## The Community Innovation Survey 2014

THE HARMONISED SURVEY QUESTIONNAIRE, 23 July 2014

## **The Community Innovation Survey 2014**

**Version 13 of 23 July 2014** 

This survey collects information on your enterprise's **innovations and innovation activities** during the three years 2012 to 2014 inclusive.

An **innovation** is the introduction of a new or significantly improved product, process, organisational method, or marketing method by your enterprise.

An innovation must have characteristics or intended uses that are new or which provide a significant improvement over what was previously used or sold by your enterprise. However, an innovation can fail or take time to prove itself.

An innovation need only be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises or organisations.

**Innovation activities** include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

Sections 2 to 7 cover product and process innovations. Organisational and marketing innovations are covered in sections 8 and 9.

Please complete all questions, unless otherwise instructed.

Person we should	contact if there are any queries regarding the form:
Name:	
Job title:	
Organisation:	
Phone:	
E-mail:	

1. General	nformati	ion about	the enterp	orise				
Name of ente	prise							
Address <sup>1</sup>								
Postal code			Main activit	ty²				
defined enterpri	ses under c	common owner	ship. Each er	nterprise in the		different i	markets, a	o or more legally s with national or )
Yes	□ In wh	nich country is	the head of	fice of your gr	oup located? 3			
No								
enterpris			-		I subsidiaries or	parent ent	erprises.	
						Y	es I	No
Merge wi	h or take o	over another e	enterprise or	a part of anotl	ner enterprise		]	
Sell, clos	e or contrac	ct out some o	f the tasks o	r functions of	our enterprise		]	
1.3 In which			ts did you	ır enterpris	e sell goods	s and/or	service	es during the
						Yes	No	•
A. Local / region	al within [yo	our country]						
B. National (oth	er regions o	f [your country]	])					
C. Other Europe	an Union o	r associated co	ountries* 4					
D. All other cou	ntries							
Which of these of turnover du letter)								
*: Include the follow	ing European	Union (EU) and a	associated count	tries: Albania, Aus	ria, Belgium, Bosni	a and Herze	jovina, Bulg	aria, Croatia, Cyprus,

<sup>\*:</sup> Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

<sup>&</sup>lt;sup>1</sup> NUTS 2 code

<sup>&</sup>lt;sup>2</sup> NACE 4 digit code

<sup>&</sup>lt;sup>3</sup> Country code according to ISO standard

<sup>&</sup>lt;sup>4</sup> Each NSO needs to remove their own country from the list of European countries.

## 2. Product innovation (good or service)

A product innovation is the market introduction of a **new** or **significantly** improved **good or service** with respect to its capabilities, user friendliness, components or sub-systems.

- Product innovations (new or improved) must be new to your enterprise, but they do not need to be new to your market.
- Product innovations could have been originally developed by your enterprise or by other enterprises or organisations.

A **good** is usually a tangible object such as a smartphone, furniture, or packaged software, but downloadable software, music and film are also goods. A **service** is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.

## 2.1 During the three years 2012 to 2014, did your enterprise introduce:

	Yes	No
Goods innovations: New or significantly improved goods (exclude the simple resale of new		
goods and changes of a solely aesthetic nature)		
Service innovations: New or significantly improved services		

# If no to all options, go to section 3 Otherwise, go to question 2.2

## 2.2 Who developed these product innovations?

	Tick	all that apply
	Goods innovations	Service innovations
Your enterprise by itself		
Your enterprise together with other enterprises or organisations*		
Your enterprise by adapting or modifying goods or services originally developed by other enterprises or organisations*		
Other enterprises or organisations		

<sup>\*:</sup> Include independent enterprises plus other parts of your enterprise group (subsidiaries, sister enterprises, head office, etc.).

Organisations include universities, research institutes, non-profits, etc.

2.3 Were any 2014:	of your produ	uct innovations	(goods or ser	vices)	during th	e three	years 2012 to	0
2014.						Yes	No	
New to your market?	•	ntroduced a new or si ur competitors (it may	• • •	•	•			
Only new to your enterprise?		ntroduced a new or si from your competitor		ed produ	ct that was			
Using the def	initions above	, please give the	percent of yo	ur tota	l turnover	<sup>5</sup> in 2014	4 from:	
New or signification your market	ntly improved prod	ucts introduced during	g the three years 2	2012 to 2	014 that wer	e <b>new to</b>	<b>\</b>	
New or signification new to your entitle	• •	ucts introduced durinç	g the three years 2	2012 to 2	014 that wer	e only		
		only marginally mos purchased from other		hree yea	rs 2012 to 20	114	%	
				Total	turnover in	2014	1 0 0 %	
		vledge, were <u>any</u>	of your produ	uct inn	ovations o	during th	he three year	S
2012 to 2014:					(Please ticl	k one opti	ion in every row	<b>/</b> )
				Yes	No D	on't know	ı	
A first in [your cou	untry]							
A first in Europe*								
A world first								
Czech Republic, Der Luxembourg, FYR M	nmark, Estonia, Finlar	J) and associated countriently, France, Germany, Gratenegro, the Netherlands dom.6	eece, Hungary, Icelai	nd, Italy,	Ireland, Kosovo	, Latvia, Lie	chtenstein, Lithuania	a,
	If	no world-first in Otherwise,	novation, go t go to questio		ion 3,			
introduced	•	total turnover in 2 and 2014? (The property)				-		
	F	WTURN						
0% to les	ss than 1%							
1% to les	ss than 5%							
5% to les	ss than 10%							
10% to le	ess than 25%							
25% or r	nore							
Don't kn	ow							

 $<sup>^{5}</sup>$  For Credit institutions: Interests receivable and similar income, for insurance services: Gross premiums written  $^{6}$  Each NSO needs to remove their own country from the list of European countries.

## 3. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or supporting activity.

- Process innovations must be new to your enterprise, but they do not need to be new to your market.
- The innovation could have been originally developed by your enterprise or by other enterprises or organisations.
- Exclude purely organisational innovations these are covered in section 8.

3.1 During the three years 2012 to 2014, did your enterprise introduce	e:		
	Yes	s No	
New or significantly improved methods of manufacturing for producing goods or services  New or significantly improved logistics, delivery or distribution methods for your inputs, go	ods 🗆	_	
or services  New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing	ce 🗆		
If no to all options, go to section 4			
Otherwise, go to question 3.2			
3.2 Who developed these process innovations?			
	Tick	all that a	apply
Your enterprise by itself			
Your enterprise together with other enterprises or organisations*			
Your enterprise by adapting or modifying processes originally developed by other enterprises or organisations*			
Other enterprises or organisations*			
*: Include independent enterprises plus other parts of your enterprise group (subsidiaries, Organisations include universities, research institutes, non-profits, etc.	sister ente	rprises,	head office, etc).
3.3 Were any of your process innovations introduced during the thr to your market?	ee years	s 2012	to 2014 new
	Yes		
	No		
	Don't know	N	

## 4. Ongoing or abandoned innovation activities for product or process innovations

Innovation activities include the acquisition of machinery, equipment, buildings, software, and licenses; engineering and development work, feasibility studies, design, training, R&D and marketing when they are specifically undertaken to develop and/or implement a product or process innovation. This includes also all types of R&D consisting of research and development activities to create new knowledge or solve scientific or technical problems.

4.1 During the three years 2012 to 2014, did your enterprise have any innovation activities that did not result in a product or process innovation because the activities were:

	Yes	No	
Abandoned or suspended before completion			
Still ongoing at the end of the 2014			

If no to all options in questions 2.1, 3.1 and 4.1 go to section 8

Otherwise, go to section 5

## 5. Activities and expenditures for product and process innovations

5.1 During the three years 2012 to 2014, did your enterprise engage in the following innovation activities:

activities:		Yes	No
In-house R&D	Research and development activities undertaken by your enterprise to create new knowledge or to solve scientific or technical problems (include software development in-house that meets this requirement)  If yes, did your enterprise perform R&D during the three years 2012 to 2014:		
	Continuously (your enterprise had permanent R&D staff in-house)  Occasionally (as needed only)		
External R&D	Your enterprise contracted-out R&D to other enterprises (include enterprises in your own group) or to public or private research organisations		
Acquisition of machinery, equipment, software & buildings	Acquisition of advanced machinery, equipment, software and buildings to be used for new or significantly improved products or processes		
Acquisition of existing knowledge from other enterprises or organisations	Acquisition of existing know-how, copyrighted works, patented and non-patented inventions, etc. from other enterprises or organisations for the development of new or significantly improved products and processes		
Training for innovative activities	In-house or contracted out training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes		
Market introduction of innovations	In-house or contracted out activities for the market introduction of your new or significantly improved goods or services, including market research and launch advertising		
Design	In-house or contracted out activities to alter the shape, appearance or usability of goods or services		
Other	Other in-house or contracted out activities to implement new or significantly improved products and processes such as feasibility studies, testing, tooling up, industrial engineering, etc.		

5.2 How much did your enterprise spend on each of the following innovation activities in <u>2014</u> only? Innovation activities are defined in question 5.1 above. Include current expenditures (including labour costs, contracted-out activities, and other related costs) as well as capital expenditures on buildings and equipment.<sup>7</sup>

Please fill in '0' if your enterprise had no expenditures for an activity in 2014

Please estimate if you lack precise accounting data

**In-house R&D** (Include current expenditures including labour costs and capital expenditures on buildings and equipment specifically for R&D)

**External R&D** 

Acquisition of machinery, equipment, software & buildings (Exclude expenditures on these items that are for R&D)

Acquisition of existing knowledge from other enterprises or organisations

All other innovation activities including design, training, marketing, and other relevant activities

Total of the above innovation activities

## 6. Public financial support for innovation activities

**6.1** During the three years 2012 to 2014, did your enterprise receive any public financial support for innovation activities from the following levels of government? Include financial support via tax credits or deductions, grants, subsidised loans, and loan guarantees. Exclude R&D and other innovation activities conducted entirely for the public sector\* under contract.

	Yes	No
Local or regional authorities		
Central government (including central government agencies or ministries)		
The European Union (EU)		
If yes, did your enterprise participate in the EU 7 <sup>th</sup> Framework Programme for Research and Technical Development or in the Horizon 2020 Programme for Research and Innovation?		

<sup>\*</sup>The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc.

<sup>&</sup>lt;sup>7</sup> Give expenditure data in 000's of national currency units to eight digits.

#### 7. Co-operation for product and process innovation activities 7.1 During the three years 2012 to 2014, did your enterprise co-operate on any of your innovation activities with other enterprises or organisations? Innovation co-operation is active participation with other enterprises or organisations on innovation activities. Both partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation. ☐ (Go to section 8) Yes ☐ (Go to question 7.2) 7.2 Please indicate the type of innovation co-operation partner by location (Tick all that apply) Type of co-operation partner Cyprus Other United China or All other Europe\*\* **States** India countries A. Other enterprises within your enterprise group B. Suppliers of equipment, materials, components, or software П П П **C**. Clients or customers from the private sector **D.** Clients or customers from the public sector\* E. Competitors or other enterprises in your sector F. Consultants or commercial labs **G**. Universities or other higher education institutes H. Government, public or private research institutes П П 7.3 Which type of co-operation partner was the most valuable for your enterprise's innovation activities? (Give corresponding letter) \*The public sector includes government owned organisations such as local, regional and national administrations and agencies, schools, hospitals, and government providers of services such as security, transport, housing, energy, etc. \*\*: Include the following European Union (EU) and associated countries: Albania, Austria, Belgium, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Kosovo, Latvia, Liechtenstein, Lithuania, Luxembourg, FYR Macedonia, Malta, Montenegro, the Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom. 8. Organisational Innovation An organisational innovation is a new organisational method in your enterprise's business practices (including knowledge management), workplace organisation or external relations that has not been previously used by your enterprise. It must be the result of strategic decisions taken by management. Exclude mergers or acquisitions, even if for the first time. 8.1 During the three years 2012 to 2014, did your enterprise introduce: Yes No New business practices for organising procedures (i.e. first time use of supply chain management,

business re-engineering, knowledge management, lean production, quality management, etc.)

New methods of **organising work responsibilities and decision making** (i.e. first time use of a

departments, education/training systems, etc.)

new system of employee responsibilities, team work, decentralisation, integration or de-integration of

New methods of organising external relations with other enterprises or public organisations (i.e.

first time use of alliances, partnerships, outsourcing or sub-contracting, etc.)

## 9. Marketing innovation

A marketing innovation is the implementation of a new marketing concept or strategy that differs significantly from your enterprise's existing marketing methods and which has not been used before.

- It requires significant changes in product design or packaging, product placement, product promotion or pricing.
- Exclude seasonal, regular and other routine changes in marketing methods.

	9.1 During the three	vears 2012 to 2014, d	did your enterp	rise introduce
--	----------------------	-----------------------	-----------------	----------------

- · · · · · · · · · · · · · · · · · · ·		Yes	No
Significant changes to the aesthetic <b>design</b> or <b>packaging</b> of a good or ser that alter the product's functional or user characteristics – these are product			
New media or techniques for <b>product promotion</b> (i.e. first time use of a new brand image, introduction of loyalty cards, etc.)	ew advertising media, a		
New methods for <b>product placement</b> or sales channels (i.e. first time use distribution licenses, direct selling, exclusive retailing, new concepts for product placement or sales channels (i.e. first time use distribution licenses, direct selling, exclusive retailing, new concepts for product placement or sales channels (i.e. first time use distribution licenses, direct selling, exclusive retailing, new concepts for product placement or sales channels (i.e. first time use distribution licenses, direct selling, exclusive retailing, new concepts for product placement or sales channels (i.e. first time use distribution licenses, direct selling, exclusive retailing, new concepts for product placement or sales channels (i.e. first time use distribution licenses).			
New methods of <b>pricing</b> goods or services (i.e. first time use of variable pridiscount systems, etc.)	icing by demand,		
10. Public sector contracts and innovation			
10.1 During the three years 2012 to 2014, did your enter goods or services for:	prise have any con	tracts	to provide
	Yes	No	
Domestic public sector organisations*			
Foreign public sector organisations*			
*The public sector includes government owned organisations such as local, regional and nati government providers of services such as security, transport, housing, energy, etc.	ional administrations and agend	cies, scho	ols, hospitals, and
If no to both options, go to se	ction 11		
Otherwise go to question	10.2		
10.2 Did your enterprise undertake any innovation activity goods or services to a public sector organisation? organisational and marketing innovations)	<del>-</del>		-
No ☐ ( <b>Go to section 11)</b> Yes ☐			
If yes, did one or more of your public sector contracts:			
	(If your enterprise had contracts, tick all that		1
Specifically require innovation as part of the contract			
Not require innovation as part of the contract			

11. Intellectual property rights and licensing		
11.1 During the three years 2012 to 2014, did your enterprise:		
	Yes	No
Apply for a patent		
Apply for a European utility model		
Register an industrial design right		
Register a trademark		
11.2 During the three years 2012 to 2014, did your enterprise:		
	Yes	No
License out or sell a patent, industrial design right, copyright or trademark to another enterprise, university or research institute		
License in* or buy a patent, industrial design right, copyright or trademark owned		

\*Exclude the acquisition of licenses for common software for desktop and laptop computers such as operating systems, word processing, spreadsheets, etc.)

by another enterprise, university or research institute

Only answer section 12 if your enterprise did <u>not</u> introduce an innovation and did not have ongoing/abandoned innovation activities during the three years 2012 to 2014 ('no' to all options in questions 2.1, 3.1, 4.1, 8.1 and 9.1).

Otherwise go to section 13.

12. Non-innovators
--------------------

12. 11011 1111101441010						
12.1 Which of the following best describes why during the three years from 2012 to 2014:	y your ente	rprise h	nad no ii	nnova	tion activities	5
	Tick one onl	V				
No compelling reason to innovate			o 12.2			
Considered innovating, but barriers to innovation too large		Go	to 12.3			
12.2 How important were the following reasons for activities during 2012 to 2014?	or your ente	rprise ı	not to co	nduct	innovation	
activities during 2012 to 2014 :	activities during 2012 to 2014?			ee of importance		
		High	Medium	Low	Not important	
Low demand for innovations in your market						
No need to innovate due to previous innovations						
No need to innovate due to very little competition in your enter	prise's market					
Lack of good ideas for innovations						
Go to ques	tion 13.4					
12.3 How important to your enterprise were the f	ollowing baı	riers to	innovat	ion du	uring 2012 to	
			Degree of importance			
		High	Medium	Low	Not important	
Lack of internal finance for innovation						
Lack of credit or private equity						
Lack of skilled employees within your enterprise						
Difficulties in obtaining government grants or subsidies for inno	ovation					
Lack of collaboration partners						
Uncertain market demand for your ideas for innovations						
Too much competition in your market						

Go to question 13.4

## 13. Innovations with environmental benefits

An innovation with environmental benefits is a new or significantly improved product (good or service), process, organisational method or marketing method that creates environmental benefits compared to alternatives.

- The environmental benefits can be the primary objective of the innovation or a by-product of other objectives.
- The environmental benefits of an innovation can occur during the production of a good or service, or during its consumption or use by the end user of a product. The end user can be an individual, another enterprise, the Government, etc.

13.1 Du	uring the three years 2012 to 2014, did your enterprise introduce a product	(good or
se	rvice), process, organisational or marketing innovation with any of the following	owing
en	vironmental benefits?	

environmental benefits?	V	NI.	
	Yes	No	
Environmental benefits obtained <u>within your enterprise</u>			
Reduced material or water use per unit of output			
Reduced energy use or CO <sub>2</sub> 'footprint' (reduce total CO <sub>2</sub> production)			
Reduced air, water, noise or soil pollution			
Replaced a share of materials with less polluting or hazardous substitutes			
Replaced a share of fossil energy with renewable energy sources			
Recycled waste, water, or materials for own use or sale			
Environmental benefits obtained during the consumption or use of	a good or se	rvice <u>by the eı</u>	nd user
Reduced energy use or CO <sub>2</sub> 'footprint'			
Reduced air, water, noise or soil pollution			
Facilitated recycling of product after use			
Extended product life through longer-lasting, more durable products			
If no to all options, go to question 1 Otherwise go to question 13.2	3.4		
13.2 Were any of these environmental benefits due to the follow innovations?	ing types o	f your enter	prise's
	Yes	No	
Product (goods or services) innovations			
Process innovations			
Organisational innovations			
Marketing innovations			

# 13.3 During 2012 to 2014, how important were the following factors in driving your enterprise's decisions to introduce innovations with environmental benefits?

		Degree of importance			
		High	Medium	Low	Not relevant
Existing enviro	nmental regulations				
Existing environ	nmental taxes, charges or fees				
Environmental regulations or taxes expected in the future					
Government grants, subsidies or other financial incentives for environmental innovations					
Current or expected market demand for environmental innovations					
Improving your	enterprise's reputation				
Voluntary actio sector	ns or initiatives for environmental good practice within your				
High cost of en	ergy, water or materials				
Need to meet requirements for public procurement contracts					
enterprise environme No	r enterprise have procedures in place to regularity senvironmental impacts? (For example preparintal performance goals, ISO 14001 certification, IS	ng env	ironmenta	al audi	ts, setting
Yes	☐  If your enterprise had any procedures in place, when w	vere they	l		
implemented? (Tick all that apply)					
		(TICK a	_	')	
	Some procedures were implemented before 2012				
	Some procedures were implemented or significantly change between 2012 and 2014	ed			

14. Basic economic infor	mation on your enterp	rise	
14.1 What was your enterposales of goods and services (	orise's total turnover for include all taxes except VAT9)	2012 and 2014? <sup>8</sup>	Turnover is defined as the market
	201	2	2014
14.2 What was the percent	of your total turnover fro	om sales to clients	outside your country?
	Please insert '0' if yo	our enterprise had r	no sales outside your country
	20	12	2014
		%	<u> </u>
14.3 14.3 What was your er	terprise's average numb	per of employees i	n 2012 and 2014? <sup>10</sup>
	2012	201	14
14.4 Approximately what podegree? <sup>11</sup>	ercent of your enterprise	e's employees in 2	014 had a tertiary
0%			
1% to less than 5%			
5% to less than 10%			
10% to less than 25%			
25% to less than 50%			
50% to less than 75%			
75% or more			

 <sup>&</sup>lt;sup>8</sup> Give turnover in '000 of national currency units. Leave space for up to nine digits.
 <sup>9</sup> For Credit institutions: Interests receivable and similar income; for Insurance services give gross premiums written.
 <sup>10</sup> If administrative data are used and the annual average is not available, give results for the end of each year. Leave space for up to six digits for question 14.3.
 <sup>11</sup> ISCED 2011 levels 5 to 8

## Examples of Innovations

#### Introduction

This annex provides a list of examples for each type of innovation. These lists are intended as illustrations and should not by any means be considered exhaustive. They are intended to give survey practitioners a better understanding of each innovation type, but they are not designed to be shown to enterprises as examples of innovations. There are two reasons for this. First, their inclusion might bias firms into excluding innovations that are not on the list. Second, the list is dated, with many innovations impossible to foresee. It is also worthwhile emphasising that two central criteria for innovations are that they represent significant changes and that they are new to the firm. Thus, a change can be an innovation for one firm and not for another. Often, more detailed descriptions are needed to determine whether a change is to be classified as an innovation and of which type.

## **Examples of innovations**

**A product innovation** is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. This includes significant improvements in technical specifications, components and materials, incorporated software, user friendliness or other functional characteristics.

#### Product innovations exclude the following:

- Minor changes or improvements.
- Routine upgrades.
- Regular seasonal changes (such as for clothing lines).
- Customisation for a single client that does not include significantly different attributes compared to products made for other clients.

- Design changes that do not alter the function, intended use or technical characteristics of a good or service.
- The simple resale of new goods and services purchased from other enterprises.

#### **Examples of product innovations:**

#### Goods

- Replacing inputs with materials with improved characteristics (breathable textiles, light but strong composites, environmentally friendly plastics, etc.).
- Global positioning systems (GPS) in transport equipment.
- Cameras in mobile telephones.
- Fastening systems in clothing.
- Household appliances that incorporate software that improves user friendliness or convenience, such as toasters that automatically shut off when the bread is toasted.
- Anti-fraud software that profiles and tracks individual financial transactions.
- Inbuilt wireless networking in laptops.
- Food products with new functional characteristics (margarine that reduces blood cholesterol levels, yoghurts produced using new types of cultures, etc.).
- Products with significantly reduced energy consumption (energy efficient refrigerators, etc.).
- Significant changes in products to meet environmental standards.
- Programmable radiators or thermostats.
- IP (Internet protocol) telephones.
- New medicine with significantly improved effects.

#### Services

- New services that significantly improve customers' access to goods or services, such as home pick-up and drop-off service for rental cars.
- DVD subscription service where for a monthly fee customers can order a
  predefined number of DVDs via the Internet with mail delivery to the home,
  with return via a pre-addressed envelope.
- Video on demand via broadband Internet.
- Internet services such as banking, or bill payment systems.

- New forms of warranty, such as an extended warranty on new or used goods, or bundling warranties with other services, such as with credit cards, bank accounts or customer loyalty cards.
- New types of loans, for example variable rate loans with a fixed rate ceiling.
- Creation of Web sites on the Internet, where new services such as product information and various support functions can be offered to clients free of charge.
- The introduction of smart cards and multipurpose plastic cards.
- A new, self-service bank office.
- Offering customers a new "supply control system" which allows clients to check that deliveries from contractors meet specifications.

A **process innovation** is the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software.

#### Process innovations exclude the following:

- Minor changes or improvements.
- An increase in production or service capabilities through the addition of manufacturing or logistical systems which are very similar to those already in use.

#### **Examples of process innovations:**

#### **Production**

- Installation of new or improved manufacturing technology, such as automation equipment or real-time sensors that can adjust processes.
- New equipment required for new or improved products.
- Laser cutting tools.
- Automated packaging.
- Computer-assisted product development.
- Digitisation of printing processes.
- Computerised equipment for quality control of production.
- Improved testing equipment for monitoring production.

#### **Delivery and operations**

- Portable scanners/computers for registering goods and inventory.
- Introduction of bar coding or passive radio frequency identification (RFID) chips to track materials through the supply chain.
- GPS tracking systems for transport equipment.
- Introduction of software to identify optimal delivery routes.

- New or improved software or routines for purchasing, accounting or maintenance systems.
- Introduction of electronic clearing systems.
- Introduction of automated voice-response system.
- Introduction of electronic ticketing system.
- New software tools designed to improve supply flows.
- New or significantly improved computer networks.

A **marketing innovation** is the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing.

Marketing innovations exclude the following:

- Changes in product design or packaging, product placement, product promotion or pricing that are based on marketing methods that have previously been used by the enterprise.
- Seasonal, regular and other routine changes in marketing instruments.
- The use of already applied marketing methods to target a new geographical market or a new market segment (e.q. socio-demographic group of clients).

#### **Examples of marketing innovations:**

 Marketing innovations can refer to any marketing method (product design/ packaging, placement, pricing, promotion) as long as it is used for the first time by the firm.

### Design and packaging

- Implementation of a significant change in the design of a furniture line to give it a new look and widen its appeal.
- Implementation of a fundamentally new design of bottles for a body lotion intended to give the product a distinctively exclusive look.

#### Placement (sales channels)

- First-time introduction of product licensing.
- First-time introduction of direct selling or exclusive retailing.
- Implementation of a new concept for product presentation such as sales rooms for furniture that are designed according to themes, allowing customers to view products in fully decorated rooms.
- Implementation of a personalised information system, e.g. obtained from loyalty cards, to tailor the presentation of products to the specific needs of individual customers.

#### **Pricing**

- Introduction of a new method that allows customers to choose desired product specifications on the firm's Web site and then see the price for the specified product.
- First-time use of a method for varying the price of a good or service according to demand for it.
- First-time use of in-store special offers that are only accessible to holders of the store's credit card or reward card.

#### **Promotion**

- First-time use of trademarks.
- First-time use of product placement in movies or television programmes.
- Introduction of a fundamentally new brand symbol intended to position the firm's product on a new market.
- First-time use of product seeding through opinion leaders, celebrities or particular groups that are fashion or product trend setters.

An **organisational innovation** is the implementation of a new organisational method in the firm's business practices, workplace organisation or external relations.

Organisational innovations exclude the following:

- Changes in business practices, workplace organisation or external relations that are based on organisational methods already in use in the firm
- Changes in management strategy, unless accompanied by the introduction of a new organisational method
- Mergers with, and the acquisition of other firms

#### **Examples of organisational innovations:**

 Organisational innovations can refer to any organisational method in a firm's business practices, workplace organisation or external relations as long as it is used for the first time by the firm.

### **Business practices**

- Establishing of a new database of best practices, lessons and other knowledge so that they are more easily accessible to others.
- First-time introduction of an integrated monitoring system for firm activities (production, finance, strategy, marketing).
- First-time introduction of management systems for general production or supply operations, such as supply chain management, business reengineering, lean production, quality management system.

 First-time introduction of training programmes to create efficient and functional teams that integrate staff from different backgrounds or areas of responsibility.

#### Workplace organisation

- First-time implementation of decentralised job responsibility for the firm's workers, such as giving substantially more control and responsibility over work processes to production, distribution or sales staff.
- First-time establishment of formal or informal work teams to improve the access and sharing of knowledge from different departments, such as marketing, research and production.
- First-time implementation of an anonymous incident reporting system to encourage the reporting of errors or hazards in order to identify their causes and reduce their frequency.

#### **External relations**

- First-time introduction of quality control standards for suppliers and subcontractors.
- First-time use of outsourcing of research or production.
- First-time entering into research collaboration with universities or other research organisations.