

INNOVATIONS AND QUESTIONS OF THEIR APPLICATIONS

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“Innovation” as a new field of study is a part of contemporary philosophical thought, often grouped with social philosophy, philosophy of science and technology. More precisely, it is a part of the science of praxeology. Prioritizing science as a key of national development strategy, and as a prerequisite for social change it is supported by many academics.

There are multitude number of definitions of “innovation” in social and philosophical literature. Some scientists say that “it is not another name for creativity”, whereas the others do not call it as “another name for invention” saying that “innovation is not an accident”, and “it is not continuous improvement.”

Modern philosophical thought, science and technology should encompass the major technological advances of postindustrial civilization and innovative industry. In its turn, the latter should move in the direction of maximally "pragmatic philosophy". Thus the new field of study is generated at the intersection between biosocial science and technology, more precisely at the edge of the boundaries of “novelty” and “tradition”. This is a new crossroad, where the alternative ontology and epistemological models are expanding the axiological and moral horizons. That is why it is logical to assume that the modern philosophy of science and technology should also serve as an innovation philosophy. However, the object of its study is not only the phenomenon of modern technology and "high-tech" developments, but the essence of both of them. In fact, as a type of active agent, innovation substantially transforms and changes the content of the old traditional philosophical problems and issues, at the same time involving the human presence as the main vector of development which is directed towards the soaring technological intervention in biosocial spheres. At this point it is useful to provide some models of philosophical interpretations related to the identification of content analysis of innovation for greater clarity [1, pp.56-57].

Human activity has always been the mayor impetus of societal changes, though some natural processes have also significantly impacted on formation and development of humanity for the epoch of millions of years. For realization of intellectual capacity in development, historical changes have also compelled us to leaf through the evolutionary processes in technological achievements that paved the way for abundant changes and sustainable development. Generally, history of arisal and application of innovations, consequently, prompted the humanity to think over the evolutions and unsurprisingly held that human beings and their way of life which had always been framed in socio-technological structures. Thus innovative activity has always been the leading force for the development of tecnological knowledge, intellectual ability. From one side, humanity always strived towards these changes, but from another side it has always struggled for eliminating the consequences and negative impacts of these changes, as technically, as well as socially. However, nobody could stand against these leveragings and for the reason it necessiated the emergence of the new sitaution of how wisely and accurately manage the innovations in the new situations. That is why innovations have greatly diffused with their managerial aspects bringing forward a number of questions as *soio-economic, environmental, multicultural and multidirectional causalities* because “innovation happens under certain conditions and does not happen under other cultural conditions. The conditions can be described,

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and they can be replicated. Organizational leaders create the culture of innovation by their systems, policies and actions. They are responsible for creating or destroying innovation in organizations” [2, p.1].

If a science-based technology is invented and widely applied in a society, then it *changes the nature of surrounding environment, walk of life, economic and social interactions*; thus, once invention is launched, it simultaneously brings a range of after effects as well. Sometimes such events cannot meet the expectations of politicians, inventors and producers because of unrealized technical processes. In this article, we do not intend at all to present the process of innovation as a negative phenomenon, nevertheless this is partly unavoidable and wherever necessary we will also mention on these. “Despite the recent surge in academic interest, management innovation remains as under-reached topic” ...only 3% of innovative related papers focus on management innovation...For example, Feigenbaum and Feigenbaum (2005, 96) argue that “the systematization of management will be a critical success for 21st century companies” [3, p.1].

There is also a great difference between the initiation and implementation of innovation. “That is, the initiation of innovation is facilitated by an organic structure and the implementation by mechanistic structure” [4, p.437]. It means that exploration and exploitation of innovations are different and “they can be applied between two types of managerial innovations-those that require an exploratory search for more in -depth learning to produce more novel management tools and techniques vs. those that need an exploitative search based on the existing ideas to refine management processes and systems” [4, p.436].

Today scientists mostly speak about 4 *types of innovations*: process innovation-where the internal business processes are changed into much effective use, product innovation -when a new service or product is offered to customers, customer experience innovation – when the layout of the sales and marketing (for example, brands) are undergone to some significant changes and finally, business model innovation- when the entire or some parts of business are remodeled or modernized.

Evidently, innovations usually turn to inherit some remarkable metaphysical processes of history, and one cannot contradict the following arguments and conclusions drawn by Mario Bunge: “1. The world is composed of things, that is, it is not simple, and it is not made of ideas or of shades of ideas; 2. Things get together in systems (composed of things in more or less close interaction), and some systems are fairly well isolated from others; 3. All things, all facts, all processes, whether in nature or in society, fit into objective stable patterns (laws); 4. Nothing comes out of nothing and nothing goes over into nothingness; 5. Determination is often multiple and probabilistic rather than simple or linear” [5, p.176].

Innovation has got a great deal of cultural aspects. Scientists mostly identify seven steps needed to create an innovation culture which are closely interrelated. Despite variety of differences existing on socio-cultural level the following commonalities are peculiar in this sphere:

1. Educate Executives
2. Identity an Executive Champion for Innovation
3. Design an organizationally unique innovation system
4. Establish goals and strategies for innovation
5. Implement the innovation system
6. Recognize and reinforce innovation formally
7. Conduct an innovation audit survey [2, p.18].

Now we will try to identify some major aspects in innovative applications. In philosophical literature we mostly refer these questions to technological or innovative determinism. Whatever we think, a human usually carries some qualities or characteristics which are reflections of historical development; thus, this determinism is much connected with what operates Homo Faber, by what a human does the things, in general, who a person is, how his/her social position stands (versus} against the person’s human qualities. For all these reasons, the cultural aspects of innovation are unceasingly bigger and much intensified in the modern world processes. So, we cannot imagine that a technology will develop independently, but rather we assume that innovation

and culture are philosophically integrative, and managers may only think on their control mechanisms.

Unfortunately, positivism as science is not able to answer to all these questions. It is because modernist individualism and tolerance are increasingly progressing from one side, unity, education, family, religions are going much faster not onward, but upward, from another side. In this dichotomy we have some other tendencies as well, like irreversibly (only going forward, sometimes out warding) of expansion in innovation culture. Hence, while identifying the technological determinism of innovative activities we cannot skip the trends which are much likely inherent to the evolutionary processes.

While applying innovations their unstoppable nature should also be considered. Nowadays, it has started to more and more cause the appearance of the newly established models within human and technology interactions. This is closely connected with the questions of abdication of human responsibilities. Today, we mostly observe such kind of inclinations in application of the newest IT technology, smart systems and in other similar applications. This problem mercilessly “sweeps the brains” maximally bringing western and eastern minds much closer to each other, whereas the demarcation lines existing in the boundaries of the various folks are diverse. Will it be a wishful thinking or not, during the rise of capitalism application of innovative technologies has turned out to be an “impersonal force” or “impetus” for society, while we change a human force into a superficial system through the intensified evolutionary reification processes.

It is not debatable that individual developments are unavoidable, but there emerge much speedy developments as technological evaluations, which start much faster controlling these individual developments, competitions and, in general, survival and thrive of humanity.

Socio-cognitive aspects of individuals are also affected by lack of conscious control, especially in the industry with wider innovative applications. What happens then? Do the innovations also much widely come under the control of human beings? To our opinion, we cannot be much optimistic in our answer, though most people think that there is not any firm ground to worry about. Such kind of *technological drifts* accumulate and more intensely tend to create undesirable and unintended conditions for humanity. Unfortunately, we try to adapt to these “changing situations” where we do not anticipate that positive outcomes may outweigh the negative ones. It looks like the humanity is looking for the ways of “salvage” to escape innovations. Some sociologists and philosophers argue that the humanity must not worry of these consequences, but the system of “increasing constraints” in application and development of innovative technology is more and more obvious not only in technological enhancements, but in the fields of socio-political, psychological and biological behaviors as well. In total, cultural systems of the “world” undergo confronting with the results of “the world’s forceful power”, where less and less space is allocated to “human agencies”. As a result, application of technology stays as an “unprecedented winner of innovative politics.

While speaking about application of innovations we do not forget the assembly of practices-techniques that are used by human beings. This is how people use the existing resources for their own and others’ conveniences. It is also a milieu in which humans exist and this has replaced nature. This nature is much artificial rather than natural where its self-growth is ensured by loss of its goal direction. It creates such a condition where the device or technique as precedence gains power to prevail over the ends. Such social phenomenological causes are inevitably situated within these techniques where its internal elements are intrinsically interrelated within this inseparable system.

There is no doubt that, innovations comprise organizational and psycho sociological techniques, that is why humans must adapt to these novelties. It also forces humans to choose namely those values and ideas which are dictated by these technological novelties. It creates some new conditions under which will not detrimentally influence on the morals of human beings. Consequently, humans make decisions under the new ethical system imposed by technologies; i.e. people seem to exploit technology whereas technology remains independent and autonomous. Such situation, of course, may lead to some discontents and dissatisfactions in modelling the

human behavior; human actor more intensively is changing into the object of these appropriate technologies. Does the limitless power of innovation or technical growth become uncontrollable? Most scientist are inclined to confirm that, techniques cannot produce freedom for humans and humans cannot go back. The likely situation puts the scientists into the awkward position to find solution out of the newly created condition. Some of them suggest economic models where material development may provide a basis for human expansion, but other part of scholars oppose (for example, Jacques Ellul) it and instead focus on the needs for the institutionalization of stronger forms of social and moral control.

Conclusion:

Finding the determination in all aspects of innovation application is a complex process. To offer a conceptual programme may vary depending on a lot of factors, such as organizational structures, managerial innovation, generation, adoption processes and so on. By increasing the awareness of population on existing theories of innovation which are derived from the existing developments may help them to extend and advance their knowledge and practice as the exploration, as well as the exploitation of innovations.

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Иновации и вопросы их применения

Резюме

Статья исследует вопросы применения инновации. Были подведены некоторые важные обобщения относительно изменений доводов и подходов видных мировых ученых к сфере деятельности связанных с вопросами применения инновационных технологии и их различных аспектов. Опираясь на мысли мировых ученых, автор анализирует мультифакторные системы и аспекты процесса применения инноваций.

***Ключевые слова:** Инновации, применение инноваций, менеджеральная инновация, типы инноваций, аспекты инноваций*

İnnovasiyalar və onların tətbiqi məsələləri

Xülasə

Məqalə innovasiyalar və onların tətbiqi məsələlərinə həsr edilmişdir. Məqalədə innovasiyaların tətbiqi ilə bağlı müxtəlif aspektlər və onların dəyişkənliyinə, eləcə də dünya alimlərinin bu problemə yanaşmalarına dair mühüm ümumiləşmələr aparılmışdır.

Dünya alimlərinin fikirlərinə əsaslanaraq, müəllif innovasiyaların tətbiqi prosesləri ilə bağlı çoxfaktorlu sistemə və aspektlərə dair təhlillər aparmışdır.

Açar sözlər: İnnovasiyalar, innovasiyaların tətbiqi, innovasiyalı idarəetmə, innovasiyaların tipləri, innovasiyaların aspektləri

Author's biography

Eldar Shahgaldiyev is Associate Professor at Khazar University, Head of Division of Graduate Studies and Research, and Associate Vice Rector. He joined Khazar University in 1999 as an instructor in Sociology and Educational Psychology. Previously he was Editor of "Yurd", issued by the Office of the President of the Republic of Azerbaijan, Supervisor of the Training & Staff Competency Department at McDermott, and a staff member at IOM Azerbaijan.