

Vladimir M. Nikolić¹⁾
Dragana Gardašević¹⁾
Srđan Stanojković¹⁾

1) Belgrad Politehnic,
Serbia nikolicmvl@sbb.rs,
{dgardasevic,
sstanojkovic}
@politehnika.edu.rs,

MODEL DETERMINATION ON INDICATORS INTELLECTUAL CAPITAL - EXAMPLE "KNOW-HOW"

Abstract: *The knowledge, which belongs to the category of value, it becomes more widespread research on the Science on business organization. The problem of measuring intellectual capital, determination of parameters assumed forms of intellectual capital. Abstraction characteristic parameters are performed using the original phenomenological method. Consideration of the manifestation of intellectual capital: "Know-How" is based on hypothetical separate sizes: the psycho-physical characteristics of employees, production workers sensory perception and his understanding of the technical documentation, and development strategies of the organization of production and business. The presented model allows the expression of an indicator of the forms of intellectual capital - "Know-How" - in concrete terms, in practice.*

Key-word: *knowledge, the Science on business organization, QMS, TQM, indicators, Know-How*

1. INTRODUCTION

We see that the problem of knowledge is becoming increasingly common in researching of business organization. The study of this phenomenon occurs in the context of entry into the postmodern period. This period is characterized, among other things, approaching the limits of growth of industrial capacity [1]. Previous research knowledge (in context of an organization of business system) points to the extreme complexity of this phenomenon.

Also, in previous studies there is a latent problem: How to comprehend the situation, the degree of their development, in relation to the environment or the objectives of the business system? These problems point to another, but a more general problem: the process of determination of indicators of business organization - as one of the obstacles to the constitution of the Science on business

organization (SBO).

It is known that the phenomenon of knowledge is characterized by complex and inhomogeneous structure. For the Science on business organization is a significant research of intellectual capital and its characteristic forms of appearance. The subject of this paper is to establish a hypothetical model for determination of an indicator of the forms of intellectual capital – the know-how. The applied approach to setting and solution of this model indicates the Science on business organization as a phenomenological science.

2. THE SCIENCE ON BUSINESS ORGANIZATION AND PROBLEM INDICATORS

A series of papers presented are the results of previous research in order to determine the theoretical basis of SBO. It

is determined by its object and domain [1], [2]. The domain implies the existence of business premises that is broken down into strata:

- The business system,
- A unified economic space,
- International business space and
- Operating in the cosmos.

The conclusion is, according to which SBO is its philosophical basis in Heidegger's philosophy of facticity [3]. We were abstracted categories of space, time, values and organizational factors of the business system [3]. Finally, the position of SBO was considered in the system of organizational science [4], [5]. The scientific community has accepted the existence of organizational science. One of the reasons for challenging the status of a separate organizational science is sufficiently clear expression of indicators. The support previous research organization has been operating on economic indicators, notably the productivity and rentability. Therefore, the process means the constitution of the SBO and the search for indicators specific

Bulat and Klarin [6] are considered indicators characteristic for discontinuous production technology. This set of indicators is based on information on the status and degree of achievement of production goals. The previous research results (indirectly) suggest the need for setting the focus to more complex indicators.

The method of determination of indicators is a starting point of the view that the SBO phenomenological science. This method, detailed previously shown and explained theoretically [5], will be presented in several steps:

First step: Selected phenomena (typical for a business organization) are perceived, abstracted and observed, and can be described by some attributes. The attributes indicate the existence features of the observed phenomena. In the event that a selected complex phenomenon, this procedure is applied to the characteristic forms in which it appears.

Second Step: The properties of a phenomenon makes, builds, the showcases one or more characteristic values. For example, a color (as a natural phenomenon) is characterized by its frequency and intensity.

Third step: For each size will be necessary to determine the appropriate measurement system. Measurement system consists of a method of measurement, unit of measurement, measuring scale and the subject (or how) the value of reading on the measuring scale.

Fourth step: Measured values should be given due weight. The actual reading, but a statement of the vector values is not sufficient to conclude.

Fifth step: The final step of phenomenological analysis is to draw conclusions, from the state, the display properties of the observed phenomena, or one of its characteristic shapes. The conclusion can be adopted only relying on a comparative value. These values can have a source in their own or others' experiences (i.e. from memory).

The second source is a priori projection of reality, and the desired state. We can say that we have determined the status indicator of the observed phenomena (characteristic of a business organization) only when it is known that some values cause certain consequences, or point to the necessity of taking some action.

3. KNOWLEDGE AND QUALITY

3.1. Knowledge, definitions, forms of knowledge that appears

Philosophy deals with the notion of "knowledge" in the gnoseology (the theory of connaissance) epistemology and ontology. The gnoseology they addressed on the possibility, meaning, scope, object, methods of human knowledge. Epistemology is focused on scientific knowledge, critical review of the scientific principles, hypotheses and results.

Ontology is the science of being, therefore, knowledge of such substance,

essence. Mannheim [7], [8] points to the influence of social environment and the particular dynamics of knowledge. His views were introduced in the study of the knowledge categories of space and time. Furthermore, knowledge is not homogenous and has a number of forms.

Therefore, the focus can be directed to the manifestations of those connoissance that are included in the object and the domain of SBO. The basic philosophy is the concept of "connaissance", but the survey of business organization used the term "knowledge". It should be noted, that between these two terms can not equate. Connaissance what is interpreted as a "knowledge accompanied by awareness of its accuracy (it is tested); any opinion or any other feature of consciousness that comes to the truth of things" [9]. Knowledge is in general interpreted as a set of facts, information or skills, and even beliefs that are acquired through experience or study.

We study the notion of knowledge in the context of the business organization. Then the appropriate definition of the term knowledge of how it was interpreted by Professor Smiljanic [10]: "Knowledge is the result of the cog-nitive process through which the reflective cover reality. (...) Any organized activity, in which human activity is differentiated from the activities of other living beings, can be characterized as a process of action conditioned and driven by the knowledge that has the acting subject."

The term of knowledge is extremely complex and in this context. Therefore, we submit our attention to its manifestations. The most general forms of knowledge related to the tacit, explicit, crystallized and condensed knowledge. The next group of forms of knowledge is inherent to the appearance of intellectual capital. Intellectual capital refers to the difference of market value accounting and business system. However, intellectual capital refers to the rights of intellectual property rights,

and knowledge covered appears forms of technology transfer.

Gordon Petrash [to 11] points out: "The intellectual capital becomes the sum of human capital (individual competence), organizational capital (internal structure) and customer capital (external structure). It follows that intellectual capital depends on the person, an organization of business processes, based on different principles of organization of working places through to knowledge acquired by studying the use-value users.

3.2 Forms QMS as the expression of the development strategy of business

The problems of quality, environmental protection, knowledge becomes ever more present in the study of business organizations from around 1980. Start these changes coincided with a period of dealing with the aftermath of the oil shock of 1973. In fact, it can be concluded that current events are a consequence of entering into a period of post-modern, post-industrial revolution period. To conclude, different forms of value are becoming the subject of more intensive research.

Profit and satisfying the needs of users are still dominant in business requirements. However, other values have more influence on business strategy. The necessity of establishing a business strategy is resulting in the establishment of different objectives and methodological approaches that lead to the projection of the desired state. Some of these approaches the phenomenon of quality, (Japanese) approach to improving productivity and profitability (JIT, Kanban, Kaizen ...), analyzes of values, Balanced score card.

3.3. Characteristics of the manifestation of intellectual capital: KNOW-HOW

When we consider the characteristics of the phenomenon know-how, we can conclude that their case describes the

attributes: of knowledge, an abilities of executors, and the idea to perform a given task. Of course, this idea includes the user's knowledge products.

It follows that determining the size of the phenomenon of knowledge in the form of know-how:

- x - psychological and physical characteristics
- y - knowledge (required to perform repetitive operations of the production workers) and
- z - strategy as a statement about the idea of continuous improvement of repetitive tasks.

To define the measurement system, these values we have presented them as the coordinate axes of three-dimensional Euclidean space.

The next step is to determine the measurement scales.

Measurement scales the coordinate axes psychophysical characteristics reflects the average value of psychophysical characteristics of employees. These features may be present in the range of 0 to 1, with a reliable expectation that, in measuring the specific conditions, specific value move in the given limits.

On the coordinate axes necessary knowledge workers to repetitive tasks related to the knowledge, skills and ability to perform manufacturing operations (with the proper interpretation of the workshop and the work of documentation), coordination (in the handling of funds and the work piece) and the ability of sensible perception. These quantities can be expressed only indirectly. That's why we as a reflection of the size used gradation arising from the way the organization of workplace.

It is known that workplace (by conventional means to work) can be organized as open, closed and stabilized. With job openings worker himself delivered to the workplace all the necessary resources (tools, materials, documentation). A worker who works on a closed workplace, are all resources to

ensure the engagement of operational preparation of production. The stabilized workplace (in addition to the properties has closed the job) have made studies of work and time. If we consider the possibility of working on a position which engages machining system (with a programmable control), or use of production lines with adaptive control, the measuring scale can be extended. This will have a five-scale measurement of the characteristic points.

The third coordinate axis reflects the idea of continuous improvement of the workplace. It is understood that such an idea is embedded in business strategy of the business system. We have previously mentioned several approaches to determination of the strategy. The fact is, that the strategy of improving and developing the quality system is most in Serbia. This process consists in the conquest of all the higher level of quality systems: QMS, TQM, excellence, quality of life. Any form of strategic alternatives has a different focus of the required knowledge. There is no doubt that the system of quality of life requires the most effort and time into the business system. All quality systems can be installed in series on the right in ascending numerical order. The position of points can be assigned a hypothetical. Mutual position of points is determined by an assumed level of effort and time required is shown in Table 1.

It is understood, that future research should examine the hypothesis of the interrelationship between the various quality systems.

Table 1

QMS	TQM	excellence	quality of life
1	2	6	12

With this measurement system can be set to access the measurement of the intensity of some size in concrete terms.

The expected result is to obtain the resultant know-how as a scalar. The expected value of the resultant know-how can be discussed hypothetically.

In the event that the business system does not apply any strategy of continuous improvement, the resultant know-how will lie in one plane: the psychophysical characteristics (x) and the knowledge, skills and abilities (y) necessary for the execution of duty. Its intensity will depend crucially on the type of job and organization characteristics of the funds for the work. The resultant of intellectual capital in the form of know-how will then have a very limited intensity.

In the event that the business system present strategy of improving the quality, the intensity of the resultant know-how will depend on the degree of application of a quality system in accordance with the values shown in Table 1. It follows that only relying on a third dimension - the dimension of the strategy, the resultant know-how can have a continuous growth.

Thus, certain vector sizes know-how will enable understanding of the business system of its own position against the competition (with reliance on benchmarking) and take the appropriate measures of business development in the future.

4. CONCLUSION

By placing the theoretical basis of the Science on business organization allowed the intensification of research. One of the justifiable objections - to accept the research organization operating as a separate science - was the lack of indicators. The direct contribution of SBO is to establish the methodological basis - in the form of models - the determination of indicators, in this case, knowledge of which is a manifestation of the know-how. The phenomenological analysis is the basis for differentiating the set of model practices in organizational research.

This paper presents a model for the determination of indicators of the manifestation of intellectual capital - the know-how. The resultant know-how (as a scalar quantity) reflects the value of applied knowledge in a business system. Comparative analyses of indicators of knowledge know-how are in different business systems to acquire the basis for determining the business strategy in the future, with the possibility of quantifying the desired goal of acquiring knowledge.

The first step in determining the forms of intellectual capital is as shown in the example of know-how. The identification of other distinctive forms is following: the good-will of the business system and the (entire) the intellectual capital business systems.

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