1,1	97	7,4	8	0,6	1146	87,2	g_k Services
mala	9	0,9	70	6,7	5	0,5	924	88,4	small
srednjivelika	4	1,8	19	8,7	2	0,9	185	84,5	medium sized
velika	1	2,0	8	16,0	1	2,0	37	74,0	large

Slika 3: Struktura podjetij z vidika inovacijske dejavnosti po velikosti podjetja, Slovenija, 2001-2002

Chart 3: Structure of enterprises in view of innovation activity by enterprise size, Slovenia, 2001-2002



3. Podjetja, ki so uvedla nove proizvode za trg, po dejavnosti, Slovenija, 2001-2002

Enterprises that introduced new products for the market, by activities, Slovenia, 2001-2002

Dejavnost	Podjetja, ki so uvedla nove proizvode za trg Enterprises that introduced new products for the market		Activity
	skupaj absolute value	% vseh podjetij % of all enterprises	
SKUPAJ - SLOVENIJA	383	12,8	TOTAL - SLOVENIA
C Rudarstvo	1	4,3	Mining and quarrying
D Predelovalne dejavnosti	266	16,7	Manufacturing
DA Proizvodnja hrane, pijač, tobačnih izdelkov	20	15,9	Mfr. of food; beverages and tobacco
DB Proizvodnja tekstilij, tekstilnih, krvnenih izdelkov	21	13,8	Mfr.of food, beverages and tobacco
17 Proizvodnja tekstilij	17	20,5	17 Manufacture of textiles
18 Proizvodnja oblačil; strojenje, dodelava krvna	4	5,8	Mfr. of wearing apparel; dress. of fur
DC Proizvodnja usnja, usnjenej izdelkov	6	27,3	Mfr.of leather and leather products
19 Proizvodnja usnja, usnjenej izdelkov	6	27,3	19 Leather tanning; mfr. of luggage, etc.
DD Obdelava in predelava lesa	8	8,1	DD Mfr.of wood and wood, cork,etc.goods
20 Obdelava in predelava lesa	8	8,1	Mfr. of wood and wood, cork, etc. goods
DE Proizvodnja vlaknin, papirja ter izdelkov iz njih	11	8,8	DE Mfr.of pulp,paper; publishing and printing
21 Proizvodnja vlaknin, papirja ter izdelkov iz njih	1	2,9	Mfr. of pulp, paper and paper products
22 Založništvo, tiskarstvo	10	11,1	Publishing, printing and recorded media
DF+DG Pro.koksa naftnih deriv., jedrskega goriva; pro.kemiik.,kem.izd.,umet.vlaken	16	26,2	DF+DG Mfr.of coke, petrol, prods.&nuc.fuel and chemicals &chemical products
23-24 Pro.kemiik.,kem.izd.,umet., koksa in naftnih der.	16	26,2	23-24 Mfr. of coke, petrol. prods.&nuc.
DH Proizv.izdelkov iz gume in plastičnih mas	15	14,9	fuel and chemicals & chemical products
25 Proizv. izdelkov iz gume in plastičnih mas	15	14,9	25 Mfr. of rubber and plastic products
DI Proizvodnja nekovinskih mineralnih izdelkov	11	14,5	DI Mfr.other non-metal mineral products
26 Proizv. drugih nekovinskih mineralnih izdelkov	11	14,5	26 Mfr. of other non-metal.mineral products
DJ Proizvodnja kovin in kovinskih izdelkov	30	10,2	DJ Mfr.of basic metals & fabricated products
27 Proizvodnja kovin	4	13,3	27 Manufacture of basic metals
28 Proizv. kovinskih izdelkov brez strojev, naprav	26	9,9	28 Mfr. of fabricated metal, not machines
DK Proizvodnja strojev in naprav	41	24,7	DK Mfr.of machinery and equipment nec.
29 Proizvodnja strojev in naprav	41	24,7	29 Mfr. of machinery and equipment nec.
DL Proizvodnja električne in optične opreme	55	28,5	DL Mfr.of electrical and optical equipment
30 Proizvodnja pisarniških strojev, računalnikov	5	26,3	30 Mfr. of office machinery and computers
31 Proizvodnja električnih strojev, aparativ	22	24,4	31 Mfr. of electric. machinery etc. nec.
32 Proizv. RTV, komunikacijskih aparativov in opreme	10	26,3	32 Mfr. of radio, TV and equipment
33 Proizv. medicin., finomeh., optičnih instrumentov	18	39,1	33 Mfr. of medical & precision instruments
DM Proizvodnja vozil in plovil	8	16,0	DM Mfr.of transport equipment
34 Proizv. motornih vozil, prikolic, polprikolic	3	8,3	34 Mfr. of motor vehicles, trailers, etc.
35 Proizvodnja drugih vozil, plovil	5	35,7	35 Mfr. of other transport equipment
DN Proizv. pohištva, druge pred. dejav., reciklaža	24	18,2	DN Manufacturing nec.
E Oskrba z električno energijo, plinom in vodo	0	0,0	E Electricity, gas and water supply
G Trgovina; popravila motornih vozil	23	3,7	G Wholesale, retail; certain repair
51 Posredništvo, trg. na debelo, brez mot. vozil	23	3,7	51 Wholesale, commission, not motors
I Promet, skladiščenje; zvezne	13	5,5	I Transport, storage and communication
60-63 Promet	8	3,7	60-63 Transport
64 Pošta in telekomunikacije	5	22,7	64 Post and telecommunications
J Finančno posredništvo	7	10,8	J Financial intermediation
65-67 Finančno posredništvo	7	10,8	65-67 Financial intermediation
K Nepremičnine, najem, poslovne storitve	73	18,4	K Real estate, renting &business activities
72 Obdelava podatkov, s tem povezane dejavnosti	29	25,7	72 Computer and related activities
73 Raziskovanje in razvoj	16	30,2	73 Research and development
74 Druge poslovne dejavnosti	27	11,7	74 Other business activities

4. Podjetja, ki so uvedla nove proizvode za trg, po velikosti in dejavnosti, Slovenija, 2001-2002

Enterprises that introduced new products for the market by activities and enterprise size, Slovenia, 2001-2002

	Dejavnost / Velikost podjetja ¹⁾	Podjetja, ki so uvedla nove proizvode za trg		Activity / Enterprise size ¹⁾
		skupaj absolute value	% vseh podjetij % of all enterprises	
	SLOVENIJA-SKUPAJ	383	12,8	SLOVENIJA-TOTAL
c_d_e	mala	159	8,5	small
	srednjevelika	136	16,0	medium sized
	velika	88	31,7	large
	INDUSTRIJA	267	15,9	c_d_e Total industry
d	mala	71	8,7	small
	srednjevelika	114	18,0	medium sized
	velika	82	36,0	large
	PREDELOVALNE DEJAVNOSTI	266	16,7	d Manufacturing
	mala	70	8,9	small
	srednjevelika	114	19,1	medium sized
	velika	82	38,1	large
g_k	STORITVENE DEJAVNOSTI	116	8,8	g_k Services
	mala	88	8,4	small
	srednjevelika	22	10,0	medium sized
	velika	6	12,0	large

1) Velikost podjetja je opredeljena s številom zaposlenih:

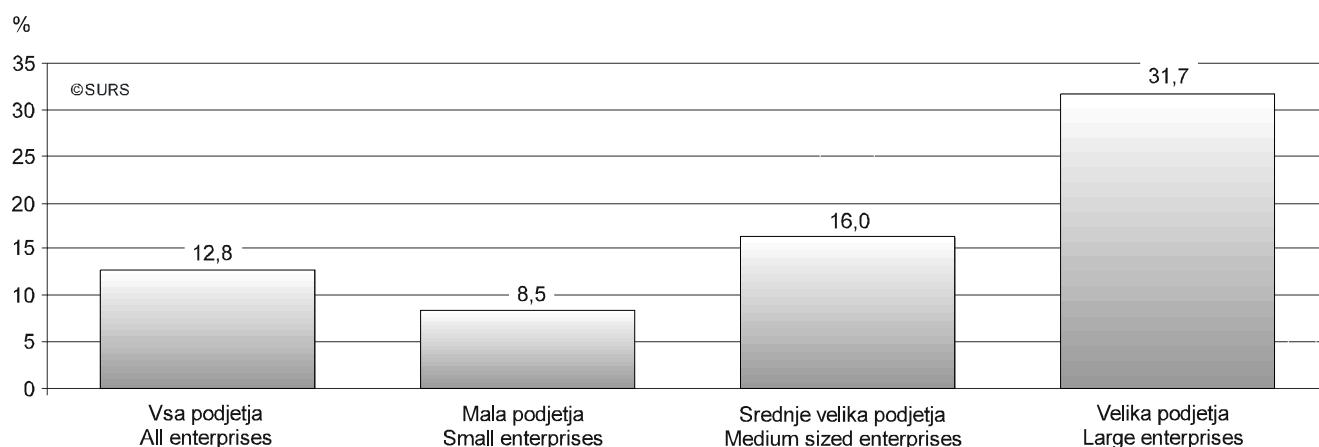
- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

Size of enterprise is defined by the number of persons in paid employment:

- small enterprises have 10-49 persons in paid employment;
- medium sized enterprises have 50-249 persons in paid employment;
- large enterprises have 250 and more persons in paid employment.

Slika 4: Podjetja, ki so uvedla nove proizvode za trg, Slovenija, 2001-2002

Chart 4: Enterprises that introduced new products for the market, Slovenia, 2001-2002



5. Razvoj novih ali bistveno izboljšanih proizvodov in postopkov, po dejavnosti, Slovenija, 2001-2002

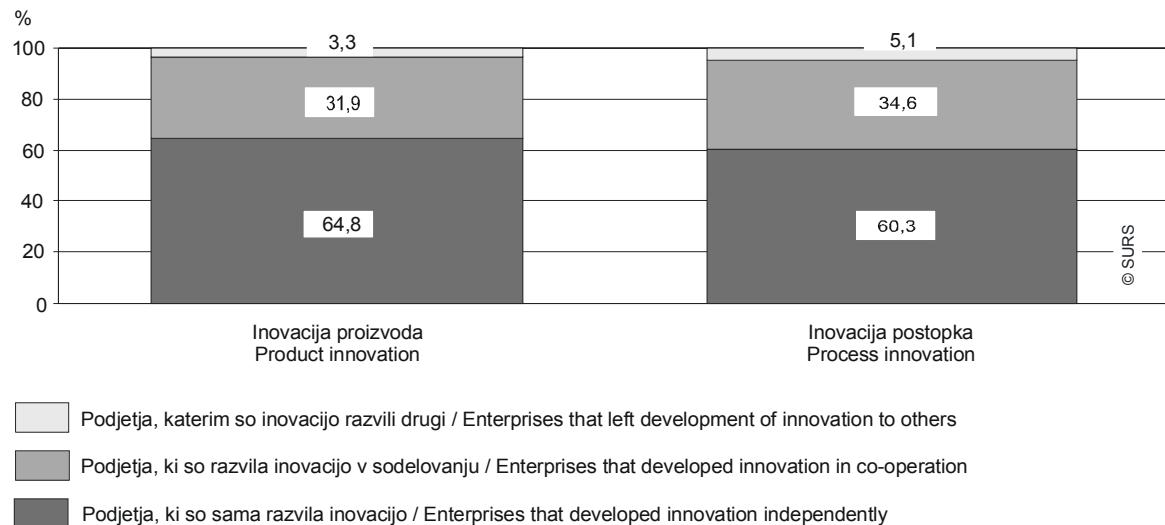
Development of new or significantly improved products and processes, by activities, Slovenia, 2001-2002

%

Dejavnost	Inovacija proizvoda Product innovation			Inovacija postopka Process innovation			Activity
	podjetja, ki so sama sodelovala pri razvoju novih proizvodov enterprises that developed new products within enterprise	podjetja, ki so razvila nov proizvod v sodelovanju enterprises that developed new products in co-operation	podjetja, ki so jih razvila nove proizvode druga podjetja enterprises whose new products were developed by other enterprises	podjetja, ki so sama sodelovala pri razvoju novih proizvodov enterprises that developed new products within enterprise	podjetja, ki so razvila nov proizvod v sodelovanju enterprises that developed new products in co-operation	podjetja, ki so jih razvila nove proizvode druga podjetja enterprises whose new products were developed by other enterprises	
SKUPAJ - SLOVENIJA	64,8	31,9	3,3	60,3	34,6	5,1	TOTAL - SLOVENIA
C Rudarstvo	42,9	42,9	14,2	75,0	25,0	0,0	C Mining and quarrying
D Predelovalne dejavnosti	66,6	31,4	2,0	59,6	35,7	4,7	D Manufacturing
DA Proizvodnja hrane, pijač, tobačnih izdelkov	67,6	32,4	0,0	57,1	39,3	3,6	DA Mfr. of food; beverages and tobacco
DB Proizvodnja tekstilij, tekstilnih, krvnenih izdelkov	59,3	40,7	0,0	59,1	40,9	0,0	DB Mfr. of food, beverages and tobacco
17 Proizvodnja tekstilij	50,0	50,0	0,0	57,9	42,1	0,0	17 Manufacture of textiles
18 Proizvodnja oblačil; strojenje, dodelava krvna	100,0	0,0	0,0	66,7	33,3	0,0	18 Mfr. of wearing apparel; dress. of fur
DC Proizvodnja usnja, usnjenski izdelkov	71,4	28,6	0,0	66,7	33,3	0,0	DC Mfr. of leather and leather products
19 Proizvodnja usnja, usnjenski izdelkov	71,4	28,6	0,0	66,7	33,3	0,0	19 Leather tanning; mfr. of luggage, etc.
DD Obdelava in predelava lesa	81,3	18,7	0,0	50,0	50,0	0,0	DD Mfr. of wood and wood, cork,etc.goods
20 Obdelava in predelava lesa	81,3	18,7	0,0	50,0	50,0	0,0	20 Mfr. of wood and wood, cork, etc. goods
DE Proizvodnja vlaknin, papirja ter izdelkov iz njih	50,0	50,0	0,0	53,3	46,7	0,0	DE Mfr. of pulp,paper; publishing and printing
21 Proizvodnja vlaknin, papirja ter izdelkov iz njih	33,3	66,7	0,0	33,3	66,7	0,0	21 Mfr. of pulp, paper and paper products
22 Založništvo, tiskarstvo	53,8	46,2	0,0	58,3	41,7	0,0	22 Publishing, printing and recorded media
DF+DG Pro.koksa naftnih deriv., jedrskega goriva; pro.kemik., kem.izd.,umet.vlaken	74,1	18,5	7,4	44,4	50,0	5,6	DF+DG Mfr.of coke, petrol, prods.&ncu.fuel and chemicals &chemical products
23-24 Pro.kemi.,kem.izd.,umet., koksa naftnih der.	74,1	18,5	7,4	44,4	50,0	5,6	23-24 Mfr. of coke, petrol. prods.&ncu.
DH Proizv.izdelkov iz gume in plastičnih mas	68,2	31,8	0,0	52,9	47,1	0,0	fuel and chemicals & chemical products
25 Proizv. izdelkov iz gume in plastičnih mas	68,2	31,8	0,0	52,9	47,1	0,0	25 Mfr. of rubber and plastic products
DI Proizvodnja nekovinskih mineralnih izdelkov	60,0	40,0	0,0	73,7	26,3	0,0	DI Mfr.other non-metal mineral products
26 Proizv. drugih nekovinskih mineralnih izdelkov	60,0	40,0	0,0	73,7	26,3	0,0	26 Mfr. of other non-metal.mineral products
DJ Proizvodnja kovin in kovinskih izdelkov	64,6	31,2	4,2	43,1	45,1	11,8	DJ Mfr.of basic metals & fabricated products
27 Proizvodnja kovin	66,7	33,3	0,0	42,9	57,1	0,0	27 Manufacture of basic metals
28 Proizv. kovinskih izdelkov brez strojev, naprav	64,3	31,0	4,7	43,2	43,2	13,6	28 Mfr. of fabricated metal, not machines
DK Proizvodnja strojev in naprav	85,7	14,3	0,0	77,1	22,9	0,0	DK Mfr.of machinery and equipment nec.
29 Proizvodnja strojev in naprav	85,7	14,3	0,0	77,1	22,9	0,0	29 Mfr. of machinery and equipment nec.
DL Proizvodnja električne in optične opreme	64,1	32,1	3,8	75,4	21,3	3,3	DL Mfr.of electrical and optical equipment
30 Proizvodnja pisarniških strojev, računalnikov	66,7	33,3	0,0	100,0	0,0	0,0	30 Mfr. of office machinery and computers
31 Proizvodnja električnih strojev, aparativ	72,2	27,8	0,0	73,3	23,3	3,4	31 Mfr. of electric. machinery etc. nec.
32 Proizv. RTV, komunikacijskih aparativov in opreme	62,5	31,3	6,2	73,3	20,0	6,7	32 Mfr. of radio, TV and equipment
33 Proizv. medicin., finomeh., optičnih instrumentov	52,4	38,1	9,5	78,6	21,4	0,0	33 Mfr. of medical & precision instruments
DM Proizvodnja vozil in plovil	44,4	50,0	5,6	61,5	38,5	0,0	DM Mfr.of transport equipment
34 Proizv. motornih vozil, prikolic, polprikolic	70,0	30,0	0,0	71,4	28,6	0,0	34 Mfr. of motor vehicles, trailers, etc.
35 Proizvodnja drugih vozil, plovil	12,5	75,0	12,5	50,0	50,0	0,0	35 Mfr. of other transport equipment
DN Proizv. pohištva, druge pred. dejav., reciklaža	53,8	46,2	0,0	43,5	34,8	21,7	DN Manufacturing nec.
E Osnovna z elektročno energijo, plinom in vodo	100,0	0,0	0,0	50,0	50,0	0,0	E Electricity, gas and water supply
G Trgovina; popravila motornih vozil	32,1	50,0	17,9	52,6	47,4	0,0	G Wholesale, retail; certain repair
51 Posredništvo, trg. na debelo, brez mot. vozil	32,1	50,0	17,9	52,6	47,4	0,0	51 Wholesale, commission, not motors
I Promet, skladiščenje; zvezze	52,2	43,5	4,3	50,0	36,4	13,6	I Transport, storage and communication
60-63 Promet	58,8	35,3	5,9	58,9	23,5	17,6	60-63 Transport
64 Pošta in telekomunikacije	33,3	66,7	0,0	20,0	80,0	0,0	64 Post and telecommunications
J Finančno posredništvo	63,6	27,3	9,1	66,7	33,3	0,0	J Financial intermediation
65-67 Finančno posredništvo	63,6	27,3	9,1	66,7	33,3	0,0	65-67 Financial intermediation
K Nepremičnine, najem, poslovne storitve	71,6	25,9	2,5	69,5	23,7	6,8	K Real estate, renting &business activities
72 Obdelava podatkov, s tem povezane dejavnosti	72,4	24,1	3,5	84,6	15,4	0,0	72 Computer and related activities
73 Raziskovanje in razvoj	58,8	41,2	0,0	70,0	0,0	30,0	73 Research and development
74 Druge poslovne dejavnosti	77,1	20,0	2,9	52,2	43,5	4,3	74 Other business activities



Slika 5: Razvoj inovacije, Slovenija, 2001-2002
Chart 5: Development of innovation, Slovenia, 2001-2002



6. Razvoj novih ali bistveno izboljšanih proizvodov in postopkov po velikosti podjetja in dejavnosti, Slovenija, 2001-2002
Development of new or significantly improved products and processes by enterprise size and activities, Slovenia, 2001-2002

Dejavnost / Velikost podjetja ¹⁾	Inovacija proizvoda Product innovation			Inovacija postopka Process innovation			Activity / Enterprise size ¹⁾	
	podjetja, ki so sama sodelovala pri razvoju novih proizvodov enterprises that developed new products within enterprise	podjetja, ki so razvila nov proizvod v sodelovanju enterprises that developed new products in co-operation	podjetja, ki so jim razvila nove proizvode druga podjetja enterprises whose new products were developed by other enterprises	podjetja, ki so sama sodelovala pri razvoju novih proizvodov enterprises that developed new products within enterprise	podjetja, ki so razvila nov proizvod v sodelovanju enterprises that developed new products in co-operation	podjetja, ki so jim razvila nove proizvode druga podjetja enterprises whose new products were developed by other enterprises		
	SKUPAJ	64,8	31,9	3,3	60,3	34,6	5,1	SLOVENIJA-TOTAL
c_d_e	mala	65,2	29	5,8	60,3	33,3	6,4	small
	srednjevelika	61,5	36,5	2,0	60,8	35,8	3,4	medium sized
	velika	69,3	29,2	1,5	59,7	34,5	5,8	large
d	INDUSTRIJA	66,3	31,7	2,0	59,6	35,8	4,6	c_d_e Total industry
	mala	69,3	25,7	5,0	56,9	35,4	7,7	small
	srednjevelika	61,6	37,8	0,6	59,1	38,3	2,6	medium sized
g_k	velika	70,6	27,8	1,6	62,0	32,4	5,6	large
	PREDELOVALNE DEJAVNOSTI	66,6	31,4	2,0	59,6	35,7	4,7	d Manufacturing
	mala	69,4	25,5	5,1	57,1	35,0	7,9	small
	srednjevelika	62,1	37,3	0,6	59,7	37,7	2,6	medium sized
	velika	70,7	27,7	1,6	61,0	33,3	5,7	large
	STORITVENE DEJAVNOSTI	60,7	33,1	6,2	62,4	31,2	6,4	g_k Services
	mala	61,7	31,8	6,5	62,0	32,9	5,1	small
	srednjevelika	59,3	33,3	7,4	71,4	19,1	9,5	medium sized
	velika	54,5	45,5	0,0	44,4	44,4	11,2	large

1) Velikost podjetja je opredeljena s številom zaposlenih:
 - mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
 - srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
 - velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.
 Size of enterprise is defined by the number of persons in paid employment:
 - small enterprises have 10-49 persons in paid employment;
 - medium sized enterprises have 50-249 persons in paid employment;
 - large enterprises have 250 and more persons in paid employment.

7. Inovatorji v predelovalni dejavnosti po tehnoloških sektorjih¹⁾, Slovenija, 2001-2002Innovators in manufacturing by technological sectors¹⁾, Slovenia, 2001-2002

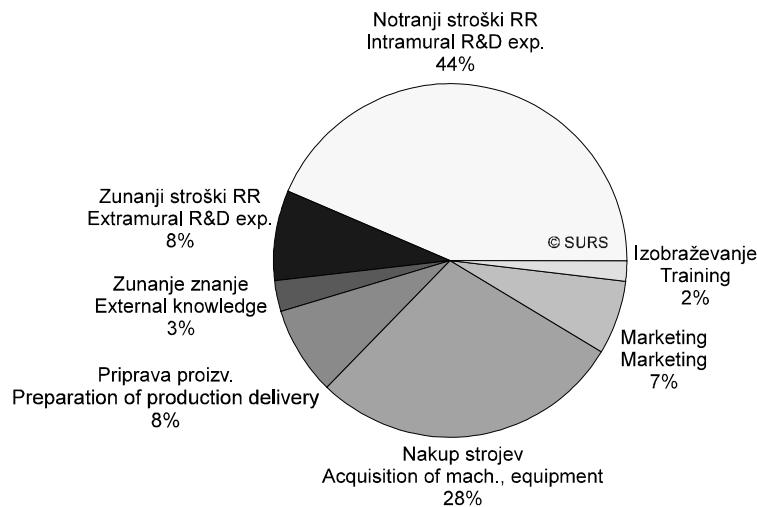
Dejavnost	Vsa podjetja All enterprises	Inovacijsko aktivna podjetja Innovation active enterprises	% inovacijsko aktivnih podjetij % of innovation active enterprises	Stroški za inovacijsko dejavnost (mio SIT) Innovation expenditure (mio SIT)	Intenzivnost inovacijske dejavnosti ²⁾ Innovation intensity ²⁾	Activity
Skupaj predelovalna dejavnost	1596	450	28,2	61.364	3,14	Total - manufacturing
Visoka - tehnologija	110	50	45,5	24.823	8,51	High - technology
Srednje- visoka - tehnologija	351	139	39,6	15.605	2,51	Medium - high - technology
Srednje - nizka - tehnologija	479	116	24,2	12.181	2,73	Medium - low - technology
Nizka - tehnologija	656	145	22,1	8.755	1,47	Low - technology

1) Vir: Eurostat: Navodila za Eurostatov vprašalnik o statistiki inovacij, 2004
 Source: Eurostat: Guidelines for the Eurostat innovation statistics questionnaire 2004

2) Delež vlaganj v inovacijsko dejavnost v prihodu od prodaje
 Share of innovation expenditure in turnover

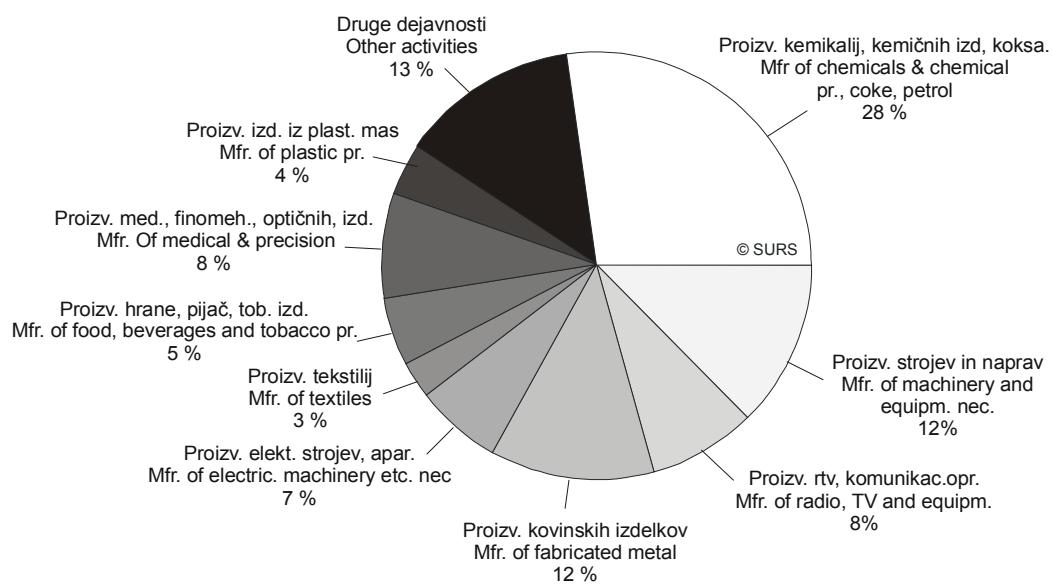
Slika 6: Struktura izdatkov za inovacijsko dejavnost po dejavnostih, Slovenija, 2002

Chart 6: Structure of innovation expenditure by activities, Slovenia, 2002



Slika 7: Struktura izdatkov za inovacijsko dejavnost v predelovalni dejavnosti po dejavnostih, Slovenija, 2002

Chart 7: Structure of innovation expenditure in manufacturing by activities, Slovenia, 2002



10. Izdatki za inovacijsko dejavnost po velikosti podjetja, Slovenija, 2002

Innovation expenditure by enterprise size, Slovenia, 2002

mio SIT

Velikost podjetja ¹⁾	skupaj total	Stroški za RRD R&D expenditure			stroji in oprema Machinery and equipment	Zuna- nje znanje Exter- nal know- ledge	Izo- braže- vanje Train- ing	Marke- ting inova- cij Market introduc- tion of innova- tions	Pripre- va za proiz- vodnjo/ dobavo Other prepar- ations for produ- ction/ delive- ries	Enterprise size ¹⁾
		skupaj total	notra- nji intra- mural	zuna- nji extra- mural						
Slovenija - skupaj	77.968	40.527	33.968	6.559	22.138	2.038	1.426	5.383	6.456	Slovenia - total
mala	7.056	3.852	2.971	881	1.932	256	197	403	416	small
srednjavelika	15.107	8.029	6.472	1.557	4.774	361	261	912	770	medium sized
velika	55.805	28.646	24.525	4.121	15.432	1.421	968	4.068	5.270	large

1) Velikost podjetja je opredeljena s številom zaposlenih:

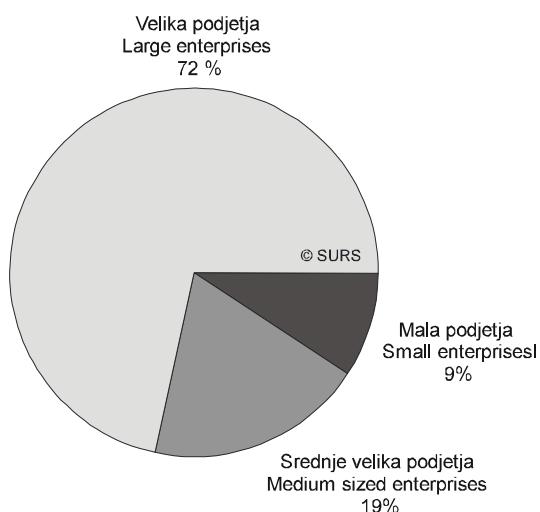
- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjavelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

Size of enterprise is defined by the number of persons in paid employment:

- small enterprises have 10-49 persons in paid employment;
- medium sized enterprises have 50-249 persons in paid employment;
- large enterprises have 250 and more persons in paid employment.

Slika 8: Struktura izdatkov za inovacijsko dejavnost po velikosti podjetja, Slovenija, 2002

Chart 8: Structure of innovation expenditure by enterprise size, Slovenia, 2002



12. Delež inovacijsko aktivnih podjetij, ki so inovacijsko sodelovala, po velikosti podjetij in dejavnosti, Slovenija, 2001-2002

Share of innovation active enterprises that were involved in innovation co-operation by enterprise size and activities, Slovenia, 2001-2002

%

Dejavnost / velikost podjetja	Podjetja, ki so ino- vacijsko sode- lovala ²⁾ Enter- prises with inno- vation co-o- peration ²⁾	Država partnerja						Activity / Enterprises size
		Slovenija Slovenia	EU ali EFTA EU or EFTA	kandi- datke za EU ¹⁾ candi- date countries for EU ¹⁾	ZDA USA	Japon- ska Japan	drugi othrs	
SKUPAJ - SLOVENIJA	45,8	41,2	28,7	6,3	5,1	1,3	3	SLOVENIJA-TOTAL
mala	36,4	30,5	19,5	2,1	4,2	0,4	3,4	small
srednjevelika	49,4	45,6	29,9	8,3	2,9	1,2	1,7	medium sized
velika	54,5	50,6	40,9	10,4	9,7	2,6	4,5	large
c_d_e INDUSTRIJA	46,7	41,9	31,7	7,4	5,6	1,3	3,2	c_d_e Total industry
mala	35,7	29,6	24,3	3,5	5,2	0	4,3	small
srednjevelika	47,3	42,9	29,9	7,7	2,9	0,9	1,9	medium sized
velika	54,6	50,3	40,4	9,9	9,9	2,8	4,2	large
d PREDELOVALNE DEJAVNOSTI	47,1	42,4	32,4	7,5	5,8	1,3	3,3	d Manufacturing
mala	36,6	30,3	25	3,6	5,3	0	4,5	small
srednjevelika	47,0	42,6	30,7	7,9	3	0,9	2	medium sized
velika	55,9	51,5	41,2	10,3	10,3	2,9	4,4	large
g_k STORITVENE DEJAVNOSTI	43,4	39,3	20,2	3,6	3,6	1,2	2,4	g_k Services
mala	37,2	31,4	14,9	0,8	3,3	0,8	2,5	small
srednjevelika	61,8	61,8	29,4	11,8	2,9	2,9	0	medium sized
velika	53,8	53,8	46,1	7,7	7,7	0	7,7	large

1) Velikost podjetja je opredeljena s številom zaposlenih:

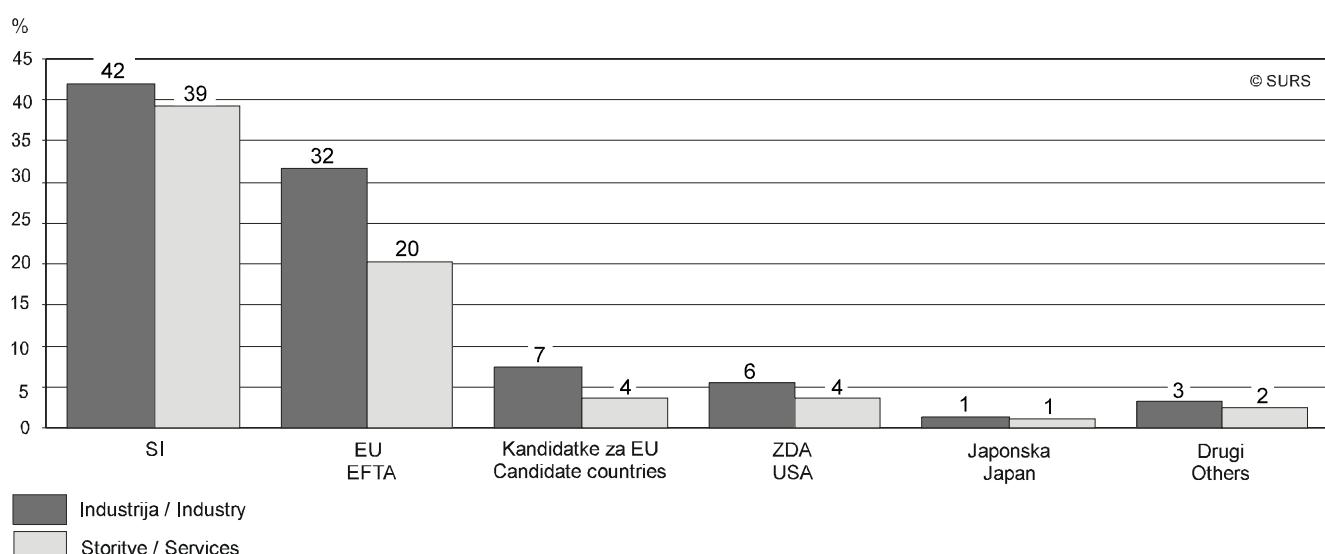
- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

Size of enterprise is defined by the number of persons in paid employment:

- small enterprises have 10-49 persons in paid employment;
- medium sized enterprises have 50-249 persons in paid employment;
- large enterprises have 250 and more persons in paid employment.

2) Podatek je izračunan kot delež podjetij, ki so inovacijsko sodelovala od vseh inovacijsko aktivnih podjetij.

Data is calculated as share of enterprises with co-operation of all innovation active enterprises.

Slika 9: Delež inovacijsko aktivnih podjetij, ki so inovacijsko sodelovala, Slovenija, 2001-2002¹⁾Chart 9: Proportion of innovation active enterprises involved in innovation co-operation by location of partner, Slovenia, 2001-2002¹⁾1) Kandidatke za EU so države, ki so maja 2004 vstopile v EU in Bolgarija, Romunija in Turčija
Candidate countries are countries that joined EU in May 2004 and Bulgaria, Romania and Turkey

13. Delež inovacijsko aktivnih podjetij, ki so posamezen vir informacij ocenila kot zelo pomemben, po velikosti podjetja, Slovenija, 2001-2002
 Share of innovation active enterprises citing specified source of information as highly important, Slovenia, 2001-2002 %

Velikost podjetja ¹⁾	Viri informacij Sources of information									Enterprise size ¹⁾
	viri znotraj podjetja sources within the enterprise	druga povezana podjetja other enterprises within the enterprise group	dobavitelji suppliers	stranke ali kupci clients and customers	konkurenca kompetitors	univerze universities	raziskovalni instituti research institutes	strokovne konference, srečanja professional conferences meetings	sezmi, razstave fairs, exhibitions	
SLOVENIJA - SKUPAJ	51,7	7,6	21,2	40,4	25,2	5,2	4,6	10,6	23,9	SLOVENIA - TOTAL
mala	57,6	8,9	24,6	40,7	22	4,2	4,7	10,6	20,3	small
srednjevelika	47,3	5,0	18,2	39,4	24,9	7,9	6,2	11,2	28,6	medium sized
velika	49,3	9,7	20,8	40,9	30,5	2,6	1,9	9,7	22,1	large

14. Delež inovacijsko aktivnih podjetij z ovirano inovacijsko dejavnostjo, po velikosti podjetja, Slovenija, 2001-2002

The share of innovation active enterprises with hampered innovation activity, by enterprise size, Slovenia, 2001-2002

%

Velikost podjetja ¹⁾	Podjetja z močno zamujeno inovacijsko dejavnostjo Enterprises with innovation activity seriously delayed	Podjetja s preprečeno inovacijsko dejavnostjo Enterprises with innovation activity prevented to bestarted	Podjetja z ovirano inovacijsko dejavnostjo Enterprises with burdened innovation activity	Enterprise size ¹⁾
SLOVENIJA - SKUPAJ	33,6	12,8	52,0	SLOVENIJA-TOTAL
mala	36,4	14,4	59,7	small
srednjevelika	34,4	10,8	55,6	medium sized
velika	27,9	13,6	34,4	large

15. Delež inovacijsko aktivnih podjetij, ki so učinek inovacij ocenila kot zelo pomemben, po velikosti podjetja, Slovenija, 2001-2002

Share of innovation active enterprises citing the following effects as highly important by enterprise size, Slovenia, 2001-2002

%

Velikost podjetja ¹⁾	Učinki inovacij Effects of innovation									Enterprise size ¹⁾
	povečana ponudba izdelkov in storitev increased range of goods and services	večji trg ali tržni delež increased market or market share	izboljšanje kakovosti izdelkov ali storitev improved quality in goods or services	izboljšanje fleksibilnosti improved production flexibility	izboljšanje zmogljivosti increased production capacity	povečana zmogljivost reduced labour costs per produced unit	zmanjšanje deleža plač reduced materials and energy per produced unit	zmanjšanje porabe energije reduced materials and energy per produced unit	izboljšanje vpliva na okolje ali varnost in zdravje improved environmental impact or health and safety aspects	
SLOVENIJA - SKUPAJ	42,6	27,5	45,6	25,4	24,2	8,9	11,9	16,3	29,8	SLOVENIA - TOTAL
mala	40,7	27,1	48,3	23,7	20,3	5,9	9,3	10,6	28,4	small
srednjevelika	44,8	27,0	42,3	27,4	28,2	8,3	14,1	17,8	28,2	medium sized
velika	42,2	29,2	46,8	24,7	24,0	14,3	12,3	22,7	34,4	large

1) Velikost podjetja je opredeljena s številom zaposlenih:

- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

Size of enterprise is defined by the number of persons in paid employment:

- small enterprises have 10-49 persons in paid employment;
- medium sized enterprises have 50-249 persons in paid employment;
- large enterprises have 250 and more persons in paid employment.

16. Delež inovacijsko aktivnih podjetij, ki so oviralni dejavnik za inovacije ocenila kot zelo pomemben, po velikosti podjetja, Slovenija, 2001-2002

Share of innovation active enterprises citing the following hampering factor as highly important by enterprise size, Slovenia, 2001-2002 %

Velikost podjetja ¹⁾	Oviralni dejavnik Hampering factor									Enterprise size ¹⁾
	Preveliko ekonomsko tveganje excessive perceived economic risks	Previsoki inovacijski stroški Innovation costs too high	Pomanjkanje finančnih virov Lack of appropriate sources of finance	Organizacijska togost znotraj podjetja Organisational rigidities within the enterprise	Pomanjkanje kvalificiranega kadra Lack of qualified personnel	Pomanjkanje informacij o tehnologiji Lack of information on technology	Pomanjkanje informacij o trgih Lack of information on markets	Nefleksibilnost regulativ ali standardov Insufficient flexibility of regulations or standards	Pomanjkanje odziva strank Lack of customer responsiveness to new goods or services	
SLOVENIJA - SKUPAJ	11,4	21,2	24,1	4,4	12,2	3,0	6,8	4,1	6,2	SLOVENIA - TOTAL
mala	11,0	19,5	20,3	4,2	11,4	2,1	4,2	6,8	5,9	small
srednjevelika	13,3	26,6	31,1	4,6	15,3	4,1	8,7	3,3	5,8	medium sized
velika	9,1	15,6	18,8	4,5	8,4	2,6	7,8	1,3	7,1	large

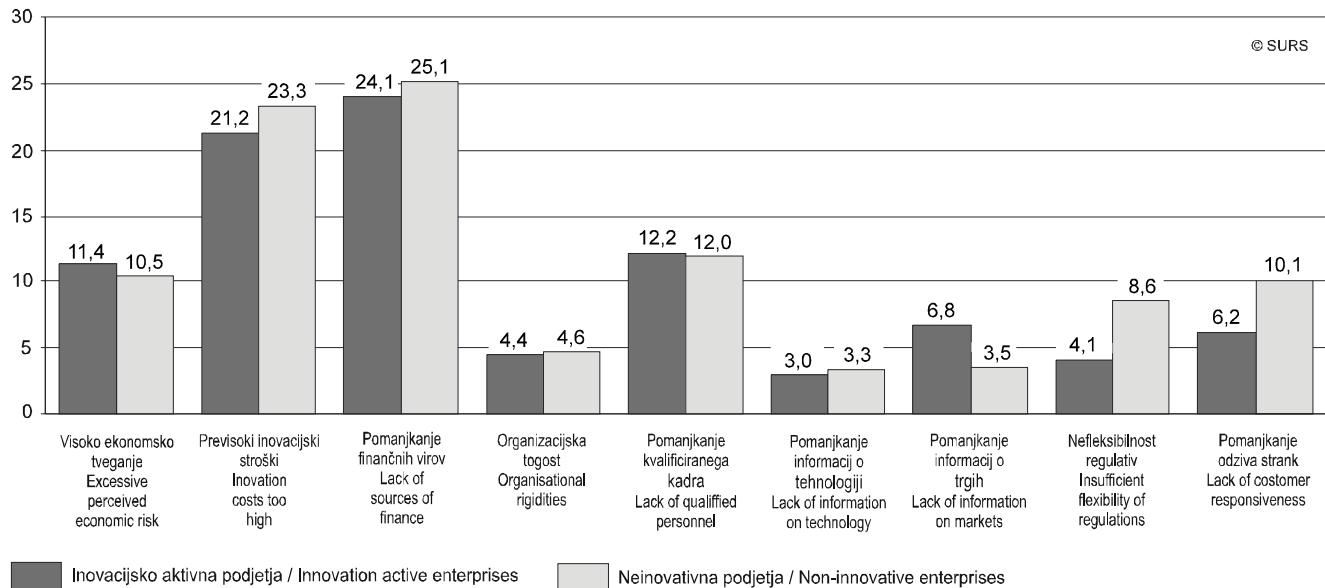
1) Velikost podjetja je opredeljena s številom zaposlenih:

- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
 - srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
 - velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.
- Size of enterprise is defined by the number of persons in paid employment:
- small enterprises have 10-49 persons in paid employment;
 - medium sized enterprises have 50-249 persons in paid employment;
 - large enterprises have 250 and more persons in paid employment.

Slika 10: Delež podjetij, ki so oviralni dejavnik navedla kot zelo pomemben, Slovenija, 2001-2002

Chart 10: Proportion of enterprises indicating hampering factor as very important, Slovenia, 2001-2002

Delež (%) / Share (%)



17. Vzroki neinovativnih podjetij, da se niso ukvarjala z inovacijsko dejavnostjo, po velikosti podjetja, Slovenija, 2001-2002

Reasons for non-innovators not having innovation activity by enterprise size, Slovenia, 2001-2002

%

Velikost podjetja ¹⁾	Ni bilo potrebno zaradi prejšnjih inovacij No need due to prior innovations	Ni bilo potrebno zaradi pogojev na trgu No need due to market conditions	Obstoj dejavnikov, ki so preprečevali inovacije Factors impeding innovations	Enterprise size ¹⁾
SLOVENIJA - SKUPAJ	14,4	34,5	59,4	SLOVENIJA-TOTAL
mala	15,1	38,2	56,7	small
srednjevelika	12,9	26,5	66,4	medium sized
velika	12,9	25,8	59,7	large

18. Delež neinovativnih podjetij, ki so oviralni dejavnik za inovacije ocenila kot zelo pomemben, po velikosti podjetja, Slovenija, 2001-2002

Share of non-innovators citing the following hampering factor as highly important by enterprise size, Slovenia, 2001-2002

%

Velikost podjetja ¹⁾	Preveliko ekonom-sko tveganje Excessive economic risks	Previsoki inova-cijski stroški Innovation costs too high	Poman-j-kanje finančnih virov Lack of appropriate sources of finance	Organi-zacijska togost znotraj podjetja Organisational rigidities within the enterprise	Poman-j-kanje kvalifi-ciranega kadra Lack of qualified personnel	Poman-j-kanje informacij o tehnolo-giji Lack of information on technology	Poman-j-kanje informacij o trgih Lack of information on markets	Nefleksi-bilnost regulativ ali stan-dardov Insuffi-cent flexibility of regulations or standards	Poman-j-kanje odziva strank Lack of customer respon-siveness to new goods or services	Enterprise size ¹⁾
SLOVENIJA - SKUPAJ	10,5	23,3	25,1	4,6	12,0	3,3	3,5	8,6	10,1	SLOVENIA - TOTAL
mala	9,9	23,5	23,8	3,5	11,5	3,9	3,3	10,5	10,1	small
srednjevelika	12,8	23,4	29,1	7,5	14,2	2,3	4,6	4,7	11,6	medium sized
velika	7,3	18,5	22,5	4,8	7,3	1,6	1,6	2,4	3,2	large

19. Delež podjetij, ki je uvedel strateške in organizacijske spremembe v letih 2001-2002, po velikosti podjetja, Slovenija

Share of enterprises that have introduced strategic and organisational changes in 2001-2002 by enterprise size, Slovenia

%

Velikost podjetja ¹⁾	Inovacijsko aktivna podjetja Innovation active enterprises					Neinovativna podjetja Non-innovative enterprises					Enterprise size ¹⁾
	strategija strategy	vodenje management	organi-zacija organisation	marketing marketing	estetske spre-membe aesthetic schanges	strategija strategy	vodenje management	organi-zacija organisation	marketing marketing	estetske spre-membe aesthetic schanges	
SLOVENIJA - SKUPAJ	39,6	54,8	62,4	46,1	58,3	15,7	27,2	31,7	23,0	22,4	SLOVENIA - TOTAL
mala	25,0	43,6	54,7	43,2	55,9	13,8	24,5	29,1	22,0	20,2	small
srednjevelika	41,9	55,2	62,2	41,5	55,6	19,3	33,4	37,6	24,4	25,6	medium sized
velika	58,4	71,4	74,7	57,8	66,2	24,2	33,1	37,1	29,0	33,1	large

1) Velikost podjetja je opredeljena s številom zaposlenih: /

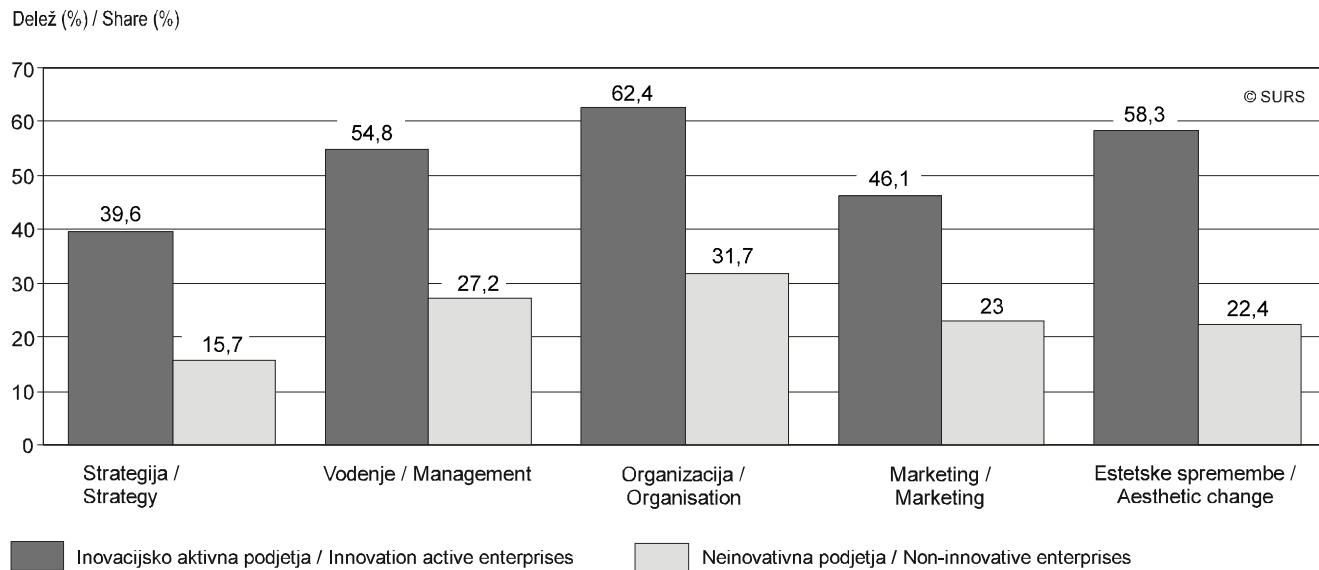
- mala podjetja imajo 10-49 zaposlenih; / small enterprises have 10-49 persons in paid employment;
- srednjevelika podjetja imajo 50-249 zaposlenih; / medium sized enterprises have 50-249 persons in paid employment;
- velika podjetja imajo 250 in več zaposlenih / large enterprises have 250 and more persons in paid employment.

Size of enterprise is defined by the number of persons in paid employment:

- small enterprises have 10-49 persons in paid employment;
- medium sized enterprises have 50-249 persons in paid employment;
- large enterprises have 250 and more persons in paid employment.



Slika 11: Delež podjetij, ki je uvedel strateške in organizacijske spremembe v letih 2001-2002, Slovenija
Chart 11: Proportion of enterprises introducing important strategic and organisational changes, Slovenia, 2001-2002



STATISTIČNA ZNAMENJA

R&D

SIT slovenski tolar

METODOLOŠKA POJASNILA

Namen statističnega raziskovanja

Namen raziskovanja INOV-P-S je pridobiti podatke o inovacijski dejavnosti v predelovalni dejavnosti in izbranih storitvenih dejavnostih, in sicer podatke o številu podjetij, ki so v opazovanem obdobju (2001-2002) uvelia nov proizvod ali nov postopek ali so se z inovacijsko dejavnostjo ukvarjala, vendar dela niso dokončala ali so jo opustila ali oboje, o višini sredstev, vloženih za ta namen, o sodelovanju podjetij z drugimi podjetji, ustanovami in kupci pri razvoju inovacije, o učinkih inovacijske dejavnosti itd.

Enota opazovanja

So podjetja, ki imajo najmanj 10 zaposlenih in so po Standardni klasifikaciji dejavnosti (SKD) uvrščena v eno izmed naslednjih dejavnosti:

- rudarstvo (10-14)
- predelovalno dejavnost (15-37)
- oskrbo z električno energijo, plinom in vodo (40-41)
- posredništvo in trgovino na debelo (51)
- promet, skladiščenje in zveze (60-64)
- finančno posredništvo (65-67)
- obdelavo podatkov in podatkovne baze (72)
- raziskovanje in razvoj (73)
- projektiranje in tehnično svetovanje (74.2)
- tehnično preizkušanje in analiziranje (74.3).

Viri in metode zbiranja podatkov

Objavljene podatke smo pridobili s statističnim raziskovanjem inovacijske dejavnosti v predelovalni dejavnosti in izbranih storitvenih dejavnostih, in

STATISTICAL SIGNS

R&D research and development

SIT Slovenian tolar

METHODOLOGICAL EXPLANATIONS

The purpose of the statistical survey

The purpose of the INOV-P-S survey is to obtain data on innovation activity in manufacturing and selected services; i.e. the number of enterprises engaged in process or product innovation in the observed period (2001-2002), enterprises with ongoing and/or abandoned innovation activity, how much funds were invested in innovation activities, co-operation of enterprises with other enterprises, institutions and buyers in developing innovations, on effects of innovation activity, etc.

Observation units

are enterprises with at least 10 persons in paid employment classified in the Standard Classification of Activities in manufacturing and selected services:

- mining and quarrying (10-14)
- manufacturing (15-37)
- electricity, gas and water supply (40-41)
- wholesale trade (51)
- transport, storage and communication (60-64)
- financial intermediation (65-67)
- computer and related activities (72)
- research and development (73)
- architectural and engineering activities (74.2)
- technical testing and analysis (74.3)

Sources and methods of data collection

The published data were obtained with the statistical survey on innovation activity in manufacturing and selected services, which is harmonised with

sicer v skladu z mednarodno OECD-jevo metodologijo (priročnik Oslo) in s priporočili evropskega statističnega urada (Eurostata) za tretji poenoten (harmoniziran) popis inovacijske dejavnosti – CIS 3 (Community Innovation Survey). Podjetja so vprašalnik INOV-P-S/2002 izpolnila z zahtevanimi podatki na podlagi svojih evidenc.

Zajetje

V raziskovanje je bilo vključenih 2 993 poročevalski enot po poslovnom registru in te enote so prejele vprašalnik INOV-P-S/2002. S podatki izpolnjen vprašalnik nam je vrnilo 86 % enot.

Definicije in druga pojasnila

Inovacija pomeni proces spremjanja zamisli v izdelek, postopek ali storitev oziroma proces preoblikovanja ustvarjalnosti v dobiček.

INOVACIJE zajemajo nove izdelke, postopke in storitve ter bistveno izboljšane izdelke, postopke in storitve. Inovacija je uvedena, ko se pojavi na trgu (inovacija izdelka, storitve) ali uporabi v okviru procesa (inovacija postopka). Izdelek, storitev ali postopek morajo biti novi ali bistveno izboljšani za podjetje, ni pa nujno, da so novi na trgu. Inovacije vključujejo vrsto znanstvenih, tehničkih, organizacijskih, finančnih in gospodarskih aktivnosti.

Inovacija temelji na rezultatih novega tehničkega razvoja, novih kombinacijah že obstoječih tehnologij ali uporabi drugega znanja, ki ga je pridobilo podjetje.

Zgolj organizacijske in vodstvene spremembe niso vključene v to raziskovanje. Inovacija mora biti nova za podjetje, ni pa nujno, da je nova na tržišču. Ni nujno, da je bila inovacija razvita v podjetju.

Inovacija proizvoda

Inovacija proizvoda je izdelek ali storitev, ki je nov(-a) ali bistveno izboljšan(-a) v svojih temeljnih funkcijah, tehničnih specifikacijah, programski opremi ali drugih nematerialnih sestavinah, nameravani uporabi ter lažji uporabi za potrošnika. Inovacija mora biti nova za podjetje, ni pa nujno, da je nova na trgu. Ni nujno, da je bila inovacija razvita v podjetju.

Zgolj estetske spremembe in prodaja inovacij, ki niso bile razvite v podjetju, niso inovacije.

Inovacija postopka

Inovacija postopka zajema nove ali bistveno izboljšane proizvodne postopke in nove ali bistveno izboljšane metode dobav storitev in izdelkov. Rezultat inovacije postopka se mora odražati v kakovosti izdelkov ali storitev ter v stroških proizvodnje in distribucije.

Inovacija mora biti nova za podjetje, ni pa nujno, da je bilo vaše podjetje prvo, ki je uvelo to inovacijo.

Organizacijske in vodstvene spremembe ne sodijo med inovacije.

Glede na to, ali so se podjetja ukvarjala z inovacijsko dejavnostjo, smo jih razdelili v različne skupine:

- **Inovacijsko aktivna podjetja** so podjetja, ki so uvedla inovacijo proizvoda (izdelka ali storitve) ali inovacijo postopka ali so imela v opazovanem obdobju nedokončano ali opuščeno inovacijsko dejavnost.
- **Inovatorji proizvoda (izdelka ali storitve) in/ali postopka** so podjetja, ki so v opazovanem obdobju uvedla inovacijo proizvoda ali inovacijo postopka ali oboje.
- **Inovatorji postopka** so podjetja, ki so v opazovanem obdobju

OECD's Oslo methodology and Eurostat recommendations for the Third Community Innovation Survey (CIS 3). Enterprises completed the INOV-P-S/2002 questionnaire with data from their records.

Coverage

We sent the INOV-P-S/2002 form to 2,993 reporting units from the Business Register of Slovenia. The response rate was 86%.

Definitions and other explanations

Innovation is the process of changing an idea into a product, process or service, or the process of transforming creativity into profit.

INNOVATION covers new products, processes and services, and significant changes of products, processes and services. An innovation is introduced when it appears on the market (product or service innovation) or is used in the process (process innovation). A good, service or process must be new or significantly improved for the enterprise, but not necessarily new on the market. Innovations include many scientific, technological, organisational, financial and economic activities.

Innovation is based on the results of new technological development, new combinations of the existing technologies or use of other knowledge used by the enterprise.

Purely organisational or managerial changes are not included in the survey. The innovation should be new to the enterprise; it is not necessary that it is new on the market. It does not matter whether the innovation was developed by the enterprise or not.

Product innovation

is a good or service which is either new or significantly improved with respect to its fundamental characteristics, technical specifications, incorporated software or other immaterial components, intended uses, or user friendliness. The innovation should be new to the enterprise; it need not necessarily be new on the market. It does not matter whether the innovation was developed by the enterprise or not.

Changes of a solely aesthetical nature, and selling of innovations wholly produced and developed by other enterprises are not included.

Process innovation

includes new and significantly improved production technology, new and significantly improved methods of supplying services and of delivering products. The outcome should be significant with respect to the level of output, quality of products (goods/services) or costs of production and distribution.

The innovation should be new to the enterprise; the enterprise needs not necessarily be the first one to introduce this process.

It does not matter whether the innovation was developed by the enterprise or not. Purely organisational or managerial changes are not included.

Enterprises were classified into different groups depending on whether they were engaged in innovation activities or not:

- **Innovation active enterprises:** Enterprises that have introduced product innovation or process innovation or those that have in the observation period not yet completed or abandoned the innovation activity
- **Product and/or process innovators:** Enterprises that have introduced product innovation or process innovation or both
- **Product innovators:** Enterprises that have introduced **only** product

uvwxyz **samo** inovacijo proizvoda.

- **Inovatorji postopka** so podjetja, ki so uvedla **samo** inovacijo postopka.
- **Inovatorji proizvoda in postopka** so podjetja, ki so uvedla inovacijo proizvoda **in** inovacijo postopka.
- **Inovatorji z nedokončanimi in/ali opuščenimi inovacijskimi dejavnostmi:** v to kategorijo so vključena podjetja, ki so se v opazovanem obdobju ukvarjala z inovacijsko dejavnostjo, vendar je niso dokončala ali so jo opustila ali oboje in tako niso uvedla nobene inovacije.
- **Neinovativna podjetja** so podjetja, ki v opazovanem obdobju niso uvedla nobene inovacije in se z inovacijsko dejavnostjo tudi niso ukvarjala.

Inovacijsko aktivna podjetja v predelovalni dejavnosti smo razdelili po tehničkih sektorjih, in sicer glede na dejavnost, v katero se uvrščajo¹⁾:

Visoka tehnologija:

- Proizvodnja farmacevtskih izdelkov (24.4)
- Pisarniški stroji in računalniki (30)
- Radijski, TV- in komunikacijska oprema (32)
- Medicinski, finomehanični in optični instrumenti (33)
- Proizvodnja letal (35.3)

Srednje visoka tehnologija:

- Kemikalije (24-24.4)
- Stroji in naprave (29)
- Elektročni stroji, naprave (31)
- Motorna vozila (34)
- Druga vozila (35.2+35.4+35.5)

Srednje nizka tehnologija:

- Koks, naftni derivati (23)
- Guma in plastične mase (25)
- Drugi nekovinski izdelki (26)
- Kovine (27)
- Kovinski izdelki (28)
- Gradnja ladij, čolnov (35.1)

Nizka tehnologija:

- Hrana, pižača in tobak (15+16)
- Tekstil in oblačila (17+18+19)
- Les (20)
- Papir, karton in založništvo (21+22)
- Pohištvo (36)
- Reciklaža (37)

Inovacijski stroški obsegajo:

- notranjo raziskovalno-razvojno dejavnost –
 - ustvarjalno in sistematično delo znotraj podjetja, namenjeno povečanju znanja, in uporabo tega znanja za razvoj novih aplikacij, kot so novi ali izboljšani izdelki ali storitve in postopki (vključno z razvojem programske opreme);
- nakup storitev RRD (zunanja raziskovalno-razvojna dejavnost)
 - obsega enake dejavnosti, kot so navedene zgoraj, vendar jih izvajajo druga podjetja (vključno s povezanimi podjetji) ali druge javne ali raziskovalne organizacije;
- nakup strojev in opreme za proizvodnjo novih ali izboljšanih izdelkov, storitev in postopkov –
 - nabava sodobnejših strojev, računalnikov (strojne opreme) izključno zaradi novih ali bistveno izboljšanih izdelkov ali storitev in/ali postopkov;

innovation

- **Process innovators:** Enterprises that have introduced **only** process innovation
- **Product and process innovators:** Enterprises that have introduced product innovation **and** process innovation
- **Enterprises with on-going and/or abandoned innovation activity:** This category includes all enterprises that have had in the observation period only on-going or abandoned innovation activity or both and have not introduced any innovation onto the market.
- **Non-innovative enterprises:** Enterprises that in the observation period have not introduced any innovation and also have had no innovation activity during the period.

Innovation active enterprises are classified by technological sectors according to their activity¹⁾:

High technology:

- Pharmaceuticals (24.4)
- Computers, office machinery (30)
- Electronics-communications (32)
- Scientific instruments (33)
- Aerospace (35.3)

Medium-high technology:

- Chemicals (24-24.4)
- Non-electrical machinery (29)
- Electrical machinery (31)
- Motor vehicles (34)
- Other transport equipment (35.2+35.4+35.5)

Medium-low technology:

- Petroleum refining (23)
- Rubber and plastic products (25)
- Non-mineral products (26)
- Metals (27)
- Fabricated metal products (28)
- Shipbuilding (35.1)

Low technology:

- Food, beverages and tobacco (15+16)
- Textiles and clothing (17+18+19)
- Wood (20)
- Paper printing (21+22)
- Furniture (36)
- Recycling (37)

Innovation expenditure:

- intramural R&D activity
 - all creative work undertaken within the enterprise on a systematic basis in order to increase the stock of knowledge, and the use of this stock of knowledge to devise new applications, such as new and improved products (goods/ services) and processes (including software research);
- acquisition of R&D (extramural R&D activity)
 - same activities as above, but performed by other companies (including other enterprises within the group) or other public or private research organisations;
- acquisition of machinery and equipment for producing new or improved goods, services and processes
 - advanced machinery, computer hardware specifically purchased to implement new or significantly improved products (goods/services) and/or processes;

1) Vir: Eurostat: Navodila za Eurostatov vprašalnik o statistiki inovacij, 2004
Source: Eurostat: Guidelines for the Eurostat innovation statistics questionnaire, 2004



- nakup zunanjega znanja –
- nakup pravic za uporabo patentov in nepatentiranih invencij, licenc, znanja in izkušenj (know-how), blagovnih znamk, programske opreme ali drugih oblik tujega znanja za izvedbo inovacij v podjetju; pripravo za proizvodnjo / dobavo –
 - postopki in tehnične priprave, potrebne za realizacijo uvedbe novih ali bistveno izboljšanih izdelkov, storitev in postopkov, ki niso prikazani drugje;
- izobraževanje –
 - notranje ali zunanje izobraževanje zaposlenih, ki je neposredno povezano z razvojem ali uvedbo inovacij;
- marketing novih izdelkov ali storitev –
 - notranje ali zunanje aktivnosti, potrebne za uvedbo novih ali bistveno izboljšanih izdelkov in storitev (lahko je vključeno vnaprejšnje raziskovanje trga, preizkušanje trga in lansiranje oglaševanja, vendar ne vključuje izgradnjo distribucijske mreže za trženje inovacij).

Vsi finančni podatki se nanašajo na leto 2002, ostali podatki o inovacijski dejavnosti pa se nanašajo na dvoletno obdobje (2001-2002).

Raziskovalno-razvojna dejavnost (RRD) obsega ustvarjalno in sistematično delo, namenjeno povečanju znanja o človeku, kulturi in družbi. Podjetja, ki imajo lastno RRD, se z njo ukvarjajo redno ali občasno. Stroški raziskovalno-razvojne dejavnosti so stroški glede na vrsto raziskav, in sicer stroški raziskav, povezanih z razvojem tehnologije, stroški raziskav, povezanih z razvojem izdelkov, in stroški za splošne raziskave.

Vire informacij za inovacijsko dejavnost in učinke inovacijske dejavnosti ter dejavnike, ki so ovirali inovacijsko dejavnost, so poročevalske enote ocenjevale – glede na pomembnost, ki so jim jo prisodile – z lestvico od 0 do 3 glede (0 = nepomembno, 1 = malo pomembno, 2 = srednje pomembno, 3 = zelo pomembno).

Kot viri informacij za inovacijsko dejavnost so bili navedeni:

- viri znotraj podjetja
- druga podjetja znotraj skupine podjetij
- dobavitelji opreme, materiala, komponent, programske opreme
- stranke ali kupci
- konkurenca znotraj dejavnosti
- univerze ali drugi visokošolski zavodi
- državni ali zasebni nepridobitni inštituti
- konference, srečanja, revije
- sejmi, razstave.

Kot učinki inovacijske dejavnosti, so bili navedeni:

- povečana ponudba izdelkov ali storitev
- večji trg ali tržni delež
- izboljšanje kakovosti izdelkov ali storitev
- izboljšanje fleksibilnosti proizvodnje ali dobave storitev
- povečana zmogljivost proizvodnje ali dobave storitev
- zmanjšanje deleža stroškov plač na proizvedeno enoto / transakcijo
- zmanjšanje porabe materiala ali energije na proizvedeno enoto / transakcijo
- izboljšanje vpliva na okolje, zdravje ali varnost
- zadostitev predpisom ali standardom.

Kot dejavniki, ki so ovirali inovacijsko dejavnost, so bili navedeni:

- preveliko ekonomsko tveganje
- previšoki inovacijski stroški
- pomanjkanje ustreznih finančnih virov
- organizacijska togost znotraj podjetja
- pomanjkanje kvalificiranega kadra
- pomanjkanje informacij o tehnologiji

- acquisition of other external knowledge
- purchase of rights to use patents and non-patented inventions, licenses, know-how, trademarks, software and other types of knowledge from others for use in the enterprise's innovations; preparations for production/deliveries
 - procedures and technical preparations to realise the actual implementation of products (goods/services) and process innovations not covered elsewhere;
- training
 - internal or external training for the personnel directly aimed at the development and/or introduction of innovations;
- marketing introduction of innovations
 - internal or external marketing activities directly aimed at the market introduction of the enterprise's new or significantly improved products (goods/services), (may include preliminary market research, market tests and launch advertising, but exclude the building of distribution networks to market innovations)

All financial data refer to 2002; all other data on innovation activity refer to the 2001-2002 period.

Research and development (R&D) comprises creative and systematic work undertaken in order to increase the stock of knowledge and the use of this stock of knowledge to devise new applications. Enterprises with R&D activity are engaged in R&D continuously or only occasionally. R&D expenditure is expenditure for research connected to technological development, product research or expenditure for general research.

Data on effects and objectives of innovation activity and on factors hampering innovation activity are estimated by reporting units according to the following scale from 0 to 3 (0 = not important, 1 = low importance, 2 = medium importance, 3 = high importance).

The following sources of information for innovation were specified:

- Within the enterprise
- Other enterprises within the enterprise group
- Suppliers of equipment, materials, components or software
- Clients or customers
- Competitors and other enterprises from the same industry
- Universities or other higher education institutes
- Government or private non-profit research institutes
- Professional conferences, meetings, journals
- Fairs, exhibitions

The following effects of innovation were specified:

- Increased range of goods or services
- Increased market or market share
- Improved quality of goods or services
- Improved production flexibility
- Increased production capacity
- Reduced labour costs per produced unit
- Reduced materials and energy per produced unit
- Improved environmental impact or health and safety aspects
- Compliance with regulations or standards

The following factors hampering innovation activity were specified:

- Excessive perceived economic risks
- Too high innovation costs
- Lack of appropriate sources of financing
- Organisational rigidities within the enterprise
- Lack of qualified personnel
- Lack of information on technology

- pomanjkanje informacij o trgih
- predpisi in standardi
- pomanjkanje odziva strank na nove izdelke in storitve.

Inovacijsko sodelovanje pomeni aktivno udeležbo v skupnih raziskovalno-razvojnih (RR) in drugih inovacijskih projektih z drugimi podjetji ali inštituti. Ni nujno, da imata oba partnerja takojšnji dobiček od vlaganj. Zgolj pogodbeno delo, ki ne vključuje aktivnega sodelovanja, se ne šteje za tovrstno sodelovanje.

Partnerji se delijo v skupine glede na vrsto partnerja (druga povezana podjetja, kupci, dobavitelji, konkurenca, svetovalci, komercialni laboratoriji ali RR podjetja, univerze, državni ali zasebni nepridobitni inštituti) in po njegovi lokaciji (Slovenija, države EU ali EFTA, države kandidatke za članstvo v EU, ZDA, Japonska, drugo).

Podjetja smo razdelili po velikosti glede na število zaposlenih:

- mala podjetja imajo 10– 49 zaposlenih;
- srednje velika podjetja imajo 50–249 zaposlenih;
- velika podjetja imajo 250 ali več zaposlenih.

Raziskovanje INOV-P-S poteka vsako drugo leto.

- Lack of information on markets
- Insufficient flexibility of regulations or standards
- Lack of customer responsiveness to new goods or services

Innovation co-operation means active participation in joint R&D and other innovation projects with other organisations (either other enterprises or non-commercial institutions). It does not necessarily imply that both partners derive immediate commercial benefit from the venture. Pure contracting out of work, where there is no active collaboration, is not regarded as co-operation.

Partners are classified according to the type of partner (other enterprises within your enterprise group, suppliers of equipment, materials, components or software, clients or customers, competitors and other firms from the same industry, consultants, commercial laboratories/R&D enterprises, universities or other higher education institutes, government or private non-profit research institutes) and location (Slovenia, EU / EFTA, EU Candidate Countries, US, Japan, other).

We divided enterprises by the number of persons in paid employment in three size classes:

- small enterprises, which have 10-49 persons in paid employment,
- medium-sized enterprises, which have 50-249 persons in paid employment,
- large enterprises, which have 250 persons and more in paid employment.

The survey on innovation activity is carried out every two years.

KOMENTAR

Z raziskovanjem INOV-P-S/2002 je Statistični urad RS pridobil podatke o inovacijski dejavnosti v predelovalnih dejavnostih in izbranih storitvenih dejavnostih. Inoviranje (uvajanje novosti, izboljšav) postaja vse pomembnejši pogoj za uspeh, hkrati pa je tudi pomemben dejavnik pri izpolnjevanju ciljev Lizbonske strategije. Leta 2000 je bila v Lizboni sprejeta strategija, katere cilj je, da postane Evropa do leta 2010 "najbolj konkurenčno in dinamično na znanju temelječe gospodarstvo na svetu". Izpolnitev tega cilja je v veliki meri odvisna tudi od inovativne aktivnosti podjetij.

Po podatkih raziskovanja INOV-P-S/2002 je bilo v obdobju 2001–2002 inovacijsko aktivnih 21,1 % vseh podjetij; od tega jih je 5,6 % uvedlo samo inovacijo proizvoda, 1,8 % pa samo inovacijo postopka. Podjetij, ki so uvedla inovacijo proizvoda in inovacijo postopka, je bilo v omenjenem obdobju 12,8 %.

Podatki kažejo, da se inovativnost v podjetjih povečuje z njihovo velikostjo. Med velikimi podjetji se je z inovacijsko dejavnostjo ukvarja več kot polovica podjetij (55,4 %); to je posledica tega, da imajo velika podjetja večinoma organizirane raziskovalno-razvojne oddelke, prav tako pa imajo tudi večje finančne in kadrovske zmožnosti.

V predelovalnih dejavnostih je bilo inovacijsko aktivnih 28,2 % podjetij; med temi največ – 50 % – v dejavnosti »proizvodnja medicinskih, finomehaničnih in optičnih instrumentov« ter v dejavnosti »proizvodnja vozil in plovil«. Sledila so jim podjetja v dejavnostih »proizvodnja kemikalij, kemičnih izdelkov, umetnih vlaken« in »proizvodnja koksa, naftnih derivatov, jedrskega goriva«, med katerimi je bilo inovacijsko aktivnih 47,5 % podjetij.

Izmed vseh podjetij, ki so uvedla nov izdelek, je 12,8 % podjetij uvedlo izdelek, ki ni bil nov samo za podjetje, temveč tudi za trg, na katerem podjetje nastopa.

Z enim izmed vprašanj v vprašalniku smo želeli izvedeti, ali so podjetja

COMMENT

With the survey on innovation activity (INOV-P-S/2002) the Statistical Office collected the data on innovation activity in manufacturing and selected services. Innovating has become an important factor for success and it is also the important factor of fulfilment of the Lisbon strategy objectives. The Lisbon strategy with an objective of Europe becoming by 2010 "the most competitive and dynamic knowledge-based economy in the world" was launched in 2000. The fulfilment of this objective depends also on innovation capabilities of enterprises.

According to the survey on innovation activity (INOV-P-S/2002), there were 21.1% of innovation active enterprises of all enterprises in the 2001-2002 period. 5.6% of enterprises introduced only product innovation and 1.8% enterprises introduced only process innovation. Both, product and process innovations were introduced by 12.8% of enterprises.

Data indicate that the share of innovation active enterprises grows with the enterprise size. Among large enterprises more than half of enterprises were innovation active which is due to the fact that large enterprises have in most cases organised R&D departments. Moreover, large enterprises also have stronger financial and personnel capacity.

In manufacturing 28.2% of enterprises were innovation active; the share of innovation active enterprises was the highest in manufacture of medical and precision instruments and in manufacture of transport equipment where half of all enterprises were innovation active. They are followed by enterprises in manufacture of chemicals and chemical products, coke, etc., where 47.5% of enterprises were innovation active.

Among all enterprises that introduced new products, 12.8% of enterprises introduced new products that were new to the market as well.

In the questionnaire we asked respondents if they were involved in co-



pri razvoju novih izdelkov ali storitev sodelovala z drugim podjetjem ali ustanovo. Rezultati so pokazali, da so podjetja večinoma sama razvila nov izdelek ali storitev, 32 % jih je razvilo nov izdelek ali storitev v sodelovanju z drugim podjetjem ali ustanovo in le 3 % podjetij so prepustili razvoj novega izdelka ali storitve drugemu podjetju ali ustanovi. Pri razvoju novih postopkov je prav tako večina podjetij sama razvila nov postopek, 5 % podjetjem je nov postopek razvil nekdo drug.

Podjetja v predelovalnih dejavnostih smo razdelili glede na tehnološke sektorje, in sicer (po Eurostatovih metodoloških navodilih) v štiri skupine: v visoko, srednje visoko, srednje nizko in nizko tehnologijo. Največji delež inovacijsko aktivnih podjetij je v visoki tehnologiji, kamor se uvrščajo proizvodnja farmacevtskih izdelkov, pisarniški stroji in računalniki, radijska, TV- in komunikacijska oprema; medicinski, finomehanični in optični instrumenti in proizvodnja letal. Med podjetji, ki se uvrščajo v visoko tehnologijo, je bilo inovacijsko aktivnih 45,5 %. Sledijo jim podjetja, ki se uvrščajo v srednje-visoko tehnologijo; v tej skupini je bilo inovacijsko aktivnih 39,6 % podjetij.

Z raziskovanjem inovacijske dejavnosti smo o raziskovalno-razvojni dejavnosti (RRD) pridobili naslednje podatke: koliko podjetij ima lastne raziskovalno-razvojne oddelke, koliko oseb je zaposlenih na področju RRD in kolikšni stroški so namenjeni za raziskovalno-razvojno dejavnosti. Raziskovalno-razvojna dejavnost obsega ustvarjalno in sistematično delo, namenjeno povečanju znanja o človeku, kulturi in družbi, ter uporabo tega znanja za razvoj novih aplikacij.

V obdobju 2001–2002 se je 17 % podjetij ukvarjalo z raziskovalno-razvojno dejavnostjo. V 66 % podjetij je bila ta organizirana kot redna dejavnost, 34 % podjetij pa se je z njo ukvarjalo le občasno.

Od sredstev, ki so bila v letu 2002 namenjena za raziskovalno-razvojno dejavnosti, je bilo 25,4 % namenjenih za razvoj nove tehnologije, 68,5 % sredstev za razvoj novih izdelkov ali storitev, 6,1 % sredstev pa za splošne raziskave.

Sredstva, vložena v RRD, so le del stroškov za inovacijsko dejavnosti. Med te stroške spadajo še stroški za pridobitev strojev in opreme, znanja, stroški za izobraževanje zaposlenih, stroški za marketing in pripravo proizvodnje.

V letu 2002 je bilo v inovacijsko dejavnost vloženih 78 milijard SIT. Od tega je bilo 40 milijard SIT namenjenih za raziskovalno-razvojno dejavnosti, 22 milijard SIT za nabavo strojev in opreme, 6 milijard SIT pa je bilo namenjenih za pripravo proizvodnje in dobavo.

Delež izdatkov za inovacijsko dejavnost se povečuje z velikostjo podjetij; največ sredstev, kar 72 % vseh izdatkov za inovacijsko dejavnost, so prispevala velika podjetja, srednje velika 19 %, mala podjetja pa so namenila za inovacijsko dejavnost 9 % sredstev/izdatkov.

Struktura vlaganj v predelovalni dejavnosti je bila tako: 47,8 % je bilo namenjenih za raziskovalno-razvojno dejavnost, 31,7 % za nakup strojev in opreme, 9,8 % za pripravo proizvodnje in dobavo.

Od sredstev, ki so jih podjetja namenila za inovacijsko dejavnost, je bilo kar 94 % lastnih sredstev, od države so prejeli 3 % sredstev.

Nekatera podjetja so pri razvoju novih izdelkov inovacijsko sodelovala, kar pomeni, da so bila aktivno udeležena v skupnih raziskovalno-razvojnih in drugih inovacijskih projektih z drugimi podjetji ali ustanovami. Takih podjetij, ki so inovacijsko sodelovala, je bilo 46 %. Zanimalo nas je tudi, kdo in od kod so bili njihovi partnerji: največ podjetij, 41 %, je sodelovalo s partnerjem iz Slovenije, 29 % podjetij je kot partnerja navedlo državo članico EU ali EFTA.

operation with other enterprises or institutions when developing a new product or service. According to the results, enterprises mostly developed a new product independently, 32% of enterprises developed a new product in co-operation with another enterprise or institution and only 3% of enterprises left the development to other enterprises or institutions. When developing a new process most of the enterprises also developed an innovation independently, while for 5% of the enterprises a new process was developed by another enterprise or institution.

Enterprises in manufacturing were classified according to technological sectors; according to Eurostat's methodological guidelines, enterprises in manufacturing are classified into four groups: high technology, medium high technology, medium low technology and low technology. The highest share of innovation active enterprises is among high technology where there are classified enterprises in manufacturing of pharmaceuticals, computers, office machinery, electronics-communications, scientific instruments. Among those enterprises, 45.5% of them were innovation active. They are followed by enterprises classified into medium high technology where the share of innovation active enterprises was 39.6%.

With the survey on innovation activity we obtained the following data on research and development activity (R&D activity): the number of enterprises with R&D divisions, the number of employees in R&D and expenditure on R&D. R&D comprises creative and systematic work undertaken in order to increase the stock of knowledge and the use of this stock o f this stock o eview new applications.

In the 2001-2002 period 17% of enterprises had R&D activity. 66% of enterprises were continuously engaged in it and 34% were only occasionally engaged in R&D

Of all funds that were invested in R&D, 25.4% were invested in development of new technologies and 68.5% of funds were invested in development of new products and services. The share of investment in general research was 6.1%.

Investment in R&D is only a part of total expenditure in innovation activity. Among expenditure on innovation activity are included: expenditure for machinery and equipment, external knowledge, expenditure for training, expenditure for market introduction of innovations and preparation for production/delivery.

In 2002 SIT 78 billion were invested in innovation activity, of that SIT 40 billion were invested in R&D, SIT 22 billion were invested in acquisition of machinery and equipment, and SIT 6 billion were invested in preparation for production/delivery.

The share of expenditure invested in innovation activity grows with the enterprise size; the most (72%) was invested by large enterprises, medium-sized enterprises invested 19% and small enterprises invested 9% of expenditure.

The structure on investment in innovation activity in manufacturing was as follows: research and development (47.8%), acquisition of machinery and equipment (31.7%), preparation for production/delivery (9.8%).

Enterprises covered 94% of total funds for innovation activity with their own financial resources. The share of funds received from the government was 3%.

Some enterprises were involved in co-operation when developing a new product or process, which means active participation in joint R&D and other innovation projects with other enterprises or organisations. We asked enterprises about the type of partner of co-operation and the partner's location. 46% of enterprises were involved in innovation co-operation, most enterprises co-operated with the partner from Slovenia (41%), 29% of enterprises indicated as the partner of co-operation the partner from the EU or EFTA.

Izmed virov informacij, ki so jih podjetja uporabila pri razvoju novih proizvodov ali postopkov, jih je največ (52 %) uporabilo vire znotraj podjetja, pomemben vir teh informacij so bili stranke ali kupci (40 %), sledile so jim konkurenca ter informacije, ki so jih pridobili na sejmih ali razstavah. Najmanj informacij so podjetja pridobila od raziskovalnih inštitutov in univerz.

Inovativna podjetja smo tudi vprašali, ali so pri svoji inovacijski dejavnosti naletela na kake ovire.

52 % podjetij je odgovorilo, da so jih pri inovacijski dejavnosti ovirali resni problemi, 34 % je imelo močno zamujeno inovacijsko dejavnost, v 13 % podjetij pa je bila inovacijska dejavnost preprečena, še preden se je sploh začela. Z ovirami pri inovacijski dejavnosti so se srečevala predvsem mala podjetja (60 %). Med velikimi podjetji je bilo takih 34 % podjetij.

Podjetja, ki v letih 2001–2002 niso bila inovativna, smo vprašali po vzrokih, da se v tem obdobju niso ukvarjala z inovacijsko dejavnostjo. Kot možni odgovori so bili navedeni naslednji :

- Inovacije niso bile potrebne zaradi prejšnjih inovacij.
- Inovacije niso bile potrebne zaradi razmer na trgu.
- Obstajali so dejavniki, ki so preprečevali inovacije.

Največ podjetij, 59 %, je poročalo, da so obstajali dejavniki, ki so preprečevali inoviranje, 34 % podjetij je odgovorilo, da inoviranje ni bilo potrebno zaradi razmer na trgu, 14 % podjetij pa je odgovorilo, da to ni bilo potrebno zaradi prejšnjih inovacij.

Podjetja so ocenila stopnjo pomembnosti posameznega oviralnega dejavnika (od nepomembnega do zelo pomembnega):

- preveliko ekonomsko tveganje
- previšoki inovacijski stroški
- pomanjkanje finančnih virov
- organizacijska togost znotraj podjetja
- pomanjkanje kvalificiranega kadra
- pomanjkanje informacij o tehnologiji
- pomanjkanje informacij o trgih
- nefleksibilnost regulativ ali standardov
- pomanjkanje odziva strank.

Tako inovativna kot neinovativna podjetja so kot zelo pomemben oviralni dejavnik za svojo inovacijsko dejavnost navedla pomanjkanje finančnih virov in previšoke inovacijske stroške. Inoviranje v podjetjih je prav tako oviralo pomanjkanje kvalificiranega kadra in preveliko ekonomsko tveganje.

Na eno izmed vprašanj v vprašalniku o inovacijski dejavnosti so poročevalske enote odgovarjale o učinkih, ki so bili doseženi z inovacijsko dejavnostjo, in sicer tako, da so že ponujene odgovore ocenile glede na stopnjo pomembnosti (ni bil pomemben, malo pomemben, srednje pomemben in zelo pomemben). Možnih je bilo več odgovorov, to pomeni, da so podjetja lahko navedla več učinkov inovacijske dejavnosti z različnimi stopnjami pomembnosti.

Med zelo pomembnimi učinki inovacijske dejavnosti je 46 % podjetij navedlo izboljšanje kakovosti izdelkov ali storitev, naslednja pomembnejša učinka sta bila povečana ponudba izdelkov in storitev, in sicer za 43 % podjetij, ter zadostitev predpisom in standardom – 30 % podjetij.

Podjetjem smo zastavili vprašanje, ali so se v opazovanem obdobju ukvarjala s katero izmed naslednjih aktivnosti:

- STRATEGIJA – uvajanje novih ali bistveno izboljšanih korporacijskih strategij
- VODENJE – uvajanje naprednih tehnik vodenja
- ORGANIZACIJA – uvajanje novih ali bistveno izboljšanih organizacijskih struktur

Among the sources of information that enterprises used when developing a new product or process most of them (52%) used sources within the enterprise; an important source of information was information from customers and clients (40%). Then ranked the competitors and information gained at the fairs and exhibitions. The enterprises gained the least information from institutions and universities.

Innovation active enterprises were asked whether they faced any hampering factors when innovating.

52% of enterprises answered that innovation activity was burdened with serious problems, 34% of enterprises had seriously delayed innovation activity, while innovation activity was prevented before having started in 13% of enterprises. Most enterprises with hampered innovation activity were among small enterprises (60%), while among large enterprises this share was 34%.

The enterprises that were in the observation period non-innovative were asked what the reasons for being non-innovative were. The following reasons were stated:

- Innovations were not needed due to the prior innovations.
- Innovations were not needed due to market conditions.
- There were factors impeding innovations.

Most enterprises (59%) stated that there were factors impeding innovations, 34% of enterprises stated that innovations were not needed due to market conditions and 14% stated that there was no need to innovate due to prior innovations.

Enterprises estimated the degree of importance (from not relevant to highly important) of each hampering factor:

- Excessive perceived economic risks
- Innovation costs too high
- Lack of appropriate sources of finance
- Organisational rigidities within the enterprise
- Lack of qualified personnel
- Lack of information on technology
- Lack of information on markets
- Insufficient flexibility of regulations or standards
- Lack of customer responsiveness to new goods or services

Innovative and non-innovative enterprises graded as a highly important hampering factor the lack of appropriate sources of finance and that the innovation costs were too high. Hampering factors were also lack of qualified personnel and excessive perceived economic risks.

In the questionnaire respondents were asked to classify the effects on innovation activity as regards the degree of impact (high impact, medium, low impact, not relevant). Multiple answers were possible, which means that respondents indicated more effects of innovation activity with different degrees of importance.

Among highly important effects, 46% of enterprises indicated improved quality in goods or services, followed by the increased range of goods or services (43%) and compliance with regulations or standards (30%).

Enterprises were asked if they had undertaken any of the following activities in the observation period:

- STRATEGY - implementation of new or significantly changed corporate strategies
- MANAGEMENT - implementation of advanced management techniques within the enterprise
- ORGANISATION - implementation of new or significantly changed organizational structures



- MARKETING – bistvena sprememba marketinških konceptov ali strategij v podjetju
- ESTETSKE SPREMEMBE – bistvene spremembe estetskega izgleda ali dizajna ali druge subjektivne spremembe pri vsaj enim izmed izdelkov.

Med inovacijsko aktivnimi podjetji je 62 % podjetij uvedlo organizacijske spremembe, 58 % podjetij je uvedlo estetske spremembe in 55 % podjetij je uvedlo spremembe pri vodenju.

Med neinovativnimi podjetji jih je največ, 32 %, uvedlo organizacijske spremembe, 27 % teh podjetij je uvedlo spremembe v vodenju in 23 % teh podjetij je uvedlo spremembe v marketingu.

MEDNARODNI PODATKI¹⁾

Raziskovanje inovacijske dejavnosti so izvedle tudi druge evropske države; podatki, ki jih objavlja Eurostat, so rezultat raziskovanja CIS 3 (Community Innovation Survey) za obdobje 1998–2000, ki so ga izvedle naslednje države: Belgija, Danska, Nemčija, Grčija, Španija, Francija, Irska, Italija, Luksemburg, Nizozemska, Avstrija, Portugalska, Finska, Švedska, Velika Britanija, Islandija, Norveška.

- MARKETING - significant change of enterprise's marketing concepts/strategies
- AESTHETIC CHANGE - significant changes in the aesthetic appearance or design or other subjective changes in at least one of their products

Among innovation active enterprises, 62% of enterprises implemented organizational changes, 58% of them implemented an aesthetic change and 55% of enterprises implemented changes in management.

Among non-innovative enterprises, most enterprises (32%) implemented organizational changes, 27% of enterprises implemented management techniques and 23% changed enterprise's marketing concepts.

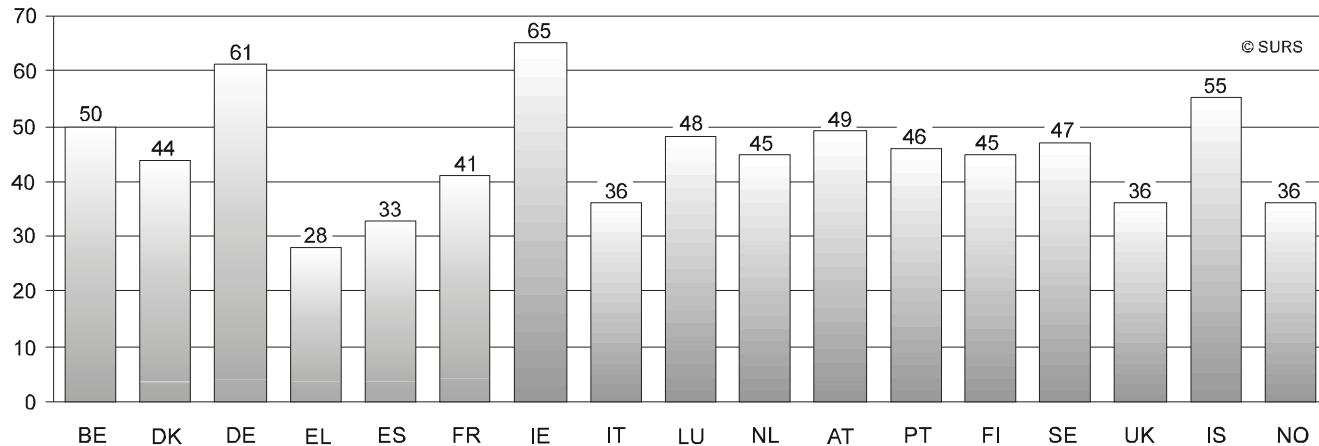
INTERNATIONAL DATA¹⁾

The survey on innovation activity was also carried out in other European countries; data that were published by Eurostat are results of the survey CIS 3 (Community Innovation Survey) for the 1998-2000 period, which was carried out in the following countries: Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, The Netherlands, Austria, Finland, Sweden, the United Kingdom, Island and Norway.

1) Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004
Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Slika 12: Delež inovacijsko aktivnih podjetij, EU (15), Islandija in Norveška, 1998–2000
Chart 12: Share of innovation active enterprises, EU (15), Iceland and Norway, 1998-2000

Delež (%) / Share (%)



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004.
Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Po podatkih raziskovanja CIS 3 se je z inovacijsko dejavnostjo ukvarjalo 44 % podjetij, samo inovacijo proizvoda je uvedlo 10 % podjetij, samo inovacijo postopka je uvedlo 7 % podjetij, inovacijo izdelka in postopka pa 23 % podjetij.

Največ inovacijsko aktivnih podjetij je bilo v predelovalnih dejavnostih, in sicer 47 %.

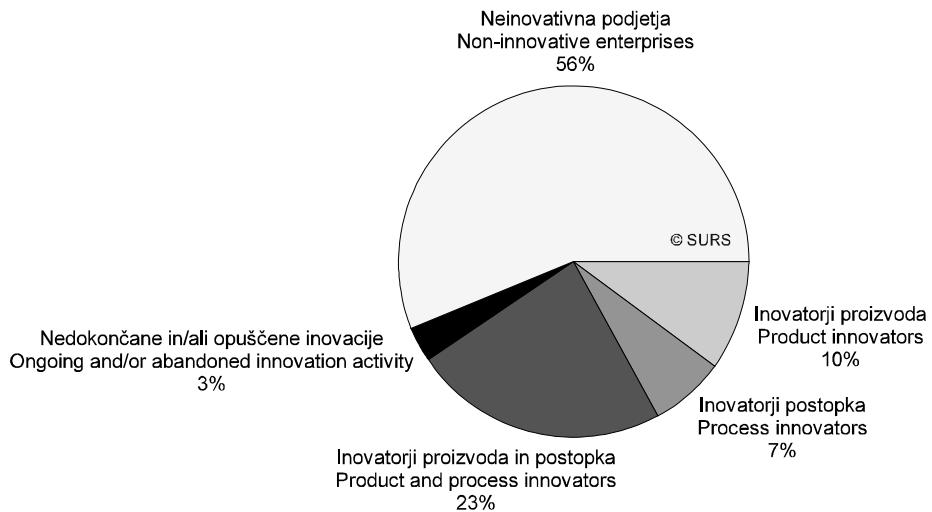
Med vsemi podjetji, ki so se v opazovanem obdobju ukvarjala z inovacijsko dejavnostjo, je bilo 29 % takih, ki razvoja novih izdelkov ali storitev ali postopkov niso dokončala. Neuspešnih je bilo 6 % podjetij; ta podjetja so inovacijsko dejavnost opustila. 3 % podjetij pa začete inovacije niso dokončali ali so jo opustili ali oboje.

According to the results of the survey CIS 3, 44% of enterprises were innovation active. 10% of enterprises introduced only product innovation, 7% of enterprises introduced only process innovation, while product and process innovation was introduced by 23% of enterprises.

Most of the innovation active enterprises were in manufacturing where the share of those enterprises was 47%.

Among all enterprises that had innovation activity in the observation period, 29% of enterprises had not yet completed innovation. 6% of enterprises were not successful and had abandoned innovation activity. Only ongoing and/or unfinished innovation activity was recorded in 3% of the enterprises.

Slika 13: Struktura podjetij glede na inovacijsko dejavnost, EU (15), Islandija in Norveška, 1998–2000
 Chart 13: Structure of enterprises according to innovation activity, EU (15), Iceland and Norway, 1998-2000

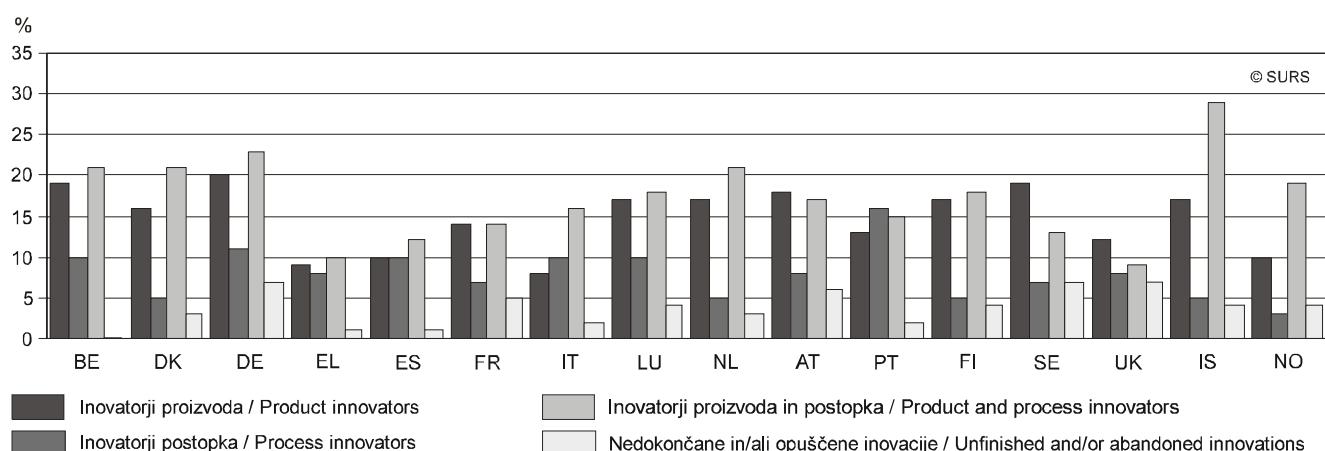


Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004
 Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Struktura inovacijsko aktivnih podjetij (to je podjetij, ki so uvedla inovacijo ali ki so se z inovacijsko dejavnostjo ukvarjala, vendar inovacije niso dokončala ali so jo opustila) po državah kaže, da so podjetja v večini držav uvela tako inovacijo proizvoda kot tudi inovacijo postopka. Med temi je na prvem mestu Islandija; v tej državi je namreč 29 % podjetij v opazovanem obdobju uvelo inovacijo izdelka in inovacijo postopka. Islandiji sledi Nemčija, kjer je oba tipa inovacij uvelo 23 % podjetij. Delež podjetij, ki v opazovanem obdobju niso dokončala inovacije ali so jo opustila, je bil po posameznih državah večinoma majhen, v Belgiji je delež le-teh znašal celo 0 %.

The structure of innovation active enterprises (enterprises that introduced innovation or had not yet completed and/or abandoned innovation activity) by countries shows that enterprises in most of the countries introduced both product and process innovation. At the top of the countries is Iceland where 29% of enterprises introduced both product and process innovation. Iceland is followed by Germany where both types of innovation were introduced by 23% of enterprises. Countries mostly had a small share of enterprises that had in the observation period unfinished and/or abandoned innovation activity. In Belgium the share of those enterprises was 0%.

Slika 14: Struktura inovacijsko aktivnih podjetij, EU (15), Islandija in Norveška, 1998–2000³⁾
 Chart 14: Structure of innovation active enterprises, EU (15), Iceland and Norway, 1998-2000³⁾



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004
 Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

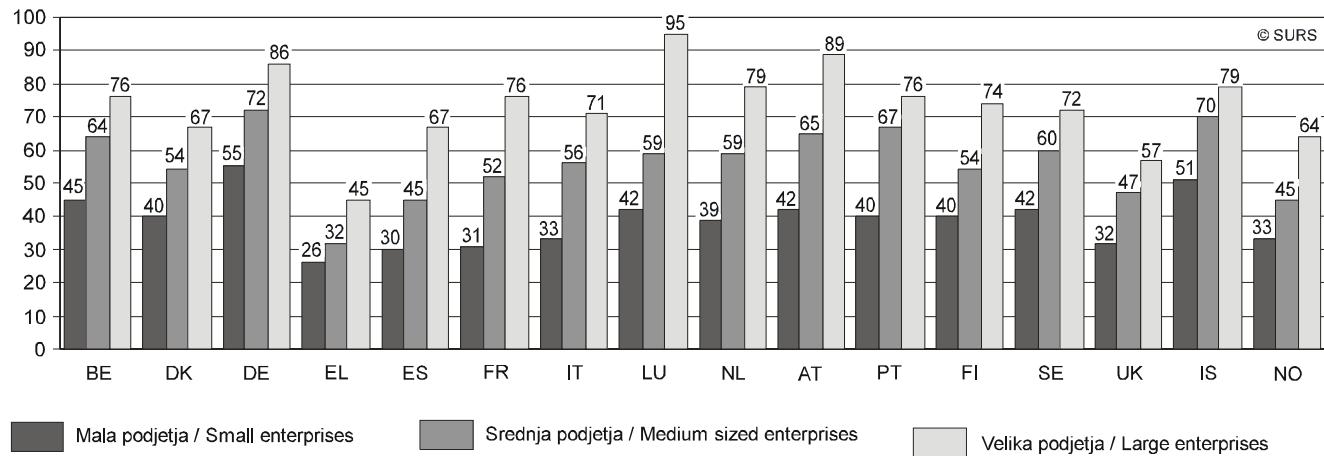
3) Podatki za Irsko niso na voljo.
 Data for Ireland are not available.

Največ inovacijsko aktivnih podjetij je bilo med velikimi podjetji, najmanj so se z inovacijsko dejavnostjo ukvarjala mala podjetja. Največji delež inovacijsko aktivnih podjetij med velikimi podjetji je imel Luksemburg, kar 95 %. Največji delež inovacijsko aktivnih podjetij med malimi podjetji pa je imela Nemčija – 55 %.

Most innovation active enterprises were among large enterprises and the smallest number of enterprises with innovation activity was among small enterprises. A high share of innovation active enterprises among large enterprises was recorded in Luxembourg, where 95% of large enterprises were innovation active. The highest share of innovation activity among small enterprises was in Germany (55%).

Slika 15: Inovacijsko aktivna podjetja glede na velikost podjetja, EU (15), Islandija in Norveška, 1998–2000
Chart 15: Innovation active enterprises by size of enterprise, EU (15), Iceland and Norway, 1998-2000

Delež (%) / Share (%)



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

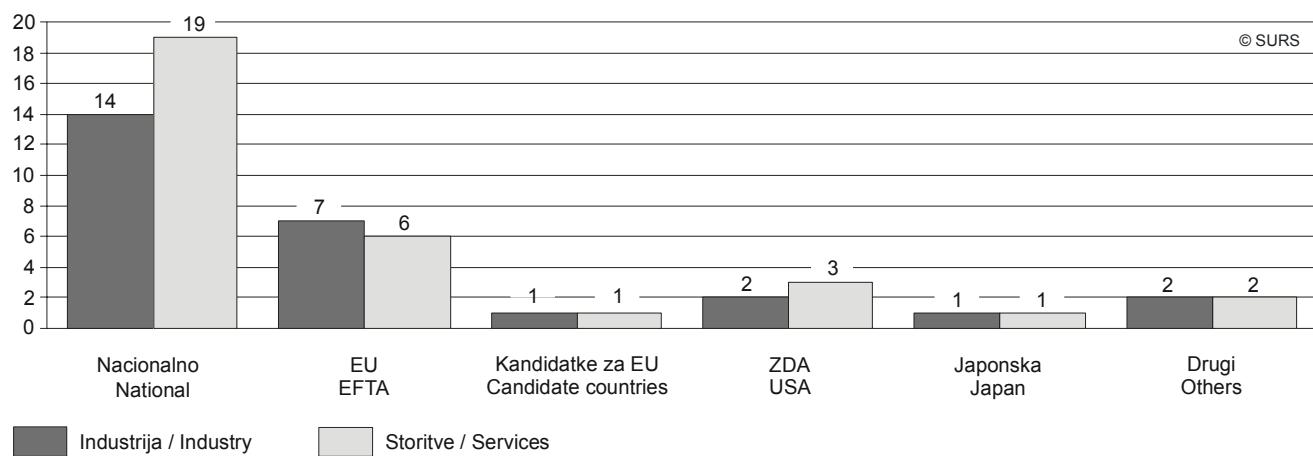
Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Med podjetji, ki so pri razvoju novih izdelkov (stорitev) ali postopkov inovacijsko sodelovala (takih podjetij je bilo 19 %); je bilo največ takih, ki so sodelovala s partnerjem iz lastne države, 16 %; 6 % jih je sodelovalo s partnerjem iz držav članic EU ali EFTA.

Among enterprises that developed new goods or services in co-operation (there was 19% of such enterprises), the most of them co-operated with a partner from their own country (16%), 6% of enterprises co-operated with a partner from Candidate Countries (Candidate Countries are countries that joined the EU in May 2004 and Bulgaria, Romania and Turkey) or EFTA.

Slika 16: Delež podjetij, ki so inovacijsko sodelovala, EU (15), Islandija in Norveška, 1998–2000⁴⁾
Chart 16 Share of enterprises with innovation co-operation, EU (15), Iceland and Norway, 1998-2000⁴⁾

Delež (%) / Share (%)



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

4) Kandidatke za EU so države, ki so vstopile v EU maja 2004 ter Bolgarija, Romunija in Turčija.
Candidate countries are countries that joined EU in May 2004 and Bulgaria, Romania and Turkey.

Glede na partnerja, s katerim so podjetja sodelovala, je največ podjetij sodelovalo z dobavitelji (12%) ter s strankami ali kupci (12%). Rezultati raziskovanja CIS 3 so pokazali, da so podjetja, ki se uvrščajo v storitvene dejavnosti, pri inoviranju več sodelovala z drugimi kot podjetja iz predelovalnih dejavnosti.

Kot viri informacij, ki so jih podjetja navedla kot zelo pomembne za inoviranje, so bili največkrat uporabljeni viri znotraj podjetja (38%), pa tudi stranke ali kupci (28%) ter dobavitelji opreme (20%).

Razlogov, zakaj se podjetja niso ukvarjala z inovacijsko dejavnostjo, je več. Prvi bi bil lahko ta, da v podjetjih niso čutili potrebe po inoviraju, saj so morda bili inovacijsko dejavnji v preteklem obdobju. Lahko pa jih pri inoviranju ovirajo različni dejavniki.

Med podjetji, ki so navedla, da je bila njihova inovacijska dejavnost ovirana, jih je največ navedlo, da je bila inovacijska dejavnost močno zamujena (37%), 22 % podjetij pa je navedlo, da je bila njihova inovacijska dejavnost preprečena, preden se je sploh začela in da je bila ovirana z drugimi resnimi problemi.

Podjetja so izmed ponujenih dejavnikov, ki so ovirali inovacijsko dejavnost (preveliko ekonomsko tveganje, previšoki inovacijski stroški, pomanjkanje ustreznih finančnih virov, organizacijska togost znotraj podjetja, pomanjkanje kvalificiranega kadra, pomanjkanje informacij o tehnologiji, pomanjkanje informacij o trgih, predpisi in standardi, pomanjkanje odziva strank na nove izdelke in storitve) največkrat kot zelo pomemben dejavnik navedla previsoke inovacijske stroške in pomanjkanje finančnih virov.

As regards the partner of co-operation, most of the enterprises co-operated with suppliers (12%) and with clients and customers (12%). Results of CIS 3 indicated that enterprises in the service sector co-operated with others more frequently than enterprises in manufacturing.

Among the sources of information that the enterprises indicated as highly important for innovating, most of the enterprises used sources within the enterprise (38%), information from the clients and customers (28%) and suppliers of equipment (20%).

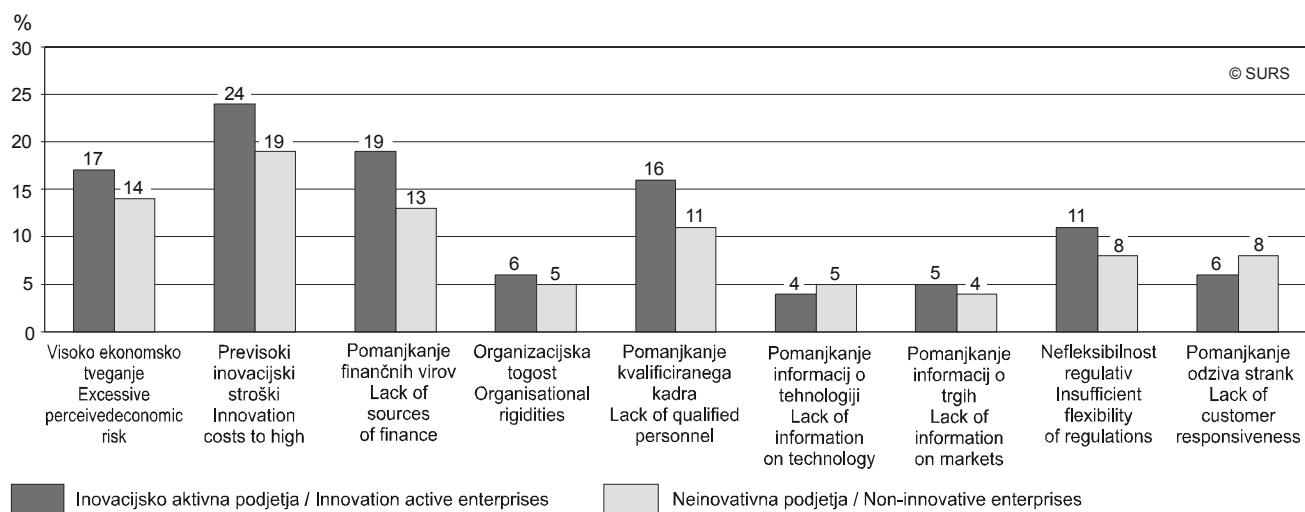
There are several reasons for non-innovators not to innovate. Firstly, enterprises might not have had the need to innovate because they had been innovative in the past. Another reason might be that enterprises were hampered by different factors.

Among enterprises that stated that their innovation activity had been hampered, most of them had seriously delayed innovation activity (37%); in 22% of enterprises innovation activity was prevented before being started and it was burdened with other serious problems.

Among factors that hampered innovation activity (excessive perceived economic risks, innovation costs too high, lack of appropriate sources of finance, organizational rigidities within the enterprises, lack of qualified personnel, lack of information on technology, lack of information on markets, insufficient flexibility of regulations or standards, lack of customer responsiveness to new goods or services), in most cases enterprises stated that highly important factors were too high innovation costs and lack of appropriate sources of finance.

Slika 17: Podjetja z ovirano inovacijsko dejavnostjo, EU (15), Islandija in Norveška, 1998–2000

Chart 17: Enterprises with hampered innovation activity, EU (15), Iceland and Norway, 1998-2000



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004
 Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Med zelo pomembnimi učinki inovacijske dejavnosti je 40 % podjetij navedlo izboljšanje kakovosti izdelkov ali storitev, 29 % pa povečano ponudbo izdelkov ali storitev.

Raziskovanje CIS 3 je poleg vprašanj o inovacijah izdelka in postopka zastavljalo tudi vprašanja o drugih strateških in organizacijskih

Among highly important effects of innovation activity, 40% of enterprises stated improved quality in goods or services.

In the survey enterprises were asked, besides questions on product and process innovation, about other important strategic and organisational

spremembah, ki so močno povezane z inovacijsko dejavnostjo.

V državah EU je med inovacijsko aktivnimi podjetji 53 % podjetij uvelo organizacijske spremembe, 46 % podjetij je uvelo nove ali bistveno izboljšane strategije, v 42 % podjetij pa je uvelo estetske spremembe pri vsaj enem izmed izdelkov.

Med neinovativnimi podjetji je največ podjetij uvelo organizacijske spremembe (23 %), pomembno za podjetja je bilo uvajanje novih strategij in estetske spremembe izdelkov (17 %).

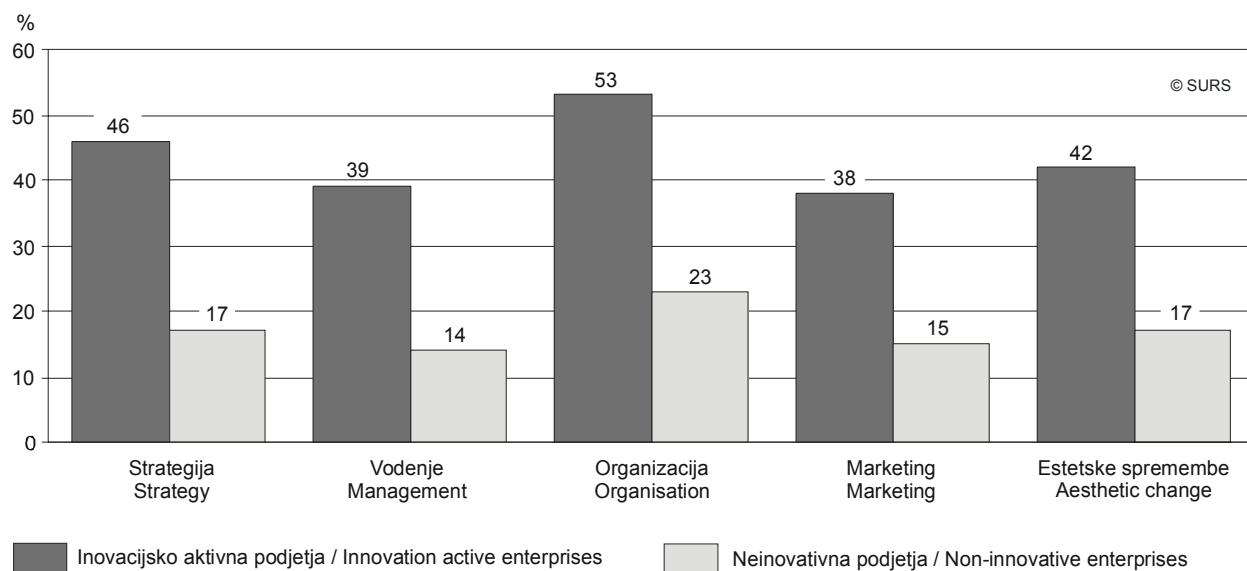
changes which are strongly connected to innovation activity.

In EU countries 53% of innovation active enterprises implemented organizational changes, 46% of enterprises implemented new or significantly changed corporate strategies and in 42% of enterprises significant changes in the aesthetic appearance of at least one of the products were introduced.

Among non-innovative enterprises, most of the enterprises introduced organizational changes (23%), whereas implementation of new strategies and aesthetic changes of products (17%) were also important for the enterprises.

Slika 18: Delež podjetij s pomembnimi strateškimi in organizacijskimi spremembami, EU (15), Islandija in Norveška, 1998–2000

Chart 18: Share of enterprises introducing important strategic and organizational changes, EU (15), Iceland and Norway, 1998-2000



Vir: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004
Source: Innovation in Europe, Results for the EU, Iceland and Norway, Eurostat, Luxembourg, 2004

Sestavila / Prepared by: Nina Frkovič

Izdaja, založba in tisk Statistični urad Republike Slovenije, Ljubljana, Vožarski pot 12 - **Uporaba in objava podatkov dovoljena le z navedbo vira** - Odgovarja generalna direktorica mag. Irena Križman - Urednica zbirke Statistične informacije Marina Urbas - Slovensko besedilo jezikovno uredil Ivanka Zobec - Angleško besedilo jezikovno uredil Boris Panič - Naklada 110 izvodov - ISSN zbirke Statistične informacije 1408-192X - ISSN podzbirke Raziskovanje in razvoj, znanost in tehnologija 1580-2450 - Informacije daje Informacijsko središče, tel.: (01) 241 51 04 - El. pošta: info.stat@gov.si - http://www.stat.si.

Edited, published and printed by the Statistical Office of the Republic of Slovenia, Ljubljana, Vožarski pot 12 - **These data can be used provided the source is acknowledged** - Director-General Irena Križman - Rapid Reports editor Marina Urbas - Slovene language editor Ivanka Zobec - English language editor Boris Panič - Total print run 110 copies - ISSN of Rapid Reports 1408-192X - ISSN of subcollection Research & development, science & technology 1580-2450 - Information is given by the Information Centre of the Statistical Office of the Republic of Slovenia, tel.: +386 1 241 51 04 - E-mail: info.stat@gov.si - http://www.stat.si.