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A REVIEW ON INNOVATION STRATEGY IN KAZAKHSTAN

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Abstract

Kazakhstan's issue of developing new technologies is brought to light by examining Kazakhstan's execution of national initiatives dedicated to industrial-innovative development. Failures in the management of innovation processes that need rapid repair limit the advancement of innovation in the United States.

Keywords: Kazakhstan, Innovation, Strategy

INTRODUCTION

One of the national objectives outlined by President of Kazakhstan, Nursultan Nazarbayev, in the "Kazakhstan-2050" plan is to foster a knowledge-based economy. The long-term aim of transitioning to a new technological level is supported by current global trends, which so far have accumulated enough scientific, technical, and socio-economic capacity to trigger this change. Today, the knowledge-based economy may be outlined by identifying the critical components. One of the primary reasons the information-based economy is thriving is because of the recent creation of new knowledge and innovation, and as a result, we have access to more sophisticated technology. The contribution of the innovation industry to GNP of industrialised nations is significant; not only does it keep pace with market dynamics, but it also offers significant inflow of multi-billions in foreign currencies via the export of inventions, educational and consulting services. Incorporating both commercialization and generating new scientific research is one of the fundamental tenets of the country's comprehensive national innovation system. It provides for the continuance of the growth of the economy and innovation. Innovative assets, such as universities and research institutes in

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collaboration with industry, as well as multinational companies, are the primary constituents of the innovation infrastructure. The institutional framework that combines government regulation and market competitive forces allows for the development of an innovative economy. In general, most of the standard state-sponsored innovation procedures used to help foster a competitive environment for scientists, inventors, and entrepreneurs serve to excite the creative interests of the business sector as well. In a knowledge-based economy, one of the most essential things is protecting the intellectual property rights and the opportunity to incorporate intellectual property into a business's economic profit.

For a long time, Kazakhstan has been interested in boosting the country's creative economy. At this point, we can start assessing the fruits of Kazakhstan's innovation strategy.

When we talk about organisational behaviour, we occasionally employ the terms ‘technology' and ‘technological management', ‘innovation' and ‘innovation management', with just a cursory understanding of their respective definitions. We would want to inquire about technology and how to handle it, though. We begin our investigation by identifying the core features of technology and identifying the management techniques used to apply those features. This helps us to better comprehend our topic.

The following text is from a textbook on writing in the English language: “Literature uses the phrase [2] to describe technology, which is simply defined as ‘a body of knowledge, tools, and techniques, derived from both science and practical experience, that is used in the development, design, production, and application of products, processes, systems, and services.’ To put it another way, new product developments and new methods for generating outputs are part of the technological package, but there's also scientific and practical knowledge built up through experience that comes with it.

Technology is often associated with newer and better methods of advancing economic goals, with the primary aim of increasing economic growth. Through the use of transfer technology, transfer influences the change, and this change helps to foster economic development by helping drive increased productivity [5]. To illustrate, the definition of technology as "know-how, techniques, patented or otherwise proprietary processes, materials, equipment, or systems" encompasses many of the modern methods that engineers use today.

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Choose four technological areas and define them. The first consideration is a critical differentiating technology that deserves to be at the top of the scale. An emerging technology is therefore a step lower since it has the potential to become a competitive differentiator. The next technology on the list is fundamental; it is necessary to be in business, but it provides no competitive edge. Commodity technologies, which are accessible in the marketplace for everyone and everyone, come last on the innovation scale.

Writing authors reference [8] who categorises technologies as being either being linked to product and process or to hardware and software. He further separates these technologies into hardware and software. In the hardware processing world, processes are entirely plant and equipment-based, whereas in the software processing world, it is all about production management approaches. non-codified abilities and executive capacity are not captured by existing hardware and software definitions; they become tacit wetware when they go beyond these initial elements.

(the methods for converting basic input like as intellectual rights, scientific concepts, and R&D into tangible goods) (marketable industrial materials, components, and end-products). The written instructions themselves are the former, whereas human implementations of these instructions are the later. The transfer of technical information (process sheets, blueprints, products, and material specifications) as well as "transfer of know-how of high-caliber engineering and technical personnel" is required for the transfer of technology in instances of manufacturing processes.

This infographic highlights the many ways that scientists, technologists, and innovators use their abilities and discusses the relationship between technology, innovation, and science. From the perspective of science and technology, on the one hand, they are separate bodies of knowledge, produced through distinctively diverse methods of accumulation that are distributed among various groups, all of which are situated in different organisational settings. When it comes to science, academics are just as creative as anybody else. Science is open, the results are disseminated across the world through scholarly journals. Most of science is utilised when there is a development process to start with. Technology may be defined as the collective body of knowledge about the design process. Openness encourages

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technology whereas secrecy encourages innovation, because scientific publishing procedures and a concern for patent protection are very different when private property rights are involved. It is in the nature of technology that it is practical and its legitimate outputs are artefacts. In determining the intrinsic value of a technical artefact, the degree of veracity of the information, as well as its practical usefulness, must be considered.

The effectiveness of technology is meaningless unless it is first utilised to bring about innovations, which are then distributed to the general public. How effective a given technology is depends on how widely it is disseminated. Although, when it comes to innovation, the answer isn't only technological skill; it's also understanding of how to utilise the technology, as well as the capacity to produce that technology. It may be said that in the words of [16] "design is often an important catalyst for innovation." Most of the time, research stems from attempting to get the design correct, and therefore is connected to issue solving.

CONCLUSION

First, components of the innovation infrastructure started to emerge as a result of the execution of the RK strategy of industrial and innovation development. New business activity arose in the regions as a result. Kazakhstan has nine technological parks, five national and fifteen regional labs, and nine venture capital funds today. Systems design (Kazan), fuel and energy manufacturing (Kostanay), agricultural machinery manufacturing (Kokshetau), instrumentation systems design (Kazan) (Almaty).

Secondly, the growth of innovative processes in the nation is predicated on the establishment of the Law of RK of 2006, which outlined state support for innovation activities. Extending the legal jurisdiction of entities such as JSC “Center for Engineering and Technology Transfer”, JSC “Science Foundation”, and JSC “KazAgro Innovation”, as well as JSC “National Innovation Fund”, were adopted in 2009. Kazakhstan has seen impressive growth in new processes and, with respect to the needs of development. They implemented the Law of RK on state support of industrial innovation activity in January 2012. The primary goal of this project is to provide the groundwork for stimulating industrial innovation by establishing the legal, economic, and organisational frameworks, and identifying the mechanisms for

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funding industrial innovation. To a greater extent, the new law focuses on industrial innovation activities that will stimulate the growth of national high-tech and export-focused industries. It is specified in this legislation that the competence and authority of the government and other authorised organisations, as well as the topics of innovative activity, must be defined.

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