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User-Driven Innovation – the Concept and Research Results

Elżbieta Szymańska*

Faculty of Management, Białystok University of Technology, Wiejska 45A, 15-351 Białystok, Poland

Abstract

The research problem discussed in the paper is the innovation process, called User-Driven Innovation (UDI). The aim of the study is to determine whether the UDI system is more effective in introducing innovations than the linear one. The following hypothesis was formulated: companies introducing UDI systems represent a higher level of innovativeness than companies introducing the linear process. The following methods were used: a questionnaire, a standardized interview, and the ranking method. The hypothesis has been verified. The research showed a relatively small role of the Management Board in relation to customers in the innovation processes at the enterprises surveyed.

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Keywords: innovation; process of innovation; User Driven Innovation; service enterprises; medicine; tourism

1. Introduction

Innovation is a key factor of economic growth and the innovation processes become increasingly complex; starting in the mid-1950s, when they were described in a linear manner, through conjugated processes, to the most recent ones: open and diffuse innovation. One of the newest concepts, which were conceived in the 21st century, is the User-Driven Innovation process (UDI). The UDI concept which began to take shape from 2005 onwards is based on the conviction that consumers (users) have an increasing influence on the commercial offer available. Indeed, they take part in the process of creating the products and services which they purchase. UDI can be defined as the process of drawing on users' knowledge to develop new products, services and concepts, which are based on a genuine understanding of users' needs and systematically engage users in the process of the development of an enterprise. The research problem in this paper is the UDI innovation at enterprises. The aim of the study is to determine whether the UDI system is

^{*} Corresponding author. Tel.: +4-885-746-9000. *E-mail address:* e.szymanska@pb.edu.pl

more effective in introducing innovation than the linear one. It was formulated the following hypothesis: Companies introducing UDI systems (processes) represent a higher level of innovativeness than companies introducing innovations based on the linear process. Relevant research methods were applied to achieve this objective. The first stage of the research was the identification of the innovation processes by an expert panel. Subsequently, the results of qualitative research were verified by a quantitative survey carried out using the method of a standardised interview.

It should be noted that the UDI processes seem to have a huge potential for creating innovation, given the deepening globalisation process and a rapid development of mass media. However, it should be emphasised that in this case theory lags behind practice; hence, these processes have not been sufficiently explored yet. The results of the research should contribute to enriching innovation theory and they can also be applied in economic practice as important information (a prompt) for entrepreneurs.

2. Literature review

Innovation is perceived as the major driver of economic growth [27, 31]. The term "innovation" comes from Latin and means the introduction of something new, a novelty, a reform – based on innovation, which means "renewal", or innovare, which means "to renew" [13]. Therefore, the innovation issues have been discussed in many publications. The most important publications include those by J.A. Schumpeter, considered to be the father of innovation theory, along with his outstanding work The Theory of Economic Growth [28]. P.F. Drucker [6] was another eminent researcher on these issues. Many studies emerged as part of the innovation studies carried out by the OECD [20], the Eurostat and the European Commission [8]. Contemporary economic studies, including primarily the Oslo Manuals [20] indicate that innovation can be found not only in manufacturing enterprises but also in services. In accordance with the OECD [20] nomenclature, innovation in services [9, 11, 20, 22, 30]. Much attention in the literature has been devoted to the innovation processes. Apart from those mentioned above, these issues were considered by other eminent economists, such as P. K. Ahmed [1], R. Rorhwell [26], P. McGowan [16], S. J. Kline and N. Rosenberg [12], G. Roehrich [24] and R. Cooper [10]. Table 1 shows different approaches to the innovation processes.

Table 1. Innovation process	es.
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No.	Processes	Characteristics
1	Science pushed	A linear model of the innovation process pushed by science
2	Pulled by the market	A linear model of the innovation process pulled by the market
3	Conjugated	Interaction models where the connections among the individual elements result from the couplings between science, market and enterprise
4	Integrated and networked	Integrated systems based on networked connections – flexible, based on the system of a response related to the consumer, continuous innovation
5	Information and communication technology	A set of interrelated elements designed to process data using a computer technique. As innovation systems evolve, the role of information and communication technologies grows
6	Self-learning processes (systems)	Focus on the management of knowledge and learning assisted by a set of electronic tools facilitating the current transfer of information and decision-making
7	Open innovation	The concept is based on the conviction that companies may, and even should, seek ideas and ways of creating innovations, not only within their structures, but also their environment – among external partners (companies, organisations and customers)
8	User driven innovation (UDI)	Demand-based approach to innovation-based on the conviction that consumers (users) have an increasingly large influence on the available commercial offers, participating in the process of creating products and services which they purchase
9	Diffuse innovation process	Focus on open innovations inside and outside the organisation. Innovation is created (higher value is generated) by establishing an efficient knowledge flow system (inside and outside)

The UDI process is one of the nine processes (also called systems) which can be distinguished in the literature concerned with innovation theory [24]. Initially, the innovation processes were perceived as a simple consequence of

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