

The role of Economic knowledge management in human resource development

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Abstract:

The study aims to clarify the role of knowledge management in developing human resource performance and understand the relationship between knowledge management and human resources. It also aims to understand the transition from an old, object-based economy to a new, knowledge-based economy, and from a society whose wealth depends on machines to one in which knowledge is the source of wealth. Knowledge does not arise from a vacuum; rather, it is the product of a reciprocal interaction between human expertise, material resources, technology, and scientific research and development.

Keywords: Knowledge; Management; Information Technology; Human Resources.

INTRODUCTION :

Recent decades have witnessed significant economic and social transformations that have led to significant changes in the lives of organizations and individuals. These changes have also increased the number of jobs and the demand for knowledge and skills among individuals to achieve continued success.

Human resources are considered one of the most important elements of production in an organization, as numerous studies have confirmed their importance. Investing in this resource is crucial, as human resources represent an intellectual and cognitive force that helps manage and operate organizations of all kinds.

The secret to the success of major global organizations lies in the efficient use of available resources through human resources. Therefore, it has become essential for organizations today to preserve their most important asset, represented by human resources, and to care for them and develop their skills and capabilities through various means and methods. Perhaps the most prominent of these is the implementation of knowledge management, which is one of the best methods organizations can resort to to improve performance and develop skills and knowledge through the process of educating and training the workforce on knowledge.

Since the early 1990s, interest in knowledge management has grown. Economists have developed a new vision for how to collect, manage, and develop knowledge to achieve organizational goals and gain a competitive advantage. Recent years have also witnessed unprecedented developments in the technological field, particularly with regard to information technology and how to efficiently employ it in most human activities. Accordingly, human resource management cannot be separated from information technology.

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Knowledge management has become one of the most important modern concepts that effectively influence the success of companies and institutions. This idea is based on obligating institutions to utilize all their knowledge to achieve change that leads to development and success. To address the challenges of preparing highly skilled individuals to enter the labour market, re-educating, rehabilitating, and developing the workforce's competencies stems from the need to implement knowledge management as a modern mechanism and gateway to achieving excellence.

To address this issue, we pose the following question: **To what extent can knowledge management impact human resource development?**

This study also aims to understand the concept of economic knowledge management and its importance; to shed light on the most important goals and concepts of human development. To cover all aspects of the topic, the research is divided into the following sections:

1. The Concept of Economic Knowledge Management

2. Applying economic knowledge management to improve human resource performance.

1. The Concept of Economic Knowledge Management

The success of any organization depends largely on the quality of its intangible assets. These assets include human resources, which are the organization's strategic resource and its lifeblood in facing competition. High-performing organizations are those that possess expertise and knowledge that are difficult to imitate. However, this interest in knowledge has often been interpreted as a product of

information and communication technologies. Because they enable greater capacity to store and disseminate information, information and communication technologies are fundamental to all forms of intangible development.

1.1. Concept of knowledge economy:

1.1.1. The definition of knowledge economy:

The term knowledge economy was popularized by Peter Drucker in his book **"The Effective Executive"** published in 1966. The knowledge economy is defined as **"an economic system based more on intellectual capabilities than on physical inputs or natural resources. Instead of traditional inputs, big data analytics and automation are essential components of the production process"**(Zuwaitf, 2011, p. 31).

The Organization for Economic Co-operation and Development defined the knowledge economy as **"an economy based primarily on the production, dissemination, and use of knowledge and information."** The United Nations Development Programme defined it as **" The efficient dissemination, production, and use of knowledge in all societal activities, including the economy, civil society, politics, and private life, with the goal of improving the human condition. This requires the building of human capabilities and the successful distribution of these capabilities."**(Saad Ali Al-Atri, 2014, p. 441).

A knowledge economy is characterized by greater flexibility and better equipped to respond to specific economic problems and challenges. It also refers to the understanding and application of knowledge, skills, and cognitive abilities within the economy.

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This approach emphasizes the importance of human capital, intellectual property, and innovative ideas in driving economic growth through the following (Al-Bilawi, 2012, p. 114):

- Knowledge as a primary resource: Rather than relying heavily on natural resources or physical assets, the knowledge economy prioritizes knowledge as the primary driver of economic activity.
- Intellectual property and human capital: The value of a knowledge economy is often linked to the creation and use of intellectual property, as well as the skills and capabilities of its workforce.
- Focus on innovation: A knowledge economy encourages innovation; both in terms of new products and services and in the way companies operate.
- Knowledge-intensive industries: Many sectors, such as technology, research and development, and various service sectors, are becoming increasingly knowledge-intensive.
- Impact on the economy: A knowledge economy can lead to increased productivity, economic growth, and a more competitive global environment.

1.1.2. The characteristics of a knowledge economy:

Here are some characteristics of a knowledge economy:

- Institutional structures that stimulate entrepreneurship;
- Knowledge utilization;
- Availability of skilled labor and a good education system;

- Access to ICT infrastructure;
- A vibrant innovation ecosystem encompassing academia, the private sector, and civil society;
- Increasing demand for STEM talent;
- Development of industrial "clusters" in specific geographic areas;
- Sharp increases in patents;
- Knowledge sharing across industries;
- Innovation-driven producers and users (e.g., open source software and customer feedback) and global diffusion of knowledge (Ahmad, 2018, p. 20).

Consequently, with the emergence of the knowledge economy, the production of intangible assets, particularly technology and patents, has increased. ICT industries contribute to driving economic growth in areas such as artificial intelligence and robotics in the knowledge economy, and exchange between research centers, universities, and think tanks encourages further innovation.

1.2/ The concept of knowledge management:

1.2.1. The definition of knowledge management:

Knowledge management is one of the newest concepts in management science, and one of its most important features is the vitality of activities that impact the quality and type of work. Knowledge management is defined as **"the processes that help organizations generate, acquire, select, organize, utilize, disseminate, and transform important information and expertise - information and expertise essential to various**

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managerial activities for decision-making and problem-solving."(Belkheiri, 2011, p. 341) .

It is also defined as **"the process by which accumulated knowledge is gathered and used from anywhere in the business—whether in documents, databases, or the minds of employees—to add value to the company through innovation in unprecedented ways."** (Ahmad, 2018, p. 125).

Thus, knowledge management represents a contemporary intellectual development that focuses on knowledge-based workers and individuals with distinct specializations and capabilities. Management leverages its relationships with existing and new clients who possess ideas, expertise, and knowledge unavailable to the organization, or difficult to obtain on its own.

Therefore, acquiring this knowledge will enable it to develop its relationships and achieve its desired goals. With the emergence of the knowledge economy, the production of intangible assets, particularly technology and patents, has increased, and information and communications technology (ICT) industries are driving economic growth in areas such as artificial intelligence and robotics. In the knowledge economy, exchanges between research centers, universities, and think tanks encourage greater innovation; it is also characterized by the development of regions focused on specific industries technology in Silicon Valley and automotive engineering in Germany.

Research has shown that investments in information technology lead to productivity growth that outperforms other investments, but only when combined with organizational changes. Common organizational changes may include the implementation of profit-

sharing plans and increased employee participation in decision-making (Zuwailf, 2011, p. 117).

1.2.2. Knowledge management objectives:

Knowledge management in the organization aims to:

- Streamline processes and reduce costs by eliminating lengthy or unnecessary procedures;
- Improving customer service by reducing the time required to provide the required services;
- Embracing the idea of creativity by encouraging the principle of free flow of ideas;
- Increase financial returns by marketing products and services more effectively;
- Activating knowledge and intellectual capital to improve service delivery methods;
- Improving the institution's image and developing its relations with its peers;
- Creating a unified source of knowledge;
- Creating an interactive environment to collect, document and transfer cumulative experiences gained from and during daily practice;
- Affirming the principle and concept of cognitive culture;
- Preserving and developing knowledge assets;

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Knowledge management can contribute to improving employee performance;

- It enables senior management and decision-makers to utilize the organization's resources correctly and at the right time (Al-Bilawi, 2012, p. 32).

1.2.3. Knowledge management processes:

Knowledge management processes include the following:

a) Knowledge Diagnosis:

Knowledge Diagnosis is critical, as its success depends on the accuracy of the diagnosis it provides. Therefore, if an organization wants to monitor its knowledge capabilities, it must follow two paths: First, identify internal knowledge, which represents the organization's capabilities and the information and expertise possessed by its individuals that benefit the organization and its future. Second, identify knowledge from external sources, which represents the knowledge environment surrounding the organization, which must be carefully monitored in accordance with the organization's objectives (Belkheiri, 2011, p. 120).

b) Knowledge Generation:

One of the reasons organizations place great importance on knowledge generation is its rapid diffusion in highly competitive knowledge-based markets. Knowledge is generated through the participation of work teams and support groups to generate new knowledge capital on new issues and practices, contributing to the

identification of problems and the development of new solutions in an innovative and continuous manner (Belkheiri, 2011, p. 122).

c) Knowledge Storage and Retention:

Organizations face a significant risk of losing much of the knowledge held by individuals who leave for one reason or another. Hence, storing and preserving knowledge has become extremely important, as neglecting this process means losing the organization's expertise and analysis of the situations it faces.

d) Knowledge Distribution:

This includes sharing, disseminating, transferring, and sharing knowledge. Enabling participation in knowledge collection or placing it within a system and procedures that allow it to be distributed to all interested parties is vital for the organization that possesses this knowledge, as this benefits all participants, thus achieving the public interest (Samia, 2019, p. 48).

e) Knowledge Application:

The final process of knowledge management requires the optimal use and application of knowledge by organizations. To achieve this benefit, knowledge must be fully applied to activities through all knowledge management processes. Managers must make significant efforts to foster a culture that encourages the effective application of knowledge (Samia, 2019, p. 49).

1.2.4. Models of knowledge management:

Philosophers and psychologists have tried to explain and interpret how individuals think, and how they work, as well as how they

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organize the knowledge they possess. Among the most prominent characteristics that must be available in any knowledge management model are the following:

- Flexibility: The system must be able to accommodate variables and make necessary adjustments, whether by increasing or decreasing them.
- Comprehensiveness: It must include all the basic requirements that provide it with reasons for continuity;
- To be able to provide the organization with the necessary knowledge and ensure its sustainability and continuity;
- Availability of qualified human elements capable of managing the system, which may be a specialized work team;
- Agreement and harmony with the organization's objectives, strategic plan, activities and work procedures;
- Competent leadership: Knowledge management revolves around providing an organizational environment that leads to the generation and sharing of knowledge (Mahdi Hassan Zuwailf, 2011, p. 231).

Many models have been developed for knowledge management in organizations, including:

a) Hope Model of Knowledge Management:

It includes four main dimensions as mentioned by:

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- Accumulated knowledge and experience that leads to creativity in solving the problem.
- Implement and integrate new methodological tools and techniques to enhance internal processes.
- The organization's experiences in building future capacities.
- Activities to import knowledge and expertise from abroad with the aim of improving the organization's core capabilities.

Hope also suggested that knowledge organizations and organizations that produce and market knowledge products and services are, above all, learning organizations, and that the learning process in knowledge organizations is a continuous, ongoing process that has no destination (Hussein, 2014, p. 11).

b) Massey et al model:

This model is based on the framework presented by Holsaple and Joshi, as the success of knowledge management stems from an understanding of the organization and the users of organizational knowledge and how they use it. This model consists of a set of elements, namely:

- **Knowledge management strategy:** The process of knowledge use is determined, what knowledge is acquired, its source, its users, and its form.
- **Main administrative influences:** Administrative support is determined by management, program management resources, and the process of controlling resources.

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- **Key resource implications:** These include the financial and knowledge resources you need to build a knowledge management system.
- Infrastructure influences: describe the external forces that direct the university to invest its knowledge (Hussein, 2014, p. 12).

c) 4- Institutional knowledge development cycle model:

The corporate knowledge development cycle model consists of five basic stages. They are (Marcel Coti, 2002, p. 102):

- **Knowledge Development:** Knowledge is developed and prepared through learning, creativity, and innovation processes, and through research efforts that aim to bring in and import knowledge from outside the organization.
- **Knowledge Acquisition stage:** where knowledge is controlled, acquired, stored and retained for use and various processing operations in order to achieve knowledge upgrading processes.
- **Knowledge Refinement Stage:** In this stage, knowledge is organized and transformed into forms useful to the organization. Here, knowledge may be transformed into written materials or into knowledge bases that benefit the organization.
- **Knowledge Distribution and Deployment stage:** During this process, knowledge is distributed and disseminated to reach every center and every point of work. The process of supply and dissemination takes place through education, teaching programs, knowledge-based systems, and expert business

networks. Knowledge is distributed to include individuals, procedures, technologies, and products (goods and services).

- **Knowledge Leveraging** stage: In this stage, the organization has adopted and applied knowledge as a result of the previous four stages. Here, the organization begins to achieve the advantage of knowledge leverage. This advantage is similar to the advantage of financial leverage (financial leverage in the field of financial management). It provides the organization with better learning processes and increases innovation and creativity processes.

d) Offman&Jennex model:

This model is based on the use of successful influences in management systems. Knowledge and dimensions of the model include (Marcel Coti, 2002, p. 104):

- System quality:** How the knowledge management system performs the functions of creating, storing, retrieving, transforming, and applying knowledge.
- Quality of knowledge:** ensuring that acquired knowledge is available to all users.
- User satisfaction:** It indicates the level at which the knowledge management system achieves a high level of satisfaction for its users.
- Potential returns:** Measuring the benefits and impacts that a knowledge management system creates for each user.
- Collective impact:** An individual's use of a knowledge management system improves the quality of his or her performance

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in the workplace, which in turn is reflected in performance within universities.

2. Applying economic knowledge management to improve human resource performance.

Through this study, we hypothesize that knowledge management will become more efficient if questions are addressed about work structure and how people are managed. Implementing a work design that brings stakeholders together and encourages their exchanges will have a significant impact on the production and renewal of knowledge. Similarly, a human resource management strategy that takes into account workers' intelligence will also have a significant impact on their thinking and actions.

2.1. The Concept of Human Resources Management:

Human resources management is concerned with the optimal and effective use of human resources at all organizational levels, ensuring the organization achieves its goals. It also plays a role in meeting the organization's workforce needs, retaining them, and developing their capabilities and desire to work, which helps create a satisfied and productive workforce.

2.1.1. Definition of human resource development:

There are several definitions of human resource development, the most important of which are the following: Human resource development means: **"Improving and developing the behavioural patterns of individuals and working to modify their attitudes and beliefs to adapt to changing conditions in the external environment and making individuals more capable of dealing**

with those conditions by achieving a balance between the nature of these individuals—in terms of their goals, motivations, personalities, abilities, and aspirations—and the work, functions, and objectives of the organization." (Besson, 2003, p. 94).

Human resource development can also be defined as: "An expression referring to the integrated, objectively planned process based on accurate information, which aims to create a workforce that is compatible with the work requirements of specific organizations, understands the conditions, rules, methods, and capabilities required for performance, is able to apply those rules and methods, and is prepared to perform the work utilizing their abilities and skills." (Mohamed Zargoun, 2014, p. 351).

2.1.2. Objectives of Human Resource Management:

These objectives can be summarized as follows:

- **Social objectives:** These objectives aim to help individuals find the best, most productive, and most profitable jobs that make them happy, motivated, and willing to work, in order to achieve the overall well-being of individuals in society.
- **Employee objectives:** These include working to develop and promote individuals within stimulating working conditions that encourage them to perform. Efficient and effective work increases employees' income. It also adopts objective policies that limit the depletion of human resources and avoid inhumane treatment of employees (Ahmad, 2018, p. 24).

2.1.3. The organization's objectives:

- Attracting qualified talent through selection and appointment based on objective criteria.

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- Maximizing human resources through training and development through internships to identify the expertise and knowledge that align with the organization's development.
- Working to increase employees' willingness to put in effort and dedication, and to integrate the organization's goals with their own to create mutual cooperation. This can be achieved by providing a fair distribution of wages and benefits, and providing all guarantees in the event of retirement or illness.
- Knowledge Economy and Labor: The knowledge economy is the primary reason for the proliferation of STEM jobs, such as computer science, engineering, chemistry, and biology. Skills such as data analysis, working with financial models, and the ability to innovate are in high demand in this economy (Carol, 2005, p. 88).

2.2. The role of knowledge management in developing and serving the organization's human capital:

The role of knowledge management in developing and serving human capital in the organization is as follows:

2.2.1. Knowledge management contributes to facilitating partnerships with users :

with the aim of increasing the returns on the organization's human capital investments, including capabilities that encompass experience, social skills, values, and beliefs. In this context, individuals need guidance and facilitation rather than monitoring and controlling them. This means reducing oversight and authoritarian roles to encourage voluntary individual contribution (Carol, 2005, p. 87).

2.2.2. Facilitating knowledge and enhancing culture:

The increasing proportion of educated human resources is reflected in cultural development. For society, this increases awareness and increases the ability to accomplish tasks faster and better. Motivation and evaluation in organizations also help support the required knowledge management.

2.2.3. Building relationships among employees within the organization:

Its essence lies in managing relationships between individuals and groups to enhance human capital. Social capital is built through a series of values such as trust, respect, empathy, cooperation, and caring. Appropriate human resource management strategies for building these relationships are achieved through teamwork, organizational communication, and resource exchange within the organization (Marcel Coti, 2002, p. 200).

2.2.4. Developing human capital resources quickly and flexibly:

A competitive organization requires speed. Therefore, human resource management must assume the responsibility of developing human capital resources flexibly, with an emphasis on adaptability and the ability to learn. This requires encouraging appropriate employee behavior, team behavior, and values that support flexibility, adaptability, and creativity.

2.2.4. Investing in human capital: Human capital is defined as the sum of an individual's intellectual and professional capabilities:

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This concept encourages investment in human capital through training. There is a difference between general human capital, which is usually represented by acquired certificates and professional experience in the labor market. It is transferable from one institution to another, as it does not carry any specificity, unlike specific human capital, which is formed and accumulated throughout the period of the worker's stay in the institution in which he works (its source is the specific training that the worker receives when using equipment or machines that are used exclusively by the institution) (Carol, 2005, p. 88).

2.2.5. Developing education and providing scientific personnel:

Learning is the transfer of knowledge, experience, or skill through exchange, interaction, and participation between two parties in a relationship that transcends formal to informal, from mechanical transfer to human interaction, and from a specific program to a social activity. This is the difference between learning and training, all of which give learning its vital character of capacity building. Because learning is a skill or knowledge defined by a specific context and specific relationships between specific individuals, it can only take place within the workplace, through interactions among its members and within the prevailing language and values (Carol, 2005, p. 89):

- Knowledge Sharing and Collaboration Development
Currently, knowledge sharing and collaboration development are the major concerns of HR managers, with the goal of improving the following aspects:
- Individuals' attitudes toward their jobs and the tasks assigned to them.

- Malleying collective capabilities at work by building social networks based on cooperation rather than authority.
- Knowledge is formed within the framework of collaboration among individuals during the production stages, but its usefulness increases when it is formed within the framework of interactions between them within a knowledge framework represented by the work team (Besson, 2003, p. 310).

Conclusion:

Developing human capital, enhancing learning capabilities, and motivating employees to be creative have become management priorities. Human resources represent the core of the production process and are essential for formulating plans and strategies and making effective decisions that lead either to the organization's success, growth, and prosperity, or to its failure and collapse. On the other hand, the technology used within an organization contributes to improving productivity, developing competitive capabilities, and achieving the organization's overall strategic objectives.

While human resources represent the cornerstone of improving organizational productivity, the human resources management function represents the administrative apparatus responsible for managing these resources and unleashing their intellectual and creative potential.

Knowledge management ensures the exchange and sharing of this knowledge, which contributes to the development and improvement of employee performance and directs their behaviour toward effective performance.

Accordingly, we conclude that knowledge management contributes to the development of the following aspects of human resources:

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- It is a motivational tool for organizations to encourage the creative abilities of their human resources to create new knowledge and identify gaps in their expectations;
- It enhances the organization's ability to retain and improve the performance of human resources and the level of their expertise and knowledge;
- It documents, develops, and shares available knowledge among organizational members.
- Developing the individual's mental and intellectual abilities and providing them with balanced behavioral values, making them more capable of confronting social problems, in addition to fostering a sense of self.
- Achieving security and stability in society by increasing education and reducing unemployment.

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