# Information Technology And Konowledge Management As A Condition For Corporate Success

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Abstract—Today, corporate and market business is of great importance if information technologies are incorporated into all spheres of business. Knowledge management in this and other areas exceeds all other needs and is placed as a priority factor of successful business. The role of the organization is to create an environment, that develops the ability of its members to constantly progress and that supports creativity and creative thinking through its belief that, creativity is the most important factor in encouraging activities within the organization and achieving organizational goals.

This has a positive effect on improving the performance of business development and keeps pace with the conditions and variables that make the organization capable of sustainability and growth because, creative thinking has a significant impact on the efficiency of the organization.

Knowledge management is a complex area of the 21'st century, where organizations are faced with strong competition that brings novelties, ideas, innovations, creativity, etc. to the forefront faster and faster. This means, that companies are placing increasing demands on management and managers at all levels of knowledge development and in all areas, claiming primarily information technology as the basis for all other jobs.

Creativity is one of the most important topics in the present time, it is in fact a phenomenon that began to develop from the beginning of the evolution of the phases of human life. For the field of knowledge management, including information technology, creativity is a multiple process in which the interaction of several variables takes place.

The phrase that an individual has a hard time resorting to creativity does not apply to knowledge managers, but on the contrary if he thinks that he can efficiently and qualitatively

adapt and adapt to new conditions of market laws, as well as for the survival and growth of his own company.

Given the rapid changes in market demands and the continuous development nowadays, it actually requires that the individual be more creative and able to cope with the circumstances and changes that surround him in the business world.

Keywords—Knowledge management, information technologies, corporate success,

## creativity, modern business.

### I. INTRODUCTION

Modern business organizations incorporate new needs and requirements of managers at all levels to expand and successfully manage their knowledge in order to achieve efficiency improvements in all important business segments: in the financial segment, operational service, innovative, creative and everyone else. Every knowledge manager must achieve sustainable results in this.

The business of companies on a global level shows that without information technologies, financial markets cannot react successfully to global trends, and that financial companies cannot consistently acquire relevant information at the same time as their competitors. As examples show in the world, the Internet provides uninterrupted access to credit ratings (according to economic sciences, it is a set of objectified and standardized data covering the entire business of one business entity. It is determined based on a special methodology that includes financial and economic analysis of business in the previous year), and credit ratings to all lenders, insurance companies and businesses that need financially responsible clients.

Observed on a global level, most authors believe that the problems faced by individual companies can be successfully explained if they develop knowledge about their roots, that is form, type, level and depth of organizational culture that has a key effect in each company. companies are not only in finance, technology or organizational structure, but it is in a wide range of factors of business quality of external and internal environment.

The process of knowledge management development is correlated with the application of IT technologies on the overall performance of managers and the performance of the organization in which they work [1]. It should be borne in mind that in industrial business today, Information Technology has become a motivator for organizations that are focused on market competition, excellence in the quality of their own products, their production, efficiency and effectiveness and high performance and quality.

Therefore, organizations compete in preparing a good basis for the implementation of information technology. The goal is, to quickly develop the required level of performance, improve administrative decisions, simplify and facilitate procedures, as well as the optimal use of skilled labor. In addition, the significant contribution of IT technologies and knowledge is reflected in the financial system through the application of various procedures and changes: u (structure, process, organization management and training of customers - users, how to use them in practice, to ensure proper functioning of the system knowledge development and how to achieve efficient business standards and the overall performance that organizations strive to achieve [2].

# II. KNOWLEDGE MANAGEMENT AND PERFORMANCE EFFICIENCY

The development of knowledge management in today's information revolution can be explained through the 5 principles shown in Figure 1. Namely, the 5 steps of management structure 3 important steps, it is: [3].

- 1. Assessment an effective measurement method is applied to evaluate the plans in order to identify and mark important problems or general problems.
- 2. Solve effective structuring as well as destructuring of the process, and identify specific problems for example, those that include taking action to solve the problem and updating the plan to improve the previous problematic state of the process. This step requires the application of the Business Element Method and forms the core of the framework.
- 3. Periodic application of the given steps is realistically satisfactory, and the given method can

be used from any moment.

- 4. For example, if there is no plan, the method can be applied starting from step 2.
- 5. If some problems have already been identified, e.g. as a result of an assessment or exercise after the event, then the starting point could be step 3.

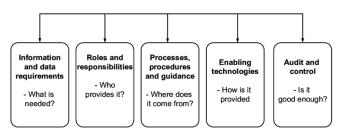


Figure 1. "5 principles" of information management knowledge

Also effective is the "FIM FRAME" method, which can be used as a process of continuous improvement, e.g. to re-evaluate the plan after it was last updated.

### Starting from:

- Information and data requirements , where the question is considered: What is needed?
- Then we look at Roles and reposibilities , where the question is considered, Who provides it Who gives it?
- Processes procedures and quidance (handshake) are processed and the question is asked,

Where does it come from?

- Enabling technologies, and knowledge management answers the question, How is it

provided?

- Audit and control, attitudes are established, Is it good enough?

Significant performances in determining the use of information technology and performance.

In the successful implementation of business and production processes in industry, it is important to determine the relevant performance that determines the relationship between the use of information technology and performance, and which play an important role in knowledge management.

The essence is to manage the management on the following characteristics:

- 1. To understand and develop modern trends in the development and implementation of the necessary knowledge in the field that will significantly affect the improvement of performance in a fast, efficient and accurate way with minimal costs, and as an advantage over doing business in the old traditional way.
- 2. The burden of routine responsibilities of managers with such an approach to knowledge, management will be effectively reduced, which gives managers the opportunity to use this time in strategic planning and composition of general business strategy and policy of the organization, which contributes to raising the efficiency and effectiveness of (top management).
- 3. The modern way of management influences the moral side of workers in terms of increasing their

loyalty and belonging to the organization, providing them with access to information regarding new knowledge, innovations and advantages in business easily and quickly, which contributes to improving their participation in the decision-making process decision.

- 4. Management creates good conditions for greater interest of organizations in the IT field and greater to competitive advantage, encourages greater use of information technology, and this means increased and emphasized interest in continuous research, development and training and faster construction and development of individual capacities.
- 5. Knowledge management creates an effective organizational culture and administrative directives business principles and standards at the highest level in each organization, regardless of the results of their administrative processes, while playing an important role in orienting the application of information technology in the organizational environment where it is adopted and developed favorable environment for the entire administrative process.
- 6. The given principles of efficient knowledge management contribute to increasing organizational efficiency to achieve long-term goal, which refers to the survival, growth and continuity of business guided by improving learning processes, knowledge transfer, use of local and global business networks, improving efficiency and quality of decision making, content, increasing the efficiency of the process of administrative communication inside and outside the organization, as well as improving the process of coordination and cooperation between different levels and administrative units in order to achieve the business goals of the organization.
- 7. It is important to emphasize an important feature, which refers to the contribution to increasing the efficiency of the organization in the exploitation of its available and various sources, in order to create the necessary quality "out way", ie the product at the optimal possible price, measured through automation activities based on business and computer applications that contribute to improving product quality and reducing inequalities in the level of performance in the use of available goods and services.
- 8. Also an important approach to this way of managing knowledge is to contribute to increasing the possibilities of the organization in internal and external markets, as well as activating the process of generating and applying new ideas necessary for the development of goods and services, etc.

This shows that corporate success is possible today, if more and more attention is paid to the quantity, speed and quality of information that play a significant role in forming the decision-making model. The process of using decision theories is very important and is based on the idea that the composition of the working group influences the way in which the working group processes information, communicates and makes decisions [4].

Figure 2. shows the tools in IT technologies for the development of knowledge and its management in a large number of situations in the market space [5]. The essence is that the management is developing Information Technologies that have caused great changes in the business world that are growing rapidly and advancing according to market laws. It is an important tool for business, social and moral development.

Thus, the theory of information and decision making can be observed together with the theory of information processing. At the same time, knowledge management concentrates on the existence of a variety of ways in which individuals process information due to different origins of information in different areas, why they play a crucial role: skills, education, experience that can positively affect group performance and the like. This approach explains that in different groups, individuals have different views and approaches to the problem, as well as different sources of information and expertise.



Figure 2. IT tools for knowledge development in a large number of different areas

### of corporate business

The theory of information processing in world research studies claims that information can improve the outcome of group work, even when it creates coordination and integration of problems in the group. Similarly, information theory and decision theory argue that for functions: information production and decision making there are faulty processes that result from high levels of heterogeneity. The goal is to realize as much creativity as possible, as many ideas as possible, and as much knowledge as possible.

It is important for management to know that Information and Decision Theories are used to show how integration is possible given the multitude of ideas present in the group, needed to develop a wellrounded and integrated decision. As a result of different information in the group, members are more likely to share and coordinate opinions with individuals who have different views than their own. Using this theory, it can be predicted that group functioning is a variable's such as information sharing, problem solving, decision making, and improving the results of different information.

That is why it is important to give the so-called behavioral theories are used to explain the possible group of diversity on performance. effects Understanding management and employees in forecasting, as these theories in management and understanding show that diversity can affect the performance potential of a group. Scientists and theorists Mannick and Neale argue that instead of using one theory, the possible effects of diversity should be analyzed, using a combination of given theories. Achieving a fully balanced perspective can be achieved given the intersection of categorization self-categorization/social identity, similarityattraction theories) and approaches to information. Perspective categorization explains how individuals develop their identity to relate better to similar others, which helps to explain what individuals feel toward the validation of homogeneity and affiliation.

success of processing all important information depends on the degree of understanding: how specificity and differences can create new approaches, learning and improved performance through interaction and constructive exchange of information. Therefore, attention is paid to developing knowledge for social categorization and similarity where it is important to analyze attraction as a process that is very important in corporate business, and which can often interfere with communication, reduce group cohesion and lead to higher levels of dysfunctional conflict, of their differences perspective. In doing so, management understands that diversity in knowledge is a thought that results in better group performance [6].

Modern management starts from the fact presented by the researcher (O. Reilly, 1998) that different groups provide a larger number of useful resources, and it is necessary to reconcile opposing views in this regard. The advantage is that different groups of employees can process the task - with relevant information that will generate more thorough and more creative and innovative ideas and good solutions [7].

If we pay attention to Social Identity as an important social categorization, it will be seen that in the theory of similarity - attraction, it is pointed out that the differences within the team are negative because they make the social process more difficult. On the other hand, the effect of information processing theory indicates that the differences are positive because they result in different contributions to the team. A diverse team covers a wider range of information, enters a wider range of perspectives, can solve a problem more easily, has greater creativity, innovation and adaptability [8].

The action of knowledge management in corporate business shows that organizations can strive to act from the perspective of integration and learning shows that the perspective in an efficient decision-making process does not always happen.

III. THE IMPORTANCE OF KNOWLEDGE MANAGEMENT IN DEFINING OF A SUCCESSFUL **BUSINESS** 

The role of knowledge management is reflected in the consideration of theory and practice, ie understanding, how Information Theory predicts a positive relationship between diversity and business performance. Empirical research that has solved this relationship in the team environment is highlighted, looking at variable performance such as: problem solving, effectiveness and overall performance achieved. Scientist and practitioner Watson, Kumar, and Michaelsen examined the impact of cultural diversity on current organizational groups — group processes and problem solving — to answer the question of how a high degree of cultural diversity reflects on group interaction and group problem solving over time

The results of Watson's research show that a high degree of cultural diversity nevertheless limits the process and performance among group members in newly formed groups. Watson's study shows that, when compared to a culturally homogeneous group, the newly formed diverse group was not as effective because of the need to deal with a high degree of cultural diversity.

Theorists and practitioners Bunderson and Satkliff examined the effect of functional diversity: they viewed it as a product of differences in expertise and experience, including how it was conceived of information exchange and performance in teams. The researchers identified three conceptualizations of functional diversity: [9].

1) the dominant function of diversity (diversity in different functional areas within which

team members have spent most of their careers).

2) the dominant background of diversity (diversity of the complete functional background of

the members team) and

3) functional task of diversity (diversity in the members of the team of functional tasks) [10].

Scientists Bunderson and Satkliff predicted that the dominant function of team diversity would be negatively related to information sharing within the team. They hypothesized that sharing information within teams would have a partial indirect effect on the positive relationships between intrapersonal functional diversity of the team and the negative relationship between the dominant function of team diversity. Based on the research shown, Bunderson and Satkliff determined that intrapersonal functional diversity is positively related to the exchange of information.

The obtained results showed that the dispersion of team members across functional areas of expertise increases the probability that team members will have very different experiences and that they will therefore have difficulties in communication and relationships with each other. Finally, it was concluded that the exchange of information is partly mediated in the relationship between the dominant diversity function and the unit of performance.

Within knowledge management, it is important to show that organizations can benefit significantly from the development of team management composed of individuals who are functionally strong to improve information sharing and performance in teams.

Collective efficiency is a consequence of group action. Efficiency is achieved thanks to their ability to perform a specific task. Researchers divide mental models and it: cognitive representations of task requirements, procedures, and roles of responsibility, as follows: [11].

- That groups with more efficiency will have more shared mental models, and that later, groups with more common mental models will have more efficiency
- The process of measuring these variables included **questions** for **group members**, for example,
- 1) How much would everyone contribute to each component of the project? and
- 2) How important is each component to complete the project?

Scientists Jones & Hill (2006), in their research believe that: [12].

1. Managerial and additional creativity is the essence of the organizational effect of

knowledge development and successful business.

2. Creativity according to this research reflects: the ability of the individual and the manager to generate creative knowledge and ideas in bringing about structural and cultural change in organization.

Scientific and pragmatic research (Basardh 2015), entitled "Integrations of knowledge management and total quality and their impact on performance", show that: [13]

Performance is a measure of efficiency, effectiveness and learning of human resources. Also, performance is a basic measure of success and an indicator on the basis of which many administrative decisions are adopted. The research shows the effect of each element of knowledge management and each element of total quality management in performance observed as a whole process in the organization [14]. The idea of this research is to consider the impact of management on knowledge in case of inefficiency of performance, where the organization is concentrated on the use of results and experiences of previous research and their application in domestic companies. The goal is to emphasize the impact of each knowledge management element on each performance component. Thus, research confirms that the interrelationships between:

- variables of knowledge management elements and
- performance variables in the administrative environment,

remain limited in the application of knowledge management principles, and are very much needed in practice, in order to strengthen their market positions and to improve the level of performance [15].

#### CONCLUSION

The success of business organizations requires keeping pace with everything new in management, specifically in their ability to use their resources in all activities and to increase the level of knowledge gained. This is important for generating results that contribute to their survival and growth and that guarantee access to high positioning in competition, entrepreneurship and creativity. When organizations reach a state where they can crystallize their knowledge management ideas, then they can take the initiative that they will later validate through successful results.

The greatest role of knowledge management is in increasing the performance of the organization. The reason for the greater involvement of new knowledge management methods is the need to increase value in business organizations, to meet all customer requirements and to make business easier to cope with the rapid changes taking place in the environment.

Among the most important factors that have stimulated the emergence of knowledge management is the greater use of information and communication technology, so that no challenge is more unsolvable in finding better information for the organization, but how to identify the most important and useful information.

The fourth world revolution of science and practice belongs to the application of new IT information technologies and their great possibility of application in all spheres of business. Starting from the most developed social network - the Internet, where the public use of this network is open, for knowledge management is a great challenge in corporate business success.

According to data in the 21'st century, the annual value of internet transactions has increased significantly, which requires more networks, more computers and more security programs.

A clear concept of IT application prefers precision, ie, financial institutions cannot compete without a wide and secure information network, which means that information technologies are essential for managerial and other business processes for long-term success. This requires the advancement of skills in the IT environment, knowledge management, corporate success in the modern market, etc.

In essence, in terms of focusing knowledge management on the use of their own skills when

applying IT techniques and technologies, the following should be done:

- 1. Get to know the plans and determine the priorities of high performance business.
  - 2. Minimize differences in success.
  - 3. Define a strategy for applying skills.
- 4. Develop and apply flexibility in applying these skills.
- 5. Ready to respond to the needs and fluctuations of the market, etc.

New strategic business trends of companies in the IT environment initiate the skills of managers and employees as a significant feature in the development of knowledge in this sector. On the other hand, IT experts are specific when it comes to "IT communication". The data show that in countries with a declining population, this technology will bring economic prosperity and successfully replace declining human labor (Japan, South Korea). Trends are focused on **new public and private sector programs to train people for the necessary skills**.

The world is dominated by the success achieved by computer engineering and electrical engineering. Accordingly, the most effective communication programs in the field of the Internet, these programs include world-class programs related to computer programming, networking or system design. Practice in the world shows that network technology is constantly changing, which means that employed administrators - programmers and the like. they must constantly participate in the development of knowledge from IT technologies in order to follow the latest achievements.

## **REFERENCES:**

[1]. Dulaimi Ihsan Allavi, " Analysis of the relationship between information

technology and effectiveness human resource management", Baghdad, Iraq, 2015, pp.141 -145.

[2]. Hanan Ahmed Al-Kudah, "Influence of information technology on administrative

development of state Jordanian Universities", Al-Bait University, Jordan, 2007, pp. 57.

- [3].https://www.researchgate.net/figure/The-Five-Principles-of-Information-Management-The-framework-is-structured-in-three-steps fig1 288708717
- [4]. D. Pitts, & E. Jarry, "Ethnic diversity and organizational performance: Assessing

Diversity", International Public Management Journal, University of Georgia, SAD, pp.67, 2007.

[5]. <a href="http://www.lithoprobe.ca/information-technology-tool-for-development/">http://www.lithoprobe.ca/information-technology-tool-for-development/</a>

[6]. K.W. Phillips & M. C. Thomas-Hunt, (2007)., Garnering the benefits of conflict: The

role of diversity and status, distance in groups, In K. J. Behfar and L. L.

Thompson (eds) Conflict in organizational groups, Evanston: Northwestern University

Press. Columbia Universit, 2007, pp.93.

[7]. C. O"Reilly, "The complexity of diversity: A review of forty years of

research, In B. Staw & R. Sutton (eds.) Research in Organizational Behavior, 20,.

Greenwich, CT: JAI Press, England, 1998, pp.19-26.

[8]. G. K., Maznevski, M. L., Voigt, K. Jonsen, "Unraveling the effects of

cultural diversity in teams: A meta-analysis of research on multicultural work groups",

Journal of International Business Studies, Austria, 2010, pp. 61.

[9]. W. E., Watson, K. Kumar, & L. K. Michaelsen, "Cultural diversity's impact on

interaction process and performance" Comparing homogeneous and diverse task groups.

The Academy of Management Journal, 36(3), New York, SAD, 1993, pp.113.

- [10]. J. S Bunderson, & K. M., Sutcliff, "Comparing alternative conceptualizations
- of functional diversity in management teams: Process and performance effects",

Academy of Management Journal, Washington University in St. Louis, 2007, pp.38.

[11]. <sup>E.</sup> Peterson, T. R. Mitchell, L. Thompson, & R. Burr, "Collective efficacy and

aspects of shared mental models as predictors of performance over time in groups", Group

Processes & Intergroup Relations, Washington, SAD,.2000, pp.26-29

- [12].Ch. Hill & G. Jones, "Strategic Management Theory, New York, SAD., 2006. pp. 47.
- [13]. Basarda, Tavfik Saree, "Integration of knowledge management and total quality,

Damascus, Syria, 2015, pp.39.

- [14]. Mteran Mter, "Knowledge management, Dar Alnašr Al-Arabi, Tunis, 2015. pp 88.
- [15]. Al-Kubaisi, Salah Ava, "Knowledge management and its impact on organizational

Creativity", Mustansiri University, Baghdad, Iraq, 2015.