INNOVATION MANAGEMENT

5. INNOVATION

Ing. Omar Ameir, Ph.D.

- Innovation = practical application of invention.
- Examples of innovation are found in new:
 - managerial practices;
 - financial instruments;
 - marketing communication channels;
 - equipment, devices, machines and their use;
 - methods of logistics, etc.
- Distinguishing innovation:
 - degree of novelty;
 - area of solution.

The technical basis of the products is based on a similar principle.



The differentiating element is innovation (detailed unique technical solutions, processes, product design, etc.).



Innovation is an important aspect of firms' competitive advantage in national and international environments.



The growth of investment to create innovation and protect it.

 Distinguishing innovations according to the degree of novelty = orders of innovation:

Oth order - regeneration:

- Renewal of certain elements of the business in order to avoid degradation (degradation = natural direction in case of neglect of regeneration);
- the elements of the business and the relationships between them are unchanged;
- adapting the business to the external environment (without incorporating new knowledge and information - just a new way of incorporating it);
- example: control of a database system as a target product.

Distinguishing innovations according to the degree of novelty = orders of innovation:

1st order - intensity of ties:

- change in the relationships between the elements of the business;
- elements of the business are unchanged;
- adaptation of the business to the external environment (no involvement of new knowledge and information - only a new way of involving it);
- example: faster linking (response) between the different modules of the database.

Distinguishing innovations according to the degree of novelty = orders of innovation:

2nd order - quantity:

- renewal and change in the quantity of certain elements of the business;
- the quality of the elements of the business and the links between them is unchanged;
- example: increase in volume (space) capacity for the work (operations) of individual modules of the database.

3rd order - quality:

- change in the quality of certain elements of the business;
- the functions of the business elements are unchanged;
- example: retraining of employees, more efficient software for programming and managing the database system.

• Distinguishing innovations according to the degree of novelty = orders of innovation:

4th order - variant:

- change of functions of the elements of the business (change of the elements' properties caused by a change in their quantity and quality);
- new product solution (not a new product!!!);
- example: modified way of accessing the required information more efficiently (faster, easier) achieved information as a target product.

5th order - generation:

- a set of changes to all elements of a business;
- increase in the current level of product features;
- example: absolutely different way of accessing the required information- more efficient (more valuable, more significant) information as a target product.

• Distinguishing innovations according to the degree of novelty = orders of innovation:

6th order - concept:

- a new approach to product features;
- new technology = change in the functions of the elements, but also in the functions of the product;
- New solution of the product;
- example: new way of accessing information (existing database system replaced by a more advanced one) orientation towards new types of information.

7th – principle:

- new approach to business change in management and production structure (may impact on the external environment of the company);
- new product portfolio;
- example: orientation to a new business principle information replaced by a different product (see impact on the firm's environment).

- The indisputable importance of innovation
 legal protection.
- The protection of intellectual property rights takes the following four forms:
 - a) patent;
 - b) industrial design;
 - c) utility model;
 - d) trademark.
- Most protection of intellectual property rights is held by multinational corporations for the following two main reasons:
 - competitive pressures in the international environment;
 - the financial capacity of multinational corporations.

Thank You for Your Attention