

THE ROLE OF HUMAN RESOURCES CAPITAL IN INCREASING ORGANIZATIONAL INTELLIGENCE

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Abstract:

This paper presents the concept of organizational intelligence as defined in the literature, the dimensions of this concept, highlighting the factors that contribute to its development, evolution and perception over time. It then focuses attention on human resources and the role it plays in the organization as a whole, as well as in increasing organizational intelligence in particular. Human resource is perceived as the most valuable resource of the organization, whose quality impacts organizational intelligence. The article uses human cognitive skills as the basis of a fundamental structure from which to form new organizational cognitive skills that are able to present management processes as critical creations of value. Organizational cognitive ability is an important factor in identifying appropriate organizational resources to assimilate and determine an optimal selection of applicable technologies and improvements. Also, human resources cognitive ability can create the premises for identifying knowledge with interconnected variables that support organizational intelligence, namely: performance, intellectual capital and managerial process.

Keywords: *cognitive ability, human capital, human resources, organizational intelligence*

JEL Classification: *O15, M12, M15*

1. Introduction

During last decades, the concepts of intelligence and organizational intelligence were defined and researched by several publications, some of definitions being mentioned in this article. Also, the components of organizational intelligence are mentioned and described, the Human capital dimension being highlighted. The purpose of this article is to analyze if the performance and intelligence of an organizational activity is the result of the capability of human capital within the organization.

2. Intelligence – literature review

Even if it seems to be a simple word, intelligence means a lot and it is a complex controversial topic. Some of us know exactly what intelligence is, but in the other hand, some of us don't. A true fact is that this concept apply to both individuals and organizations. Also, considering this concept, are defined two approaches.

Considering a report of Board of Scientific Affairs of the American Psychological Association (Neisser et al., 1996), first approach mentions that intelligence definition should take into account 'Known and Unknown' factors: *Individuals differ from one another in their ability to understand complex ideas, to adapt effectively to the environment, to learn from experience, to engage in various forms of reasoning, to overcome obstacles by taking thought. Although these individual differences can be substantial, they are never entirely consistent: a given person's intellectual performance will vary on different occasions, in different domains, as judged by different criteria. Concepts of "intelligence" are attempts to clarify and organize this complex set of phenomena.*

The second approach promote the definition of intelligence mentioned in the journal Intelligence and agreed by 52 intelligence researchers (Gottfredson, 1997): *a very general*

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mental capability that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or test-taking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings—"catching on", "making sense" of things, or "figuring out" what to do.

These definitions of intelligence are focused on human intelligence, but in fact the concept of intelligence may take different meanings in different areas. Hence, intelligence is the process and the result is a capability that can be measured in the form of an intelligence quotient based on the results of the application of this capability to processes (Jung Younghan, 2009).

Robert J. Sternberg (2000) also analyze the intelligence concept in Handbook of Intelligence. He mentions that on views of intelligence involving not just a single ability but many, one could argue that there are so many different ways to be intelligent that no one prototype or even small number of prototypes would suffice to characterize a person as intelligent. Rather, it may be that we have stored in our minds multiple exemplars of intelligent people, and we assess a person's intelligent in relation to these exemplars.

According with Haslam & Baron (1994) there is a connection between personality and intelligence, and personality may be individual or corporate (Fink, G., Yolles, M., Dauber, D. 2013). Also, there is a consistent endeavor in social theory to relate organization and individual theory together, synergizing and harmonizing apparently distinct terms of reference, as Boje (2002) illustrates. Perhaps more well-known is the work of Kets de Vries (1991) who, in his book "Organizations on the Couch" adopts a Freudian view about dysfunctional and neurotic organizations (Fink, G., Yolles, M., Dauber, D. 2013).

General intelligence was researched by Piaget (1950) who attempted to measure it in children using cognitive testing approaches to assess their concrete and formal operative strategies. The tests designed by Piaget look for particular types of understanding and/or reasoning (Bybee & Sund, 1982). Outside the child learning context the concepts of figurative and operative intelligence have not been used (Fink, G., Yolles, M., Dauber, D. 2013).

Cantor and Kihlstrom (1987) define **social intelligence** in terms of an agency's fund of knowledge about the social world, geared to solving the problems of social life and managing the life tasks, concerns or personal projects which an agent either selects or is assigned. 13 years later, Kihlstrom and Cantor (2000) provided a useful review of the notion of social intelligence and its relation with other theoretical constructs. E.g., Thorndike (1920) sees social intelligence as the ability of an agency to perceive its own and others' internal states, motives, and behaviors, and to act toward them in an appropriate way. Kihlstrom and Cantor (2000) further argue that social intelligence cannot be evaluated abstractly, but rather with respect to context and in relation to the purposes it serves from the agency's perspective. They set up criteria for the assessment of social intelligence through the use of empirical psychometric tests (Fink, G., Yolles, M., Dauber, D. 2013).

In the literature we also find a variety of attempts to measure **organizational intelligence** or sub-forms like **competitive intelligence**, which largely have no systematic link to most of the different classes of organization theory dealing with strategy, structure, operations, organizational culture or the organizational environment as identified by Hatch and Cunliffe in 2006.

The now following approaches can be connected with **cybernetic intelligence** as described by Schwaninger (2001), for whom (consistent with agency theory) the intelligent organization has:

- 1) Adaptability;
- 2) Effectiveness in shaping its environment;
- 3) Virtuosity (the ability to create a self-reconfiguration in relation to its environment);

4) Sustainability (the ability to make positive net contributions to viability and development of the larger supra-system in which the agency is embedded).

The concept of **cultural intelligence** (Earley & Ang, 2003) posits that understanding the impact of an individual's cultural background on their behavior is essential for effective business.

Given that wide diversity of approaches towards organizational intelligence, we aim at an approach that is capable to integrate the concept of organizational intelligence with different classes of organization theory and organizational culture theory (Fink, G., Yolles, M., Dauber, D. 2013).

3. Organizational intelligence

3.1. Concept and definitions

Thru time, organizational intelligence was defined by several researchers. Some of the definitions organizational intelligence has are mentioned below:

"Organizational intelligence is the talent and capacity of an organization to move his mental strength and focus the power of the mind in achieving its corporate objectives. Organizational Intelligence after his seven strategic vision, shared destiny, a desire for change, a spirit of unity and agreement, application of knowledge and the division of the pressure." (Nasabi 2008).

Another creator of the theory of organizational intelligence, Japanese T. Matsuda, considers the organizational intelligence, human intelligence and machine intelligence as consisting of two factors. His organizational intelligence has two basic components of the process and the product. (Matsuda, 1993).

Mathematically, organizational intelligence is the brain power available (the sum of individual intelligence) minus the entropy (disorder) plus (synergy). (Albrecht, 2002).

Organizational intelligence is one of the topics that have been planned by the challenges facing organizations. However, it differs from many of the topics raised in the line of it since it does not provide a solution to get rid of the difficulties and crises experienced by it, but provides a recipe characterized by a proactive approach, and optimization in the exploitation of knowledge resources. In this regard, organizational intelligence can be defined as the full management of the business sector, as well as the intelligence of established policies. Organizational intelligence reflects the ways of mutually reinforcing the receipt of tacit and explicit knowledge and works to increase the overall interaction of the organization with a view to achieving timely results (Marjani, A.B., Soheilipour, M. 2012).

Organizational intelligence is defined as an organization's ability to create and use knowledge to adapt to the market environment strategically (Porkiani, M. Hejinipoor, M. 2013). It is the ability of an organization to utilize all its mental strengths by managing and coordinating information, and acting wisely, so that it can meet the ever-changing needs of its customers and achieve its goals. It is an indicator of the measurement of successful business crisis management and includes the following aspects: extensiveness, realism, perspective, homogeneity, and development (Albrecht, Karl 2003).

Also, in order to increase organizational intelligence, the cost of development and maintenance should be increased. In this regard it can be said that organizational intelligence is a set of intrinsic capabilities and tacit knowledge possessed by an individual and used by things that are difficult to deal with by another individual (Sadq, Z. M., Othman, B., 2019).

3.2. Importance of organizational intelligence

In every organization, the importance of its intelligence is represented by the ability of the organization to solve organizational issues. Emphasis is placed on the integration of technical and human capacity to solve problems and difficulties. It integrates general information, experience and knowledge to understand the organizational problem (Porkiani,

M. &Hejinipoor, M. 2013). The importance of organizational intelligence highlights through the organization's ability to increase innovation, information, general knowledge, effective work and provides organizations with a competitive advantage by converting information into knowledge (Kashani. F. H. 2012). Organizational intelligence focuses on accurate understanding of challenges, improved knowledge management as well as communication with the internal and external environment of the organization. Organizational intelligence provides better data management. Furthermore, organizational intelligence is essential to increase the usefulness of education in the organization through continuous training (Iranzadeh, S., Gholamreza, E., Tohid, E. 2015). Understanding organizational intelligence has a great importance in commercial business. It reflects the ability of workers in the organization to enhance their capabilities and their ability to continually acquire skills and their desire to reach the desired results. Organizational intelligence is an organizational multi-level intelligence and is important because it leads to the achievement of intelligent organizations. This type of organization can be identified by identifying educated and smart organizations as well as market-oriented organizations and innovative organizations (Lefter, V., Prejmerean, M. and Vasilache, S., 2008).

3.3. *Dimensiones*

The dimensions of organizational intelligence were researched by Albrecht (2005) and Prejmerean and Vasilache (2007) and were identified seven dimensions: strategic vision, shared fate, change orientation, heart and soul, alignment, knowledge deployment, and performance pressure.

Strategic vision relates to presence or absence of environmental scanning, annual strategic review, statement of direction, value proposition, correlation between statement of direction and key decisions and Leaders' identification and promotion.

Shared fate consist in evaluation of plans and priorities sharing between management and employees, understanding organizational idea throughout organization, information sharing across departments, sense of belonging, employees – management partnership, employees' belief in the organization success and projected long lasting relationship with the organization.

Change orientation measure commitment in term of issuance of new university services to keep up with the demand, natural mechanisms to encourage innovation, employees' stimulation to find creative ways to better do their jobs, permission to question the habitual way of getting things done, bureaucracy, willingness of the management to admit their mistakes and to cancel nonworking strategies and openness.

Heart and soul shows overall quality of work life, as perceived by the employees, management's interests as perceived by the employees, pride taken in belonging to the organization, willingness from the part of the employees to spend extra effort to build organizational success and optimism regarding the future of employees' career in the organization.

Alignment is accounted for by organizational structure appropriateness to the mission, sense-making of rules and policies, as compared to priorities, facilitation of employee performance, information systems as facilitators, value creation, authority delegation, alignment of department's missions, as to facilitate cooperation.

Knowledge deployment takes into account cultural processes of knowledge sharing, managers' respect for employees' knowledge skills, porous organizational boundaries, information systems knowledge flows support, continuous study of the new tendencies at the managerial level, continuous learning programs support, accurate appreciation of employees' tacit knowledge.

Performance pressure is expressed by presence or absence of clear understanding of roles and responsibilities at all levels, on-going communication of performance goals and expectations, replacement of poorly performing employees, removal of failing managers, feedback to employees and recognition of their contributions, employees' perception that their work contributes to the organization's success and employees' perception that their career success is determined by their job performance.

3.4. Components

Organizational intelligence has three components of intellectual capital: human capital, organizational capital and relational capital. These concepts were defined in 2009 by Jung, Younghan as following:

Human capital is defined as the human resources within the organization that can be deployed to acquire and apply its knowledge to perform, respond, or control designated work with the available organizational assets.

Organizational capital represents the available assets, excluding HC, that are available to support the performance of organizational activities. It includes both tangible and intangible assets such as system, policy, culture, and so on. Information/Communication Technology (ICT) is an example of tangible assets. Intangible assets indicate intellectual property with the organization such as attitude, culture, leadership, and policy.

Relational capital is a special phenomenon that combines human capital and organizational capital to perform a specific organizational activity. For instance, the use of a computer for estimating in the construction company integrates human capital and organizational capital. The specific organizational activity is estimating, human capital is an estimator, and organizational capital is a computer. Relational capital requires items such as education, experience, appropriate policy, and software that are from both human capital and organizational capital.

Organizational intelligence optimizes these elements and applies them to managerial processes in order to clarify and intensify the organization's performance requirements. This performance optimization is based on understanding and integrating human and organizational intelligence in accordance with the three capitals and specific organizational activity (Jung, Younghan, 2009).

4. Human capital and cognitive abilities

4.1. Human capital

Human capital is the stock of productive skills, talents, health and expertise of the labor force, just as physical capital is the stock of plant, equipment, machines, and tools. Within this type of capital the performance, vintage and efficiency can vary. The stocks of human and physical capital are produced through a set of investment decisions, where the investment is costly in terms of direct costs and, for human capital investment, in terms of the opportunity cost of the individual's time (Goldin, C., 2014). The human capital of an organization is represented by the human resources within the organization that can be deployed to acquire and apply its knowledge to perform, respond, or control designated work with available organizational assets, in order to create and increase organizational intelligence.

4.2. Human cognitive abilities

In 2000, American Heritage Dictionary define the term ability as "the quality of being able to do something: physical, mental, financial, or legal power to accomplish something". From psychological point of view, ability was defined as "actual power to perform an act, physical or mental, whether or not attained by training and education" (English, H. B., & English, A. C., 1958). Also, the research uses human cognitive abilities as the basis of a fundamental structure

from which to form new organizational cognitive abilities that are capable of presenting management processes as critical value creations (Jung, Younghan, 2009).

From professional perspective, human cognitive abilities are the skills that people use in relation with other people or tasks they need to perform and consist in abilities such as communication, teamwork, and adaptability, understanding body language, empathy, self-awareness or growth mindset.

5. Conclusions

Considering the information, definitions, concepts and approaches presented in this article, the human resource capital is highlighted as the most precious capital of an environment, its quality and performance being responsible for increasing organizational intelligence. Human intelligence is perceived as an ability of an individual's ability to solve verbal, mathematical, spatial, memory, and reasoning problems. So far, no widely accepted statement of organizational intelligence has been defined to include concepts such as human intelligence, corporate knowledge management, business strategy, and decision support systems.

This article dealt with organizational intelligence in terms of size, skills and categories of capital. Compared to human intelligence, organizational intelligence is easily modified and developed through the use of different resources. Also, capital capacity has an impact on the performance of an organizational activity. In this article we analyzed the organizational factors that influence the overall performance and intelligence of organizations, with an emphasis on human capital.

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