The Impact of Innovation on Organizational Competitiveness

Author Details: Federico DE ANDREIS
Università degli Studi Giustino Fortunato-Viale Raffaele Delcogliano 12
82100 Benevento, Italy

Abstract
Conquering new markets and expanding competition areas make innovation the basis of development and dynamism in all economies. In this study we analyze how innovation, becoming part of the life of a business, will allow the companies to adjust and adapt their business model to the changing market, gaining knowledge and competitiveness. Once described what an innovation truly represents for the competitiveness, the research will explain where the innovation may develop and what is the process that transforms a simple idea into a product service or innovative mechanism to be placed on the market. Innovation could be considered as the only solution to overcome the economic crisis, and different types of innovation may represent choices and processes of business development.

Keywords: competitiveness, innovation, strategies, business environment, business performance.

Introduction
Innovation, in its classical meanings, represents an invention, i.e., the key to the competitiveness which is a project to develop a “vision” useful to improve and push forward the human civilization. It represents the practical application of an idea, not only technological but in every possible field. Commonly, however, the concept of innovation is connected to the technical progress and the economic conquests of the market, representing the boost of demand of consumer goods that can increase the growth of a market economy, namely an economic system in which economic decisions and the pricing of goods and services are guided solely by the aggregate interactions of a country's individual citizens and businesses. According to Schumpeter innovation represents “a creative response that occurs whenever an economy, a sector or a company, offer something different, something that is outside the existing practice (creative destruction)” (Schumpeter, 1917). For the economist, therefore, the innovations are the main determinant of industrial change; in fact, they are able to destroy the old context.

From invention to innovation
The transformation of an invention into innovation is not an automatic and simple process. Devising something completely innovative, different and dissimilar from common, requires a long process of analysis and study in order to convert that idea into something concrete. The times are getting longer because of the need to carry out studies, research, and economic investment for the design and development of the initial idea. Adapting something to new to the state of the social system in which a company operates, means, therefore, changing something composed of several elements that interact according to predetermined rules (whether it be the social system or the company itself) and such change consists in the introduction of one or more new elements.

To increase the companies’ competitiveness in the global market, it is necessary to organize the activities of the company and to include in the supportive processes, also the innovative process in order to let the company adapt to continuous fundamental changes to survival on the market (Porter, 1985). Innovation is, therefore, the only possibility to respond effectively in a global market strongly heterogeneous. Given its characteristics, in a similar market the ability to quickly copying determines the absence of R&D costs and less need for investment; moreover, the ability to produce with low labor costs means a lower cost of the product and an increased competitiveness; finally, the ability to communicate creates a fast potential of understanding markets and more market shares.

The innovation process starts with basic research, an activity based on the curiosity and the desire to discover new things. It has as its unique purpose the increasing of both theoretical and practical knowledge, exploring as much as possible what is unknown.

With the applied research instead, a process of transformation, of the invention into innovation, begins; in fact, through the production and the testing of new models and prototypes in the development phase, it is possible to seek practical solutions and application methods of the formulated theories.

The companies represent, therefore, a system that undergoes change and resents the influence of internal and external changes. Thus, the analysis of the system should, therefore, cover the context in which the company operates (external environment) and the internal environment.

The external environment represents the socio-political, cultural and religious environment but also the laws that regulate the activities and the target market; instead, the internal environment is the company internal staff, the customers, the partners, the shareholders, the suppliers, and the infrastructures.

The extreme mutability of these elements making up the external and internal environment requires constant and periodic analysis of the system in order to make corrections and to elaborate effective strategies.
A change of the strategies might be the only solution for the economic recovery of a company producing according to its objectives, without taking into account the mutations that can intervene during the production process; therefore a critical observation of the potential system changes became a crucial for the innovation success based on the time factor.

During the developing phase, models and prototypes are turned into goods or services to be offered on the market. This is usually the most expensive phase for the company, due to the huge investment that the production requires to realize goods or services, whether they are intended for commerce products or for a new technology of the production process. The observation and analysis must necessarily follow a strategy of action to produce operating results; through the monitoring of measures and indicators, it will be possible, in fact, to identify the most suitable strategy.

Furthermore, an enterprise is composed of several elements, and in order to search for a successful strategic plan, it is necessary to involve all company resources. Sharing with collaborators the goals and the strategies, i.e., making them protagonists of the process, motivates them to achieve the company objectives. Obviously, in order to make a strategy operative, instruments and knowledge are required. These elements involve the considerable expenditure of money and therefore require a judicious use; in fact, in order to limit the investment, it is necessary to identify the skills and instruments accurately.

The production transformed permanently in practice as developed in the previous phases; the invention realizes innovation ready to be placed on the market.

Then, during the commercialization or marketing phase, the company try to make a maximum profit from the innovation, placing on the market its product or service and attracting new potential customers. The company choice concern, in fact, the selling price of the good (or service), the types of customers and the types of promotion.

As stated, the innovation represents a source of wealth; the continuous and constant renewal allows the enterprises to develop new proposals for the market, anticipating customers’ needs and generating wealth. This even more in the era of globalization, in which the markets are huge, and ideas and solutions propagate at very high speeds.

From this perspective, also the size of the company innovating represent an important element. For example, there are different conditions, opportunities and problems for existing enterprises and for startups, for the kind of companies, in fact, the innovation is often the very reason for being; the entrepreneur has as its primary objective the finding of capital needed to support the development of a business idea, until its realization and presence on the market.

Instead, for existing enterprises, already launched on the market and structured, the problem of innovation is to stimulate the production of new ideas, their selection and in their effective introduction in the companies’ production process. To stimulate the creation of new ideas, the company must create an appropriate environment by involving the employees in all phases of the organization, making them feel involved and gratified by the contribution to the process of innovation. In addition, companies of this size can perceive the changes going on in the system, through constant monitoring of external and internal stimuli, such as customer demands, new technologies, proposals from suppliers, the behavior of competitors.

The selection of ideas, for this kind of enterprises, is usually developed in the research and development process, but having already a well defined and structured organization for the creation and sale of products, sometimes the “space” for innovation is limited. In this case, however, the company may decide not to support internally the idea but to become partners and funder of the individual who proposed it, with consequent benefits for all parties involved and with an general progress in the innovation system.

In the process of the industrialization of innovations, the enterprise should, therefore, create a climate of collaboration and interest able to generate further ideas and further innovation, trying to overcome the inertia and the obstacles.

**Types of technological innovation**

As stated also by the Oslo manual (The Organization for Economic Co-operation and Development's document "The Measurement of Scientific and Technological Activities, Proposed Guidelines for Collecting and Interpreting Technological Innovation Data", contains guidelines for collecting and using data on industrial innovation), innovation changes depending on its field of application, on its impact on the corporate organization and on its scope and times of production times, and it is possible to analyze different types of innovation.

*Product innovation* represents the placement on the market of a new good or service, or a good or service essentially improved in its characteristics for the intended uses. The improvements may include one or more of the different aspects of the product, as the functional characteristics, the software or the material components.

*Process innovation* means the implementation of the production or distribution methods (new or considerably improved), including significant changes in technology, in equipment and/or software. *Marketing innovation* is pursuing the objective of responding to the customers’ needs, gaining new markets and making profits for the company through the use of a new method of marketing that significantly modifies the packaging of products, their design, their market positioning, and their price and their promotion.

*Organizational innovation* consists in the introduction of a new organizational method, never used before, in the company business practices, in the workplace, in the organization or in the external relations, aiming to optimize the...
company performance through reduced administrative costs, increasing employee satisfaction and their consequent productivity, accessing external knowledge or reduced funding costs. Moreover, it is possible to analyze the innovation according to the degree of newness got. There are three categories of innovation: radical, incremental, and revolutionary.

**Radical innovation** involves the introduction of new products or services that may generate considerable changes so much as to be a promoter of creating significant new enterprises as well as new values.

**Incremental innovation**, instead, consists in the revision, refinement, simplification, consolidation, and improvement of products, processes, services production and distribution activities already existing. Finally, the **revolutionary innovation** is a rare event, which is raised by scientific or engineering intuitions able to achieve what most people did not consider possible.

Over the past decades, a definition of technology has arrived, not as simply as the result of different technical components but also of numerous processes of knowledge and application of the information acquired. Technology relates to machinery, tools, and knowledge contained in products and services (technology) and machinery, tools, and knowledge that connects inputs and outputs (process technology) (Rosenberg, 1972). Therefore the importance of allocating resources to the Research, responsible for studying and developing potential projects, and to the Development responsible for realizing those projects, transforming them into innovations process or product. Thus, the technological innovation represents the activity of enterprise and institutions aiming to introduce new products and new services, and new ways to manufacture them, deploy them and use them. It should not be forgotten that the enterprise is an entity that pursues as its primary purpose the making of a profit or loss; Therefore, the technological innovation means also for the enterprises the possibility to achieve their goals through gaining new segments of the market, by offering the more functional and innovative goods and services than those of the competitors; a company, in fact, will be able to enter new markets or expand its market share by attracting new customers with products of “greater value”, and thus to achieve higher earnings.

The phases of the activity of a company that wants to make technological innovation are the improvement of a technology and its change, the meeting the needs of the changing market, and the opening up of new markets. The process that can lead to the development of technological innovation can be of two types: **demand-pull or technology push**. For the **demand-pull model**, the innovation aims to meet the needs and unmet needs of end users based on preferences expressed by potential customers. The market, therefore, plays a decisive role defining the process of creating technological innovation, and it is up to the company to identify and implement these desires through the improvement of existing products or even by creating new ones. This model develops, thus, the process through stages of development, production, marketing, sales, and customer requirement analysis.

For the **technology push** model: instead, technological innovation arises from the research and development process that operates independently of the signals given by the market and by the consumers’ needs. In this case, therefore, the market will not influence the company promoting the search for appropriate solutions to the needs expressed, but rather the products, offered on the market and “imposed” to the consumer, will result from an autonomous R&D process.

The **technology push** model develops through stages of basic research (scientific discovery), applied research, development, marketing and sales, but in this case, the marketing will have to convince potential buyers of the utility of the product offered.

**Conclusion**

In business and in economics, innovation can become a catalyst for growth. With rapid advancements in transportation and communications over the past few decades, the old-world concepts of factor endowments and comparative advantage which focused on an area's unique inputs are outmoded for today's global economy.

A company to be able to identify potential sources of profit in the market should identify its competitive position as well as the context in which it operates, through the study of the external environment. It will be a mistake, in fact, considering that innovation consists only in technological changes, regardless of the organizational and management model.

The production process represents, thus, a combination of labor, plants, definition of tasks, raw materials, information, i.e., all factors used in the production of goods or services; their interaction in fact, represents a kind of business strategy directed at the products’ realization and it is comparable to a strategic innovation. Product innovations and process innovations evolve interdependently, through distinct phases in the structure of the sector and, consequently, in the source of competitive advantage. Fundamentally, innovation means introducing something new into your business and in the organizational context, innovation may be linked to positive changes in efficiency, productivity, quality, competitiveness, and market share.
References


