

INTELLECTUAL POTENTIAL AND CREATIVE ENVIRONMENT OF SUSTAINABLE INNOVATIVE DEVELOPMENT

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Nowadays innovative activities in the conditions of so called knowledge economy can be distinguished from those held during early industrial era. Innovative development today is the result of cooperation of brilliant creative individuals with each-other or their groups with different organisations and institutions involved in this collective innovation process of social capital application [1] mostly within its intellectual aspect. As a result, a permanent flow of recently appeared knowledge and information becomes naturally crucial factor for innovatively targeted development in the knowledge economy. In everyday working life it means mutual exchange of professionals and intellectually creative people among innumerable innovation processes. It may be pointed out in accordance with many scholars that big cities and large scale diversified companies of research institutions may play a special role as knowledge, intellectual and innovation nodes. So intellectual potential of business, administrative or regional socio-economic-environmental systems becomes a factor to be included into strategic decision making in the conditions of knowledge economy.

The modern environment of business activities as the main field for innovative development is characterised by:

- Rapidly changing technological conditions of market competition.
- Growing awareness and sophistication of customers.
- Shift of competition towards secondary and tertiary values of products (e.g. service activities before and after purchasing the product).
- Increasing dynamics and uncertainty of corporate decision making. [3]

Taking this into account, the separation of managerial knowledge used by top administrators to develop general strategy and technological knowledge used by middle level managers and executors to implement emerging innovations into working process within the frames of accepted strategies may be an example of a growing theoretical and paradigmatic gap between natural, life and social sciences and research. The managerial perspective must be also based on a deep understanding of technological processes. So the practical challenges between social sciences and technology in the knowledge civilisation age require just the opposite, an integration of these two managerial perspectives.

Each knowledge creation process depends critically on the intellectual heritage of humanity. The individual, group and heritage knowledge – elements of the social dimension of knowledge creation processes – can again be classified as rational, intuitive, and emotive. This three-by-three Creative Space [2] matrix we tried to fill with elements of socio-economic-environmental systems innovative development (see Table 1).

The concept of Creative Environments [3] is related to systems of tools that support creativity It includes both the informational technologies aspect and the social aspect, referring both to social interaction in knowledge creation (with the fundamental role of the intellectual heritage of humanity) and to the participation of future users of this knowledge system.

Applying mentioned tools for studying special elements included into this model we may more deeply investigate the role of intellectual potential in the economic-environmental system for its sustainable innovative development.

Table 1 – The Elements of Knowledge Creation Process in Socio-Ecolo-Economic Innovative Development

KNOWLEDGE	Dimensions		
	Emotional	Intuitive	Rational
Levels Individual	Personal socio-economic-environmental preferences, motives and choices as a result of real-life experience	Ideas and inventions appearance, implementation or support	Inclusion into everyday routine with personal adaptation r even improvement
Group	Commonly shared emotions, opinions regarding local socio-economic-environmental situations and motivations for being included into common action	Acceptance and distribution of the most attractive responses to the socio-economic-environmental issues with sharing of the most valuable and validated	Current strategies and tactics formulation, specification, monitoring of implementation process and improvement for further decision-making

		ideas of the time	
Heritage	Accumulation of emotive and experience heritage of different socio-economic-environmental systems	Level of commonly shared ideas and images before their scientific rationalisation	Accumulation of large scale factual patterns and formulating global development priorities

References:

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3. A. Wierzbicki, Y. Nakamori Creative Environments: Issues of Creativity Support for the Knowledge Civilization Age. Studies in Computational Intelligence, Volume 59 Springer Verlag, Berlin-Heidelberg., 2007.