

The Community Innovation Survey 2006 (CIS 2006)

THE HARMONISED SURVEY QUESTIONNAIRE

The Community Innovation Survey 2006

(Final Version: August 30 2006)

This survey collects information about product and process innovation as well as organisational and marketing innovation during the three-year period 2004 to 2006 inclusive. Most questions cover new or significantly improved goods or services or the implementation of new or significantly improved processes, logistics or distribution methods. Organisational and marketing innovations are only covered in section 10. In order to be able to compare enterprises with and without innovation activities, we request all enterprises to respond to **all** questions, unless otherwise instructed.

Person we should contact if there are any queries regarding the form:

Name: _____

Job title: _____

Organisation: _____

Phone: _____

Fax: _____

E-mail: _____

General information about the enterprise

Name of enterprise _____

Address _____

Postal code _____ Main activity _____

1.1 Is your enterprise part of an enterprise group? (A group consists of two or more legally defined enterprises under common ownership. Each enterprise in the group may serve different markets, as with national or regional subsidiaries, or serve different product markets. The head office is also part of an enterprise group.)

Yes ☐ In which country is the head office of your group located? _____
No ☐

If your enterprise is part of an enterprise group, please answer all further questions only for your enterprise in Cyprus.

Do not include results for subsidiaries or parent enterprises outside of Cyprus.

1.2 In which geographic markets did your enterprise sell goods or services during the three years 2004 to 2006?

	Yes	No
Local / regional within Cyprus	<input type="checkbox"/>	<input type="checkbox"/>
National	<input type="checkbox"/>	<input type="checkbox"/>
Other European Union (EU) countries, EFTA, or EU candidate countries*	<input type="checkbox"/>	<input type="checkbox"/>
All other countries	<input type="checkbox"/>	<input type="checkbox"/>

*: Include the following countries: Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

2. Product (good or service) innovation

A product innovation is the market introduction of a **new** good or service or a **significantly** improved good or service with respect to its capabilities, such as improved software, user friendliness, components or sub-systems. The innovation (new or improved) must be new to your enterprise, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your enterprise or by other enterprises.

2.1 During the three years 2004 to 2006, did your enterprise introduce:

	Yes	No
New or significantly improved goods. (Exclude the simple resale of new goods purchased from other enterprises and changes of a solely aesthetic nature.)	<input type="checkbox"/>	<input type="checkbox"/>
New or significantly improved services.	<input type="checkbox"/>	<input type="checkbox"/>

If no to both options, go to question 3.1, otherwise:

2.2 Who developed these product innovations?

Select the most appropriate option only

Mainly your enterprise or enterprise group	<input type="checkbox"/>
Your enterprise together with other enterprises or institutions	<input type="checkbox"/>
Mainly other enterprises or institutions	<input type="checkbox"/>

2.3 Were any of your goods and service innovations during the three years 2004 to 2006:

	Yes	No
New to your market? Your enterprise introduced a new or significantly improved good or service onto your market before your competitors (it may have already been available in other markets)	<input type="checkbox"/>	<input type="checkbox"/>
Only new to your firm? Your enterprise introduced a new or significantly improved good or service that was already available from your competitors in your market	<input type="checkbox"/>	<input type="checkbox"/>

Using the definitions above, please give the percentage of your total turnover¹ in 2006 from:

Goods and service innovations introduced during 2004 to 2006 that were new to your market	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
Goods and service innovations introduced during 2004 to 2006 that were only new to your firm	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
Goods and services that were unchanged or only marginally modified during 2004 to 2006 (include the resale of new goods or services purchased from other enterprises)	<input type="text"/>	<input type="text"/>	<input type="text"/>	%
Total turnover in 2006	1	0	0	%

¹ For Credit institutions: Interests receivable and similar income, for insurance services: Gross premiums written

3. Process innovation

A process innovation is the implementation of a **new** or **significantly** improved production process, distribution method, or support activity for your goods or services. The innovation (new or improved) must be new to your enterprise, but it does not need to be new to your sector or market. It does not matter if the innovation was originally developed by your enterprise or by other enterprises. Exclude purely organisational innovations.

3.1 During the three years 2004 to 2006, did your enterprise introduce:

	Yes	No
New or significantly improved methods of manufacturing or producing goods or services	<input type="checkbox"/>	<input type="checkbox"/>
New or significantly improved logistics, delivery or distribution methods for your inputs, goods or services	<input type="checkbox"/>	<input type="checkbox"/>
New or significantly improved supporting activities for your processes, such as maintenance systems or operations for purchasing, accounting, or computing	<input type="checkbox"/>	<input type="checkbox"/>

If no to all options, go to section 4, otherwise:

3.2 Who developed these process innovations?

Select the most appropriate option only

- | | |
|---|--------------------------|
| Mainly your enterprise or enterprise group | <input type="checkbox"/> |
| Your enterprise together with other enterprises or institutions | <input type="checkbox"/> |
| Mainly other enterprises or institutions | <input type="checkbox"/> |

4. Ongoing or abandoned innovation activities

Innovation activities include the acquisition of machinery, equipment, software, and licenses; engineering and development work, training, marketing and R&D² when they are *specifically* undertaken to develop and/or implement a product or process innovation.

4.1 Did your enterprise have any innovation activities to develop product or process innovations that were abandoned during 2004 to 2006 or still ongoing by the end of 2006?

- Yes ☐
No ☐

If your enterprise had no product or process innovations or innovation activity during 2004 to 2006 (no to all options in questions 2.1, 3.1, and 4.1), go to question 8.2.

Otherwise, go to question 5.1

² Include basic R&D as an innovation activity even if not specifically related to a product and/or process innovation

5. Innovation activities and expenditures

5.1 During the three years 2004 to 2006, did your enterprise engage in the following innovation activities:

		Yes	No
Intramural (in-house) R&D	Creative work undertaken within your enterprise to increase the stock of knowledge and its use to devise new and improved products and processes (including software development)	<input type="checkbox"/>	<input type="checkbox"/>
	If yes, did your firm perform R&D during 2004 to 2006:		
	Continuously?	<input type="checkbox"/>	
	Occasionally?	<input type="checkbox"/>	
Extramural R&D	Same activities as above, but performed by other companies (including other enterprises within your group) or by public or private research organisations and purchased by your enterprise	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of machinery, equipment and software	Acquisition of advanced machinery, equipment and computer hardware or software to produce new or significantly improved products and processes	<input type="checkbox"/>	<input type="checkbox"/>
Acquisition of other external knowledge	Purchase or licensing of patents and non-patented inventions, know-how, and other types of knowledge from other enterprises or organisations	<input type="checkbox"/>	<input type="checkbox"/>
Training	Internal or external training for your personnel specifically for the development and/or introduction of new or significantly improved products and processes	<input type="checkbox"/>	<input type="checkbox"/>
Market introduction of innovations	Activities for the market introduction of your new or significantly improved goods and services, including market research and launch advertising	<input type="checkbox"/>	<input type="checkbox"/>
Other preparations	Procedures and technical preparations to implement new or significantly improved products and processes that are not covered elsewhere.	<input type="checkbox"/>	<input type="checkbox"/>

5.2 Please estimate the amount of expenditure for each of the following four innovation activities in 2006 only. (Include personnel and related costs)

If your enterprise had no expenditures in 2006 please fill-in 0

Intramural (in-house) R&D (Include capital expenditures on buildings and equipment specifically for R&D)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.000
Acquisition of R&D (extramural R&D)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.000
Acquisition of machinery, equipment and software (Exclude expenditures on equipment for R&D)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.000
Acquisition of other external knowledge	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.000
Total of these four innovation expenditure categories	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	.000

5.3 During the three years 2004 to 2006, 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 research and other innovation activities conducted entirely for the public sector under contract.

	Yes	No
Local or regional authorities	<input type="checkbox"/>	<input type="checkbox"/>
Central government (including central government agencies or ministries)	<input type="checkbox"/>	<input type="checkbox"/>
The European Union (EU)	<input type="checkbox"/>	<input type="checkbox"/>
If yes, did your firm participate in the EU 6 th Framework Programme for Research and Technical Development (2003-2006)	<input type="checkbox"/>	<input type="checkbox"/>

6. Sources of information and co-operation for innovation activities

6.1 During the three years 2004 to 2006, how important to your enterprise's innovation activities were each of the following information sources? Please identify information sources that provided information for new innovation projects or contributed to the completion of existing innovation projects.

		Degree of importance			
		Tick 'not used' if no information was obtained from a source.			
	Information source	High	Medium	Low	Not used
Internal	Within your enterprise or enterprise group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market sources	Suppliers of equipment, materials, components, or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Clients or customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Competitors or other enterprises in your sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Consultants, commercial labs, or private R&D institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Institutional sources	Universities or other higher education institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Government or public research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other sources	Conferences, trade fairs, exhibitions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Scientific journals and trade/technical publications	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Professional and industry associations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

6.2 During the three years 2004 to 2006, did your enterprise co-operate on any of your innovation activities with other enterprises or institutions? Innovation co-operation is active participation with other enterprises or non-commercial institutions on innovation activities. Both partners do not need to commercially benefit. Exclude pure contracting out of work with no active co-operation.

- Yes ☐
 No ☐ (Please go to question 7.1)

6.3 Please indicate the type of co-operation partner and location (Tick all that apply)

Type of co-operation partner	[Your country]	Other Europe*	United States	All other countries
A. Other enterprises within your enterprise group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Suppliers of equipment, materials, components, or software	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Clients or customers	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Competitors or other enterprises in your sector	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Consultants, commercial labs, or private R&D institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Universities or other higher education institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Government or public research institutes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

*: Include the following European Union (EU) countries, EFTA, or EU candidate countries: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Italy, Ireland, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovenia, Slovakia, Switzerland, Turkey, Spain, Sweden and the United Kingdom.

6.4 Which type of co-operation partner did you find the most valuable for your enterprise's innovation activities? (Give corresponding letter) _____

7. Effects of innovation during 2004-2006

7.1 How important were each of the following effects of your product (good or service) and process innovations introduced during the three years 2004 to 2006?

		Degree of observed effect			
		High	Medium	Low	Not relevant
Product oriented effects	Increased range of goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Entered new markets or increased market share	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Improved quality of goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Process oriented effects	Improved flexibility of production or service provision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Increased capacity of production or service provision	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reduced labour costs per unit output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Reduced materials and energy per unit output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other effects	Reduced environmental impacts or improved health and safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Met regulatory requirements	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

8. Factors hampering innovation activities

8.1 During the three years 2004 to 2006 were any of your innovation activities or projects:

	Yes	No
Abandoned in the concept stage	<input type="checkbox"/>	<input type="checkbox"/>
Abandoned after the activity or project was begun	<input type="checkbox"/>	<input type="checkbox"/>
Seriously delayed	<input type="checkbox"/>	<input type="checkbox"/>

TO BE ANSWERED BY ALL ENTERPRISES:

8.2 During the three years 2004 to 2006, how important were the following factors for hampering your innovation activities or projects or influencing a decision not to innovate?

		Degree of importance			
		High	Medium	Low	Factor not experienced
Cost factors	Lack of funds within your enterprise or group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lack of finance from sources outside your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Innovation costs too high	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Knowledge factors	Lack of qualified personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lack of information on technology	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Lack of information on markets	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Difficulty in finding cooperation partners for innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Market factors	Market dominated by established enterprises	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Uncertain demand for innovative goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reasons not to innovate	No need due to prior innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	No need because of no demand for innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

9. Intellectual property rights

9.1 During the three years 2004 to 2006, did your enterprise:

	Yes	No
Apply for a patent	<input type="checkbox"/>	<input type="checkbox"/>
Register an industrial design	<input type="checkbox"/>	<input type="checkbox"/>
Register a trademark	<input type="checkbox"/>	<input type="checkbox"/>
Claim copyright	<input type="checkbox"/>	<input type="checkbox"/>

10. Organisational and marketing innovations

An organisational innovation is the implementation of new or significant changes in firm structure or management methods that are intended to improve your firm's use of knowledge, the quality of your goods and services, or the efficiency of work flows. A marketing innovation is the implementation of new or significantly improved designs or sales methods to increase the appeal of your goods and services or to enter new markets.

10.1 During the three years 2004 to 2006, did your enterprise introduce:

		Yes	No
Organisational innovations	New business practices for organising work or procedures (<i>i.e. supply chain management, business re-engineering, lean production, quality management, education/training systems, etc</i>)	<input type="checkbox"/>	<input type="checkbox"/>
	New knowledge management systems to better use or exchange information, knowledge and skills within your enterprise or to collect and interpret information from outside your enterprise	<input type="checkbox"/>	<input type="checkbox"/>
	New methods of workplace organisation for distributing responsibilities and decision making (<i>i.e. first use of a new system of employee responsibilities, team work, decentralisation, integration or de-integration of departments, etc</i>)	<input type="checkbox"/>	<input type="checkbox"/>
	New methods of organising external relations with other firms or public institutions (<i>i.e. first use of alliances, partnerships, outsourcing or sub-contracting, etc.</i>)	<input type="checkbox"/>	<input type="checkbox"/>
Marketing innovations	Significant changes to the design or packaging of a good or service (Exclude routine/ seasonal changes such as clothing fashions)	<input type="checkbox"/>	<input type="checkbox"/>
	New or significantly changed sales or distribution methods, such as internet sales, franchising, direct sales or distribution licenses.	<input type="checkbox"/>	<input type="checkbox"/>

If no organisational innovations (no to all first four options), go to question 10.5

Otherwise go to question 10.2

10.2 Who developed these organisational innovations?

Select the most appropriate option only

Mainly your enterprise or enterprise group	<input type="checkbox"/>
Both your enterprise and other enterprises or institutions (including consultants)	<input type="checkbox"/>
Mainly other enterprises or institutions (including consultants)	<input type="checkbox"/>

10.3. Were any of these organisational innovations integrated with or linked to other innovations that were introduced during the three years 2004 to 2006?

Tick 'not relevant' if your enterprise did not introduce one of the following

	Yes	No	Not relevant
Product innovations for a new or improved good	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Product innovations for a new or improved service	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Process innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

10.4 How important were each of the following effects of your enterprise's organisational innovations introduced during the three years 2004 to 2006?

If your enterprise introduced several organisational innovations, make an overall evaluation

	High	Medium	Low	Not relevant
Reduced time to respond to customer or supplier needs	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved ability to develop new products or processes	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved quality of your goods or services	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Reduced costs per unit output	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved employee satisfaction and/or lower employee turnover	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved communication or information sharing within your enterprise	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Improved communication or information sharing with other enterprises or institutions	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please describe) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Go to question 11.1

10.5 How important were the following factors for not introducing an organisational innovation between 2004 and 2006?

	High	Medium	Low	Not relevant
Organisational innovations were introduced before 2004 and no need for further change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of funds to implement an organisational innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lack of knowledgeable or qualified staff to implement an organisational innovation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Resistance of staff or management to organisational change	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No need for organisational change at this time	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other reason (please describe) _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

11. Basic economic information on your enterprise

11.1 What was your enterprise's total turnover for 2004 and 2006?

Turnover is defined as the market sales of goods and services (Include all taxes except VAT³).

	2004						2006							
In Cyprus Pounds							.000							.000

11.2 What was your enterprise's total number of employees in 2004 and 2006?⁴

2004

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2006

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COMMENTS - REMARKS	

This image shows a full page of white paper with horizontal dotted lines. The lines are evenly spaced and run across the width of the page, providing a guide for handwriting practice. There are no margins, text, or other markings on the page.

³ For Credit institutions: Interests receivable and similar income; for Insurance services: Gross premiums written

⁴ Annual average. If not available, give the number of employees at the end of each year. Give figures to six digits.

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.

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- 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.

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- 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.

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- 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.g.* 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 re-engineering, lean production, quality management system.

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- 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.