THE IMPACT OF KNOWLEDGE MANAGEMENT OPERATIONS IN PROMOTING THE DIMENSIONS OF SUSTAINABLE DEVELOPMENT OF THE ORGANIZATION: AN ANALYTICAL STUDY AT THE COLLEGE OF EDUCATION AL MUSTANSIRIYAH UNIVERSITY

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ABSTRACT

The research aims to identify the knowledge management processes and the dimensions of sustainable development, as well as the effect of the relationship between them in the College of Education, Al-Mustansiriyyah University. The research problem was represented in several questions about indicating the effect among its variables, and the research started from a main hypothesis from which four sub-hypotheses emerged to explore the correlation and influence relationships between the research variables by analyzing the answers of the research sample that included (64) teachers and administrators working in the college, and the data were collected. And the information was by using a questionnaire, and the data were analyzed using the statistical program (SPSS). The research reached several results, including: that there is a statistically significant effect between the research variables (knowledge management processes, dimensions of sustainable development), and this result is consistent with the hypothesis on which the research was launched. The research presented a number of recommendations, perhaps the most prominent of which is: The need for the college administration in the field of research to invest the results of knowledge management processes in a well-thought-out manner for the purpose of building and developing sustainable development to be a basic base from which to base its competitive position in a sustainable way.

Keywords: knowledge management processes, dimensions of sustainable development.

INTRODUCTION

In view of the large and growing role of university educational service organizations as one of the most important basic pillars in the economic development plans, and like other sectors it faces a number of challenges, perhaps the most prominent of which is the diversity and different needs of customers and their desires and the beneficiaries, and the speed of the tremendous technological development in different fields, which makes it imperative for the higher education sector to search for ways to face these challenges and create real chances of success by adopting modern administrative approaches, including the approach to knowledge management processes to enhance the dimensions of sustainable development to ensure a high level of high quality of its outputs and its superiority in the environment in which it operates or that surrounds it in a sustainable manner.

RESEARCH METHODOLOGY

1- Research problem: The research problem has arisen represented in the extent to which the faculty relies on the field of research on knowledge management processes to enhance the dimensions of sustainable development and gain the loyalty of those dealing with it in a way that guarantees its growth and survival. Research questions can be crystallized as follows:
A- To what extent are knowledge management processes applied to enhance the dimensions of sustainable development in the researched organization?

B- Is there an impact of knowledge management processes in enhancing the dimensions of sustainable development in the research organization?

2- The importance of the research: The importance of the research lies in two parts, the first of which is to identify the reality of applying knowledge management processes and the dimensions of sustainable development in the researched organization, the level of their use and highlight their importance in the researched organization, and the second of them is the importance of the two variables studied (knowledge management processes, and the dimensions of sustainable development), as they were not studied together. By and as far as the researcher's knowledge of the Iraqi university environment.

3- Research objectives: The current research aims to: Demonstrate the level of application of knowledge management processes to enhance the dimensions of sustainable development in the researched organization, as well as explain the impact of the relationship between knowledge management processes and the dimensions of sustainable development in the researched organization.

4- Research hypothesis:
The hypothetical research scheme shows the interrelationship between the independent research variables, the four knowledge management processes, and the dependent variable, the dimensions of sustainable development, which consists of three basic dimensions, in preparation for presenting the research hypotheses and testing the extent to which there is an effect among the investigated variables, as shown in Figure (1).
5- **Research hypotheses:**

The research attempts to negate or prove the following hypotheses:

- **The main hypothesis:** There is a significant effect of knowledge management processes in enhancing the dimensions of sustainable development combined in the organization under study, from which the following sub-hypotheses are branched.

  1. There is a significant effect of knowledge generation in promoting the dimensions of sustainable development.
  2. There is a significant effect of knowledge storage in enhancing the dimensions of sustainable development.
  3. There is a significant effect of knowledge distribution in promoting the dimensions of sustainable development.
  4. There is a significant effect of applying knowledge in enhancing the dimensions of sustainable development.

6- **Research limits:**

A- **Temporal limits:** The current research lasted for one year from 31/6/2018 to 31/6/2019.

B - **Spatial boundaries:** The research included a sample of teachers and administrators working in the College of Education, Al-Mustansiriyah University as human and spatial boundaries.
7- Research community and sample:

A - Research community: The research community includes all the teachers and administrators working in the College of Education, Al-Mustansiriyah University.

b- Research sample: The research was applied to a simple random sample consisting of (64) members of the teaching staff and staff working in the college, and it is possible through Table (1) to clarify the characteristics of the sample as follows:

Table (1) Characteristics of the research sample (N=64)

<table>
<thead>
<tr>
<th>Gender</th>
<th>MALE</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rep.</td>
<td>%</td>
<td>Rep</td>
</tr>
<tr>
<td>24</td>
<td>37.5</td>
<td>40</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Less than 25 years old</th>
<th>40-26 years old</th>
<th>55-41 years old</th>
<th>56 years and over</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>7.8</td>
<td>41</td>
<td>17</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Qualification</th>
<th>Secondary</th>
<th>Technical Diploma</th>
<th>Bachelor’s Diploma</th>
<th>Higher Diploma</th>
<th>Master’s</th>
<th>Doctorate</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>3.1</td>
<td>2</td>
<td>3.1</td>
<td>30</td>
<td>46.9</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Years of service</th>
<th>Less than 5 years old</th>
<th>5-10 years old</th>
<th>20-11 years old</th>
<th>More than 20 years</th>
</tr>
</thead>
<tbody>
<tr>
<td>19</td>
<td>29.7</td>
<td>26</td>
<td>40.6</td>
<td>15</td>
</tr>
</tbody>
</table>

Source: computer output

*Rep.= Repetition
THE SECOND TOPIC: THE THEORETICAL SIDE OF THE RESEARCH

First: Knowledge Management:
1- The concept and importance of knowledge management:

2- It was defined as “the process that helps organizations to generate, obtain, select, organize, use and disseminate knowledge and transfer important information and experiences that the organization possesses that are necessary for various managerial activities such as decision-making, problem solving, organizational learning, and strategic planning” (Jennex, 2009: 4). While others referred to it as a set of processes that aim to transform intellectual resources into tangible values by focusing on intangible assets in the first place (Jennex, 2012:404). The importance of knowledge management is highlighted in the fact that it works to provide opportunities to obtain a permanent competitive advantage for organizations, and this importance was represented by the following: Oebbecke & Flatoff, (2011:11-14)

A - The steady development in technology and the resulting change in concepts and impact on costs.
B - The continuous and expected development of concepts resulting from the development of services and the subsequent development of new needs.
C - The need for what links all that knowledge, information and expertise to enable the development and development of public organizations as an interactive entity.
d - Doubled the volume of information generated in any field.
C - The possibility of obtaining huge amounts of information in a matter of fractions of a second.
H - Increasing difficulty of benefiting from such information.

2- Objectives of knowledge management:

According to (Heisig & Vorbeck, 2000: 116), the objectives of knowledge management are as follows:

A - Develop clear goals for knowledge.
B - Improving processes, and creating clarity on each of the (the organization's work areas, problems, and the organization's operations).
C - Facilitating creativity.
D - Orientation towards the customer.
C - Facilitate the process of planning and forecasting.
H - Seeking to adopt radical transformations, broad goals, achieving superior quality, producing high-quality goods and services, and non-traditional solutions.
In addition, it is possible to create value for the organization through knowledge
management, by focusing on the customer, focusing on operations, creativity and working individuals, and financial focus, as shown in Figure (2).

Figure (2) Creating value through knowledge management

3- Knowledge management processes:
Most writers and researchers put these processes in the form of a closed loop, which is the so-called core processes of knowledge management, as in Figure (3).

Figure (3) Core processes of knowledge management

A- Knowledge generation: This process requires knowledge, experience, practice, and an organizational culture that encourages this, and knowledge generation can occur during reproduction processes, when solving problems, or when completing tasks, and that current knowledge and experience depend on these processes that include education processes. The experience of workers is important, and workers must be motivated and supported (Mertins et al, 2001:48).

B- Storage of knowledge: individuals and organizations need to store and retrieve acquired knowledge when needed, and one of these common mechanisms in knowledge management is organizational memory, where organizational memory includes individual memory (personal experiences) as well as shared knowledge and interpretations results from social interactions. It includes organizational culture, procedures, business processes, organizational structure, and archives (Vlok, 2004:36).

C- Knowledge Distribution: Knowledge distribution works to disseminate internal expertise, experiences, and knowledge that will lead to providing workers with undefined solutions to address problems, make decisions, and provide learning, as well as enabling them to respond to environmental change at the lowest costs, thus benefiting organizations by increasing their distinct capabilities and competition. (Sher & Lee, 2004: 936).

d- Knowledge application: The basic task of knowledge management is the application of knowledge, and it is the duty of management to find ways to overcome the obstacles to application, some of which result in the generation of new knowledge. Mertins et al, 2001: 119).

SECOND: SUSTAINABLE DEVELOPMENT:

1- The concept of sustainable development:

Sustainable development was defined for the first time by (Gro Harlen Bruntland) and the first official term was considered in 1987 in our common future report, as “that development that meets the needs of the present without compromising the ability of future generations to meet their needs” (2012: 83, Anne). Webster Dictionary defines it as "that development that uses natural resources without allowing their depletion or partial or total destruction, i.e. the necessity of rationalizing their use." As defined by Edward Barbier ("as that activity that leads to the advancement of social welfare with the greatest concern for the available natural resources, and with the least possible amount of damage and abuse of the environment", and explains that sustainable development differs from
development in a more complex and intertwined universe in what is Natural and Social Development (Chile, 2014: 66). The concept of sustainable development has more than one concept and meaning, and the alternative ways in which researchers dealt with this concept can be summarized as follows (Al-Quraishi, 2010: 351-352):

A- It is a state in which utility and consumption do not decrease with time.
B - The resources are managed in a way that preserves the chances of future production.
C - A case in which the stock of natural capital does not decrease with time.
D- It is the management of resources in a way that maintains a sustainable production of the supplier's services.
C - where the minimum conditions for the stability of the ecosystem are met.

2- Characteristics of sustainable development:

The most important characteristics of sustainable development can be clarified as follows (Al-Fahdawi, 2012: 28):

A- Continuity, meaning the use of resources in a way that generates high income through which part of it can be reinvested in a way that achieves renewal and replacement of natural resources.
B- Directing the use of depleted natural resources to ensure the interest of future generations.
C- Preserving the environment in a way that guarantees the safety of natural life and the preservation of the biosphere with all its basic elements and compounds (water, air, soil, natural resources and energy sources) and not depleting the natural resource base.
D- Sustainable development is an integrated policy and approach based on coordination in the policy of using natural resources and investment trends, technological options, and institutional organization in a way that makes them work in harmony and harmony within environmental systems.
C- The main and pivotal point of sustainable development is planning for the future of future generations, and that the element of time and the future is the basis of sustainable development, that is, development in which the time dimension is the basis. It is long-term development that depends on the capabilities of the present, and is planned in a way that achieves sustainability for the longest possible period.
h- It is based on working to meet the requirements of the poor segments of society, and works to reduce the exacerbation of poverty in the world
G- Sustainable development has an international dimension related to the necessity of the intervention of all rich
countries and work on the development of poor countries.

3- Dimensions of sustainable development:
The World Summit on Sustainable Development in 2002 in Johannesburg defined the dimensions of sustainable development as follows:

A- The economic dimension: The economic dimension can be summarized as follows:
  ● Stop the waste of natural resources and modify consumption patterns: that is, making continuous reductions in the levels of wasteful consumption of natural resources and energy, through improving efficiency levels and changing lifestyles, and dedicating natural resources to continuous improvement in living standards (Samaqa Yi, 2015: 25-26).
  ● Equality in the distribution of resources and income: It means the equitable distribution of resources, wealth and services in a relatively equal manner, reducing differences in the distribution of income and improving the level of well-being of individuals (Abboud, 2013: 164).
  ● Reducing the dependency of developing countries: It is represented by the interdependence between rich countries and poor countries, as the decrease in the industrial countries’ demand for natural resources is directly reflected in the poor countries’ exports of natural resources, and thus on the revenues of those countries that are in dire need (Al-Labadi, 2015: 153).

B - The social dimension: The social dimension is reflected here as the basis for sustainability through:
  ● Stabilizing demographic growth (population control): the continued growth of the population at increasing rates for a long period leads to great pressures on the ability of governments to provide services and care for individuals, limits development and reduces the base of available natural resources (Bouzid, 2013: 83).
  ● The importance of population distribution: sustainable development works on rural development in order to reduce the movement of migration towards cities by taking measures that work on developing rural areas, agrarian reform and the introduction of modern technology in them.
  ● The importance of the role of women: It was mentioned in the development report in 1995, and human development cannot be achieved without women’s participation in it. Development needs women to achieve equitable and sustainable development, and the development process is not limited to the inclusion of women in the field of work only, but also requires the provision of effective opportunities for
their participation in policy-making and formulation Decisions, as women's learning is reflected in children's health and education and awareness of the importance of birth control (Samaqa Yi, 2015:3029).

- Health and education: where a healthy and educated population contributes to achieving and building economic development projects, as well as building human capacities capable of achieving sustainable development (Al Labadi, 2015:157).

**H- The environmental dimension:** where the environment contributes to human well-being, and the environment provides raw materials and the rest of the production elements necessary for the production process from renewable and non-renewable energies, as well as providing a suitable place for human living, and the quality of life is affected by the surrounding characteristics that are directly reflected on the human being (Al-Quraishi, 2010:343).

**THE THIRD TOPIC: THE PRACTICAL ASPECT OF RESEARCH**

**First: Analysis of the influence relationship:**

The main hypothesis: which states "there is a significant effect of knowledge management in promoting sustainable development in the organization in question" and four sub-hypotheses are branched from it. The results of the simple linear regression test were used to test the moral effect between knowledge management, which was encoded (X1,X2,X3,X4) and sustainable development (Y), and the calculated value (F) was relied on to test the significance of the independent variables in the dependent variable. In light of the hypothesis between them, a functional relationship was formulated between them as in the following equation:

\[ Y = a + B X a + B X \]

Arriving at results for accepting or rejecting the main hypothesis and the sub-hypotheses that emanate from it. The table (?) shows the results of the analysis:-
Table (2) Results of simple linear regression analysis between knowledge management processes and the dimensions of sustainable development combined (N=64))

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Dependent Variable</th>
<th>Constant Value a</th>
<th>R²</th>
<th>regression coefficient B</th>
<th>calculate F value</th>
<th>morale level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge Generation X1</td>
<td>Dimensions Sustainable Development</td>
<td>2.64</td>
<td>0.28</td>
<td>0.32</td>
<td>5.61</td>
<td>0.05</td>
</tr>
<tr>
<td>Store Knowledge X2</td>
<td></td>
<td>2.51</td>
<td>0.27</td>
<td>0.34</td>
<td>4.99</td>
<td>0.05</td>
</tr>
<tr>
<td>Knowledge Distribution X3</td>
<td></td>
<td>2.32</td>
<td>0.31</td>
<td>0.39</td>
<td>6.12</td>
<td>0.05</td>
</tr>
<tr>
<td>Knowledge Application X4</td>
<td></td>
<td>1.53</td>
<td>0.44</td>
<td>0.56</td>
<td>15.06</td>
<td>0.01</td>
</tr>
<tr>
<td>Total Knowledge Management</td>
<td></td>
<td>1.69</td>
<td>0.34</td>
<td>0.76</td>
<td>15.76</td>
<td>0.01</td>
</tr>
</tbody>
</table>

F tabular with significance level 0.05 = 4.01  
F tabular with significance level 0.01 = 7.08

Source computer output

1- As the value of (F) computed for (knowledge generation), which was coded in table (1X) (5.61), which is greater than its tabular value of (4.01) with a level of significance (0.05) and with a degree of freedom (95%), and this confirms the presence of an effect of (knowledge generation) in the dependent variable (dimensions of sustainable development). Where the constant can be observed (a = 2.64), this means that there is an existence of sustainable development of (2.64). The value of the coefficient of determination was (R²) and represents the percentage of decrease in errors when using the regression equation, and the amount was (0.28), and this means that its amount (28%) of the variance obtained in the dependent variable is a variance explained by the independent variable, while the value of (BX1 = 0.32) It indicates that a one-unit change in knowledge generation will lead to a change in the dimensions of sustainable development by (0.32), and this calls for accepting the first sub-hypothesis, which states: "There is a significant effect of moral generation in promoting the dimensions of sustainable development."

Table (2) showed that the calculated (F) value for (knowledge storage), which was encoded in Table (2X) (4.99), is greater than its tabular value of (4.01) with a significant level (0.05) and a degree of freedom (95%), which means there is an effect of (knowledge storage) on the dependent variable (dimensions of sustainable development). The value of the constant was (a = 2.51), which means that there is a sustainable development presence of (2.51). The value of the coefficient of determination (R²) was
(0.27), which means that its amount (27%) of the variance in the dependent variable is explained by the action of the independent variable, while the value of BX2 = 0.34). It indicates that a change of one unit in the storage of knowledge will lead to a change in the dimensions of sustainable development of the amount (0.34), and this calls us to accept the second sub-hypothesis, which states “there is a significant effect of knowledge storage in enhancing the dimensions of sustainable development”.

3- The calculated value of (F) for (distribution of knowledge), which was encoded in the table (X3), reached (6.12) which is greater than its tabular value of (4.01) with a significant level (0.05) and a degree of freedom (95%), which means that there is an effect of (distribution of knowledge) in the dependent variable (dimensions of sustainable development). From table (2), it can be observed that the constant (2.32 = a), and this means that there is a sustainable development of the amount of (2.32). The value of the coefficient of determination (R2), which is the percentage of variance in the values of observations that are explained by the regression line, was (0.31), which means that the amount of 31% of the variance in the dependent variable is a variance explained by the independent variable, while the value of (BX3 = 0.39), it indicates that a change of one unit in the distribution of knowledge will lead to a change in sustainable development of (0.39).

4- Table (2) showed that the calculated value of (F) for (Knowledge Application), which was encoded in Table (X4) (15.06), is greater than its tabular value of (7.08) with a significant level (0.01) and a degree of freedom (99%), and this It means that there is an effect of (knowledge application) on the dependent variable (dimensions of sustainable development). As shown in Table (2) that the constant (a = 1.53), which means that there is a presence for sustainable development of (1.53). The value of the coefficient of determination was (R2), which is the percentage of variance in the observations’ values that are explained by the regression line, and it was 0.44), which means that the amount of (44%) of the variance in the dependent variable is a variance explained by the independent variable, while the value of ( BX4 = 0.56) and this indicates that a change of one unit in the application of knowledge will lead to a change in sustainable development of 0.56)), which calls us to accept the fourth sub-hypothesis, which states "there is a significant effect of knowledge application in enhancing the dimensions of sustainable development".
5- Referring to Table (2) to determine the impact of the total knowledge management processes on the dimensions of sustainable development, we find that the calculated (F) value amounted to (15.76), which is greater than its tabular value, which is (7.08), with a significant level of (0.01) and a degree of freedom (99%), This means that there is an impact of knowledge management processes on the dimensions of sustainable development.

The value of the constant was (a = 1.69), and this means that there is a sustainable development of (1.69). The value of the coefficient of determination was (R2), which is the percentage of variance in the observations’ values that are explained by the regression line, and it was (0.34), and this means that the amount of 34% of the variance in the dependent variable is a variance explained by the independent variable, while the value of (B) = 0.76, it indicates that a change of (1) in knowledge management will lead to a change in sustainable development of 0.76.

In general, it is clear from the final results in Table (2) that the regression coefficients for knowledge management processes have been proven correct and significant, which calls us to accept the main hypothesis and the sub-hypotheses emanating from it that most knowledge management processes have a significant impact in enhancing the dimensions of sustainable development, but the strength of this effect varies between Dimensions.

FOURTH TOPIC: FINDINGS AND RECOMMENDATIONS

First: The Results

1- The results of the research showed that most of the influencing relationships between knowledge management processes and the dimensions of sustainable development are statistically significant, as shown by the results of simple linear regression analysis, which is attributed to the importance of knowledge management for the research sample in the college in the field of research for its effective role in promoting the dimensions of sustainable development and improving the service of those dealing with it To satisfy their need in a sustainable manner.

2- The current research adopted (knowledge generation, knowledge storage, knowledge distribution, application of knowledge) as dimensions for knowledge management to achieve sustainable development in the college in the field of research.

3- The results of the research showed a variation in the level of influence of knowledge management processes in its various dimensions on sustainable development, due to the discrepancy between the importance of each dimension...
The results of the research also reflected that the current knowledge management processes used in the researched faculty are diverse and serve its objectives, but they are not at the required level due to the lack of interest in methods of storing and retrieving knowledge, and reliance on the traditional means represented by the written method.

There is an awareness and awareness on the part of the employees of the researched faculty of the importance of knowledge management processes and their effective role in achieving sustainable development.

The college’s reliance on internal reports and publications in the distribution of knowledge and the weakness of advanced internal communication in the college.

Second: Recommendations
1- The necessity of the college adopting the field of research, knowledge management processes that are in line with the dimensions of sustainable development that it has chosen, and working to spread the dimensions and characteristics of sustainable development at all administrative levels to be part of knowledge management processes.
2- The need to adopt the use of knowledge management processes in the researched organization in order to enhance the dimensions of sustainable development to face the changes taking place in its environment and not to be satisfied with the current individuals' knowledge, which will positively reflect on the sustainability of improving customer service.
3- The necessity for the college administration in the field of research to invest the results of knowledge management processes well and thoughtfully for the purpose of building and developing sustainable development to be a basic base from which to support its competitive position in a sustainable manner.
4- Enhancing the knowledge of individuals working in the college in the field of research by activating knowledge management processes because of their great role in achieving the desired goals.
5- The necessity for the college in the field of research to pay attention to all knowledge management processes because of their importance in promoting the dimensions of sustainable development.

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