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## **THE EVOLUTION OF APPROACHES TO DEFINITION OF TERMS OF SCIENTIFIC AND TECHNOLOGICAL, INNOVATION POTENTIALS**

### **Summary**

The ambiguity of the definition of the essence of the economic potential is complicating the process of making appropriate management decisions and thus actualizes study the evolution of approaches to the treatment of its components – scientific and technological, innovation.

The purpose of the research is to show evolution of approaches to definitions of conceptions scientific and technological, innovation potentials.

Retrospection of the concepts of scientific and technological, scientific and technical potentials in the second half of the XX – at the beginning of the XXI centuries deposes of their use by scientists as synonyms. The joint theoretical and methodological basis of these concepts made possible the author's periodization of approaches to the definition of "scientific and technological potential. "The transformation of the concept of scientific and technological potential of its vision through production and resource perspective to the interpretation of a system of producing new knowledge occurred gradually at different stages of the period of 1974–2015 years had been determined: stage 1 (1974–1980 years) is characterized by production and resource concept; stage 2 (1981–1991 years) – reflects the concept of resources and opportunities; stage 3 (1991–1996 years) – is the period of time with resource understanding these categories; stage 4 (1997–2013 years) – studied

category is characterized by a complex multidimensional understanding; stage 5 (2014 – nowadays) – the idea of consideration of component of the economic potential as the system of production of new knowledge is inherent.

It was found that for the Soviet era and independence times of Ukraine within the period we had examined (1974–1991 and 1991–2015 years.) the common feature was the application of approaches by scholars according to which scientific and technological potential is the totality: 1) possibilities (1987, 2001); and 2) elements (1984, 2001, 2009). Unlike independent Ukraine, during Soviet period approaches are inherent when science and technology researchers saw potential level of production (1974), the result of factors (1975) and aggregate of capabilities (1977, 1988), which, in fact, meet the requirements of implementing the concept of improving production of a narrow product range ways to improve technology, increase production capacity and productivity, economies of scale and more. However, as you know, the excess of supply over demand for agricultural products and lack of opportunities to reduce costs through high productivity, which declined as a result of a sharp slowdown in the technical improvement of production in the second half of the 1970 – 1980 years caused transition during independence Ukraine to the formation in agriculture concepts of product development, intensification of sales efforts, customer satisfaction and partnerships.

Author's vision of the evolution of approaches to the definition for innovation potential had been offered. It was established that stages the period 1980 years – nowadays had been characterized by a gradual rethinking the concept of innovative potential of his vision first through the resource prism, then – innovation, in particular: stage 1 (1980-1991 years) – the concept resource recreates; stage 2 (1991–1996 years) – is defined by the concept of resources and opportunities; stage 3 (1991–1996 years) – is characterized by the resource and innovative concept; stage 4 (2013 – nowadays) – the formation of the concept of knowledge economy.

It was argued that research methodology of concept of "innovation potential" dates back to the mid-1980 years and received intensive development in the late 1990 years. Analysis of scientific papers allowed us to group approaches to defining the

essence of this category and select: resource, potential, opportunity, innovative.

Summarizing scientists use of approaches to defining the essence for innovation potential, we came to the conclusion about the synergistic effect of its structural elements, which together ensure the readiness of business entities to innovations. However, we believe that the dynamics of difference and approaches of scientists in the definition of "innovation potential" in the scientific literature complicates the formation and effective use in practice. In addition, the consideration of this category in the plane of national, branch or enterprise economy narrows its scope of application.

It is proved that methodology for determining of scientific and technological, innovation potentials is ambiguous and somewhat common. Scientists determine two categories using the resource, potential, opportunities and innovative approaches. At each stage we have identified, scientists have determined the innovative potential using approaches that have been used in the previous step in characterizing the scientific and technological potential. Thus, since 2013 year both categories have been considered in the field of knowledge economy.

Consequently, the coexistence of identical approaches to the interpretation of scientific and technological, innovation potentials is obvious as they are structural components of economic potential as aggregate resources, potentials and possibilities of exercising of scientific and technological activity and production of competitive innovative products. It was proved no identical approaches to determine the scientific, technological and innovation potentials during system analysis of approaches.

***Keywords:*** *scientific and technological potential, innovative potential, approaches to definition.*