

Towards Integrating the Knowledge Management Mechanisms to Employ Innovation Factors within Universities: Critical Appraisal Study

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Abstract

The knowledge management was considered as the inevitable result of the rule of knowledge in this era, and its importance became clear in being the main source for achieving success, the need to consider and manage knowledge as an independent field that must be addressed with a clear scientific methodology has become intangible - they are very valuable and a strategic asset. On the other hand, the innovation process relates to all parts of the organization, and helps to improve the behavioral patterns of individuals and their attitudes towards adopting modern and innovative ideas, it is a purposeful process adopted by the senior management and works to provide the capabilities and requirements for embodying the innovative behavior in it. In the field of dealing with the market, it is a product of the organization's innovative approach, which aims at advancement, change, and intended and organized renewal.

The main objective of this article is to determine the most appropriate ways to integrate knowledge management mechanisms to employ innovation factors within universities based on the role of universities in supporting innovation. This was achieved through reviewing many relevant research and listing the most prominent concepts of knowledge management, its importance, objectives, and processes determining the stages of knowledge management application, the requirements for applying knowledge management, and the obstacles that impede its application; Then the statement "Innovation in universities, through which it addressed the concept of innovation, its importance, stages, and requirements for its application, as well as identifying the most prominent models of innovation, and obstacles to innovation, in addition to that the role of universities in supporting innovation will be identified. From the surveyed study done in this article, we concluded that the relationship among organizational culture, knowledge management and innovation capability can provide useful insights for managers regarding developing a strong culture, promote knowledge management practices effectively and eventually enhance the whole organization's innovation capability. Also, we found that different components of Knowledge Management as Knowledge activities, Knowledge types, transformation of knowledge and technology have a significant positive effect in bringing innovation through transformation of knowledge into knowledge assets in universities.

Keywords: *Knowledge Management "KM", Innovation, knowledge creation, knowledge Obstacles and University Innovation*

1. Introduction

Knowledge overlaps in all life and professional fields, and knowledge represents a prominent position within practical contexts, which necessitates the need to manage, store and exchange it, which was indicated by Ibrahim (2013, pp. 3-4) when he emphasized that knowledge is what qualifies humans to face a world Very complex and rapidly changing, characterized by competitive performance, and the a bundance of information does not necessarily mean the availability of knowledge, knowledge is renewable by nature, and knowledge management is one of the latest concepts in management science, which is one of the most vital features of activities that affect the quality and quality of work It occupied a prominent and vital place in various administrative and technical fields, and knowledge management revolves around extracting, storing, and exchanging the knowledge, understanding and experience accumulated within the organization.

Ali (2013, p. 111) emphasized that knowledge management was considered as the inevitable result of the rule of knowledge in this era, and its importance became clear in being the main source for achieving success. The need to consider and manage knowledge as an independent field has increased significantly. Treating it with a clear scientific methodology, and knowledge - although it is often intangible - has become of great value and is considered a strategic asset. The knowledge management process is one of the processes that requires a collaborative effort within a social and participatory context between individuals working within the organization, which was pointed out by Chen, Huang, & Hsiao, 2010, P. 850 when he emphasized that knowledge management can be conceptualized on.

They are collaborative activities in social contexts, and through management sciences, the importance of knowledge management activities in innovation has been recognized and known, and that the climate and institutional structure have an important factor that can affect the relationship between the nature of the institutional climate and how to properly manage knowledge. The level of participatory understanding has increased to higher levels

among the members working in the concerned institution, which definitely affects the motivation of individuals towards teamwork and to contribute what they know to achieve mutual goals. From the above, it can be concluded that knowledge management is one of the processes that are positively related to the formation of the knowledge structure and how it is managed, stored and exchanged in institutions, and the participatory interaction between professional individuals on the other hand; In addition, the impact of knowledge management on innovation positively mediates between a supportive climate and a decentralized, integrated and less formal structure.

2. LITERATURE REVIEW

Regarding the knowledge management model in universities, there are four processes to form a culture of knowledge sharing and cooperation: (1) making knowledge tangible; (2) enhancing knowledge intensity; (3) building knowledge infrastructure; and (4) creating a driving force for the development of knowledge culture. From an academic perspective, the learning community should start at the individual level by creating partial knowledge, knowledge between departments with similar academic interests or disciplines, and networks of knowledge within institutions and other organizations or corporations. In the following sections, we'll survey the most recent work that join innovation with the knowledge management in the various universities on the worldwide levels: -

- (A) A study of Al-Sawy (2020) entitled: "*The Role of the Learning Resource Centers Specialist in the Application of Knowledge Management in Private Universities in the State of Kuwait: A Field Study*". This study aimed to identify the importance of knowledge management, and to reveal the presence of an impact on the contribution of the learning resource center specialist in supporting knowledge management within the university: The Open School, the American University, Boxhill College, and the American University of the Middle East). The study sample included (200) students and (50) members. The researcher used the descriptive approach as a method of study, and used the questionnaire as a tool for the study. The author reaches to the following conclusion: -
 - The management of knowledge, its strategic importance lies in transforming the tacit knowledge that exists in the minds of individuals and groups and transforming it into explicit knowledge, where experiences are coded or written down and stored in a way that they can be reused and shared with others.

- There is an impact on the contribution of the learning resource center specialist in supporting knowledge management within the university.

○ The study made several recommendations like: the most important of which is the need to work on adopting the general policy to spread the culture of knowledge management among all employees within the university at all levels and the need to work diligently to provide an infrastructure for information technology tools and the necessary modern means of communication.

- (B) A study by (Shafiee et al., 2020) entitled: "*Factors Affecting Knowledge Management in Universities According to the Perspectives of Physical Education Teachers*". This study aimed to study the relationship between technology, organizational culture, emotional intelligence, and knowledge management according to the two variables of mediation, organizational structure and delegation. The study used the descriptive correlative approach. The study also used the questionnaire and structural equation modeling as its tools. The study reached many results, the most important of which are: -
 - The existence of a negative and significant relationship between technology and knowledge management due to the dependence of the impact of technology on other factors, including managers' orientation and philosophy and other organizational factors, and this is due to factors including failure to take appropriate and necessary measures to enhance individuals' access to the required technology.
 - The existence of a significant relationship between organizational culture and knowledge management, which means that the adopted organizational culture is appropriate to the flow of knowledge necessary for the design of knowledge management; and the existence of a significant relationship between emotional intelligence and knowledge management, which means that teachers have emotional intelligence that leads to the development of knowledge in universities.
 - The existence of a significant relationship between technology and the organizational structure, which means that the activities of the adopted technology pave the way towards the development of the organizational structure and that the choice of the type of technology justifies the quality of the organizational structure and its outstanding performance; and the existence of a significant relationship between organizational culture and organizational structure which means that

organizational culture can be used instead of formal controls.

- There is a significant relationship between technology and delegation which indicates that technology can contribute to increasing the knowledge and capabilities of organization members, and ensures a low rate of human error in information processing; And there is a significant relationship between organizational culture and delegation, which indicates that the current situation at the university is good.
- The existence of a significant relationship between the organizational structure and delegation which means that universities have an appropriate delegation structure, and the availability of a good and appropriate environment for delegation; There is a significant relationship between delegation and knowledge management, which means that enhancing teachers' delegation can in turn enhance their knowledge management related capabilities.

The study also recommended several recommendations, the most important of which are: Universities reconsider their strategies in the case of investment in order to enhance the technological infrastructure, and maintain indicators and effective factors in knowledge management such as self-management, participation, etc.

- (C) The study of Kamal Al-Din and Abu Zaid (2019) entitled: *"The reality of the application of knowledge management and its impact on the excellence of institutional performance in Saudi universities: a case study of Najran University"*. This study aimed to identify the reality of the application of knowledge management at the University of Najran from the point of view of the faculty members, and to identify the obstacles to the application of knowledge management from the point of view of the faculty members, and to reveal the existence of a relationship between knowledge management processes and the excellence of institutional performance at the University of Najran. The faculty members at Najran University and the study sample included (168) members. The researchers used the descriptive approach and the analytical approach as study methods, and they used the questionnaire as a tool for the study. The researchers reached many results, the most important of which are: -
- The reality of the application of knowledge management at Najran University came to a moderate degree from the point of view of the faculty members.
 - The obstacles to the application of knowledge management came to a moderate degree from the

point of view of the faculty members; Where it came in the first place the absence of an independent organizational unit.

It is concerned with overseeing the management of knowledge, followed by the lack of incentives to encourage participation in the creation and generation of knowledge, and in the last order was the statement that faculty members do not have enough time to practice knowledge applications.

- The existence of a direct and positive correlation between knowledge management processes and institutional performance excellence at the University of Najran, which means that any increase or development in knowledge management processes will play an effective role in managing the organization, solving problems and speeding up decision-making and contributing to increasing performance accuracy and accelerating achievement.

○ The study reaches to several recommendations, the most important of which is the need to raise awareness about the concept of knowledge management and its importance, and to develop a clear strategic vision for knowledge management at the University of Najran.

- (D) The study of Graha et al., 2019 study: *"The Role of Knowledge Management in Organizational Performance: A Case Study of the State University of Malang, Indonesia."* This study aimed to present a model that studies the variables of human resource management practices, organizational culture, knowledge management, and organizational performance. The study also aimed to explore the effects of human resource practices and organizational culture on organizational performance, in particular the relationship of both to knowledge management as a mediating variable. (163) individuals, and the study used the descriptive approach and used the questionnaire as a tool. The study reached many results, the most important of which are: -
- Human resource management practices have a significant impact on organizational performance indicating that enhanced organizational performance requires trustworthy management at all levels and capabilities in order to achieve optimal human resource management practices.
 - Since there is a significant impact of human resource management practices on knowledge management, knowledge management mediates the impact of human resource practices on organizational performance which indicates the need for sound knowledge management supported by good human resource practices in order to achieve improved organizational performance.

- There is no significant effect of organizational culture on organizational performance. This means that a well-developed organizational culture does not necessarily improve organizational performance.
- Knowledge management mediates the impact of organizational culture on organizational performance. This means that the lecturers must have sound knowledge management supported by organizational culture so that they can change organizational performance.
- There is a significant impact of knowledge management on organizational performance which means that increasing knowledge management will in turn enhance organizational performance.

The study recommended several recommendations, the most important of which are: -the necessity of conducting qualitative research to explore the nature of the effects of organizational culture that are indicative of organizational performance in private universities of Malang to enrich knowledge of the relationship. As well as the need to conduct quantitative research that explores the dimensional impact of organizational culture on organizational performance to know the degree of the relevant impact.

- (E) The study of Fargoun study (2019) entitled: *"Application of knowledge management in Libyan universities to achieve excellence in scientific research"*. This study aimed to identify the orientation of Libyan universities in the use of knowledge management and to identify the obstacles that transform Libyan universities using knowledge management. The author reaches to the following important notes: -
- The importance of the Libyan universities' orientation to the use of knowledge management lies in that it facilitates the building of information bases to store, provide and retrieve knowledge when needed, facilitate the exchange and sharing of knowledge among all workers in the organization and transform internal and external knowledge into knowledge that can be employed and invested in the operations and activities of the organization, and finally contribute in the problems facing the organization.
 - The most important obstacles that prevent Libyan universities using knowledge management are the isolation of knowledge management implementers from the organization's senior management, and this leads to building and developing capabilities and capabilities that are compatible with their personal beliefs and convictions in operational activities and practices, and that the promotion of the knowledge management system may take

place in an unrealistic manner, and that In most cases, the focus is not on market opportunities and business needs, so the focus is on presenting knowledge management as having general capabilities and capabilities that reveal an unclear and undefined competitive value.

○ The study recommended several recommendations, the most important of which is the establishment of an award for the distinguished university for its application of the concept of knowledge management, which is characterized by the quality of performance, results, and outputs, as well as the opening of partnership between Libyan universities in the field of scientific research and the rapid trend towards interest in knowledge management in order to build competitive advantages.

- (F) The study of Sirorei & Fombad study (Sirorei & Fombad, 2019): *"Knowledge management processes in the St Paul's University Library in Kenya"*. This study aimed to determine the extent of awareness of knowledge management and how it is acquired, organized, shared or transferred and retained in the Saint Paul University Library. Paul University Library and the study sample included (32) individuals. The study used the qualitative research method and the design of a single case study. It also used personal interviews as a tool. The study reached many results, the most important of which are: -
- It was found that the concept of knowledge management is more prevalent among senior management staff, while its levels varied among librarians as the concept of knowledge management among them was limited to managing information resources, services and systems using technology or other specific processes, rather than sharing and using tacit knowledge.
 - It has been proven that the means of acquiring knowledge in the library are: research work, training, workshops, seminars, and establishing communication networks with other institutions.
 - The culture of knowledge sharing among colleagues remains a challenge, although knowledge sharing is largely encouraged and achieved, and knowledge-sharing events such as academic seminars, workshops and monthly trainings, were held at irregular intervals.
 - With regard to knowledge retention, the library did not develop an appropriate strategy for retaining knowledge, and the presence of knowledge was limited to procedures, manuals and computers, and not to a central location.

The study also recommended several recommendations, the most important of which are: the need to formally integrate

knowledge management processes into the academic library in Kenya to increase the effectiveness and efficiency of the library, and the possibility of realizing the knowledge management process through the development of a linear and institutional knowledge management policy.

- (G) The study of Si Mousa and Bouajimi (2018) study entitled: *"The contribution of knowledge management technology to improving administrative performance in local universities: A case study in Medea."* The study aimed to identify the advantages offered by knowledge management in the practice of administrative activities to identify the requirements for the application of knowledge management technology and to identify the automated system adopted in the state of Medea as well as to identify the contribution of knowledge management to improving the performance of employees and administrative transactions, and finally to study community employees dependent on knowledge management processes and providers of communication technology and employees who are based on knowledge management in the performance of their tasks, in the Directorate of Organization and Public Affairs, and the Directorate of Local Administration. The study sample included (60) employees, and the researchers used the case study approach as a method for the study, and they used the form as a tool for the study, the researchers reached several results, the most important of which are: -
- The most important advantages provided by knowledge management in the practice of administrative activities are summarized in saving time and effort, facilitating and categorizing information, ease of archiving and retrieval of files, and flexibility in moving between information and files thanks to the internal network.
 - The requirements for the application of knowledge management technology are achieved by providing various modern means of communication to transfer information such as computers and its accessories, and linking these computers to information networks.
 - It turns out that the automated system adopted in the state of Medea is a simple office automation system because it contains in a large part the characteristics of office processing systems because it contains word processing and formatting program, e-mail and desktop publisher but it lacks other characteristics such as audio and television meetings and others.
 - Knowledge management contributed weakly to moderately in improving the performance of

employees and administrative transactions, and this is due to the bad mental image that employees drew about everything related to automation and communication technology.

○ The study made several recommendations, the most important of which are the necessity of disseminating and forming knowledge management within the field of institutions in the state, and the need to carry out reforms and modifications to the style and prevailing situation of knowledge management which is characterized by the traditional.

- (H) The study of Adeinat & Abdulfatah, 2018 study entitled: *"Organizational Culture and Knowledge Management Processes: A Case Study at a Public University"*. This study aimed to study the effects of organizational culture on knowledge management in a higher education institution from the perspective of a single cultural context. In particular, the interrelationships between knowledge management processes and the relationship between organizational culture and knowledge management to determine whether any type of organizational culture has a positive or negative impact on knowledge management practices in a public university in the Kingdom of Saudi Arabia. The study community may be faculty members and administrators working at King Abdulaziz University, while the study sample included (360) individuals, and the study used the descriptive approach. The authors reach to the following concluded points: -
- The culture of Adhocracy is the dominant culture at King Abdulaziz University, and the market culture occupies the second place among the most common cultures in the university.
 - Organizational culture has a significant positive impact on all knowledge management processes with the exception of knowledge dimensions. The results indicate the influence of cultural factors on knowledge exchange rather than knowledge creation in higher education institutions in particular.
 - The adoption of knowledge management processes which is affected by defining the organizational culture in higher education institutions can positively affect the output of the organization.
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The study also made several recommendations, the most important of which are: King Abdulaziz University should develop ways to store information created by faculty members and university employees; The university should also devise new ways to encourage and support employees

to learn how to engage in argumentative ideas and obtain funding to spread knowledge.

- (I) Studies that dealt with the topic of innovation at the university: Milley et al.'s study (Milley, Szijarto & Bennett, 2020) entitled: ***"A Landscape for Social Innovation in Canadian Universities: An Empirical Analysis"***. This study aimed to provide a comprehensive description and analysis of the general landscape of social innovation initiatives in the Canadian university sector. The study used the analytical approach based on reviewing data related to social innovation in Canadian universities. The study reached several results, the most important of which are: -
- There is a diversity of social innovation initiatives in Canadian universities in terms of multidisciplinary and the types of activities held in them in particular; However, there are some common features including that the vast majority are youth-oriented, regionally or locally oriented and focus primarily on social problems outside the university.
 - The vast majority of initiatives aim to promote joint cooperation or participation between actors inside and outside the university in order to solve social problems.
 - The vast majority of the initiatives mentioned in the study are involved in training, mentoring and capacity building activities; Education is the main focus of this category thus enhancing key functions and competencies in university communities.
 - Half of the initiatives support the launch of social enterprises which fits with the university's role as one of the main actors in innovative ecosystems and enhances the role of universities by supporting other forms of entrepreneurship and entrepreneurship across business schools and others.
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The study also recommended several recommendations, the most important of which are: The possibility of active intermediary organizations contributing to social innovation in shaping the future concept of social innovation, along with political and financial agencies.

- (J) The study of Caliskan & Zhu, 2019: ***"Organizational Culture and Educational Innovations in Turkish Higher Education: Students' Perceptions and Reactions"***. This study aimed to study the relationship between organizational culture features and students' perceptions and reactions regarding student-based learning, cooperative learning and the use of

innovative educational technologies in Turkish higher education. The study was conducted on (4) public universities and (894) university students from second to final year students in universities. The study used the quantitative approach and a questionnaire, a survey of organizational culture, as well as a measure of students' perceptions and their reactions to educational innovations as a tool for it. The study found many most important results like: -

- There are significant differences between the four universities with regard to organizational culture, but the participatory decision-making process and supportive leadership are relatively less positive in the four universities compared to other dimensions of organizational culture, and this is due to the hierarchical culture of Turkish higher education.
 - There are significant differences between the four universities with regard to educational innovations and the students' need for them is high; Students' views of educational innovations were positive despite the similarities between universities, and this similarity may be attributed to the central culture.
 - With regard to the levels of implementation of educational innovations, there are no significant differences between the application of cooperative learning and student-based learning between universities, and this may be attributed to the convergence of universities; While the dimensions of culture have a significant impact on the implementation of e-learning and computer-assisted e-learning, the more creative and collaborative the culture, the higher the level.
- (K) A study by "Gardashi et al., 2019" entitled: ***"Innovative Capacity in Universities of Medical Sciences: A Qualitative Study in Iran"***. This study aimed to determine the dimensions and components of innovative capacity in universities of medical sciences in Iran. The study population may consist of all experts working in the field of health innovation in the Ministry of Health and Medical Education or universities of medical sciences and senior management in universities of medical sciences whose experience exceeds 5 years, and the study sample included 110. The study used the inductive qualitative method and interviews as a tool. The study reached many results, the most important of which are: -
- The possibility of studying the university's innovative capacity according to two dimensions: external communication and internal interactions which are the way towards achieving the university's innovation capacity.

- At the university level, there are six main axes that affect the university's innovative capabilities: the university environment; policy factors; organizational culture; organizational resources; management and leadership; and institutional learning.
- Human capital is the first and most important innovative capacity in universities of medical sciences, and knowledge and experience; technical and functional skills; employee-based learning; and the development of ideas are the intellectual capital and innovative capabilities of the institution.
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The study also recommended several recommendations, the most important of which are: Relying on the results of this study with future studies. It is also recommended to study the relationship between the determinants of innovative ability.

(L) The study of Assaf's (2018) entitled: *"Indicators of Innovation Management at Al-Azhar and Islamic Universities in Gaza Governorate from the point of view of faculty members and ways to activate them."* The study aimed to identify the indicators of innovation management at Al-Azhar and Islamic Universities in Gaza Governorate from the point of view of the faculty members, and to reveal the presence of statistically significant differences between the mean scores of the study sample members about the reality of the indicators of innovation management due to the study variables. The teaching staff at Al-Azhar University and the Islamic University in Gaza Governorate, and the study sample included (200) members. The researcher used the descriptive analytical method as a method of study and used the questionnaire as a study tool. The authors reach to the following important comments: -

- The indicators of innovation management at Al-Azhar University and the Islamic University in Gaza governorate came to a large extent from the point of view of the faculty members. The domain of intelligence and systemic thinking came in the first rank followed by the domain of quality and future vision and in the last rank came the domain of the diverse mental style.
- There are no statistically significant differences at the significance level (0.05) between the mean scores of the study sample members on the reality of innovation management indicators due to the gender variable.
- There are no statistically significant differences at the significance level (0.05) between the mean scores of the study sample members about the

reality of innovation management indicators due to the variable years of experience.

■ The study made several recommendations, the most important of which is the necessity of establishing a special unit in each university specialized in innovation management, and the necessity of separating innovation management and human resources management in universities to ensure excellence.

(M) The study of Ngoc-Tan & Gregar entitled: *"The Effects of Knowledge Management on Innovation in Higher Education Institutions: Evidence from Experience in Vietnam"*. This study aimed to provide an empirical evidence on how knowledge management affects innovation in public universities in Vietnam?? It also aimed to raise the awareness of higher education institutions on how to promote organizational innovation through knowledge management activities. Finally, the study also aimed to contribute its role within the knowledge management and innovation literature by exploring the effects of knowledge management on innovation in higher education institutions in Vietnam. The study population was from public universities in Vietnam, while the study sample included (30) universities distributed in each region of Vietnam, which is equivalent to 20% of Vietnamese universities. The study used the experimental survey method and the questionnaire as a tool. The authors concluded several results, the most important of which are:

- Knowledge management positively and collectively affects technical innovation in public universities in Vietnam; This indicates that innovation that results in the creation of new ideas, markets, products or services are based primarily on knowledge.
- Starting from knowledge management, academic institutions become more aware and facilitated of the importance of knowledge exchange, communication and interaction between stakeholders for better organizational performance and competitiveness.
- Knowledge management partially affects the innovation of the educational institution which indicates that the process of knowledge management enhances the application of knowledge in order to achieve innovation and improve business performance.
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The study also recommended several recommendations, the most important of which are: Conducting qualitative surveys along with quantitative surveys to avoid bias in future studies. It is also recommended that researchers use

time-series and longitudinal data to better understand the causal relationship between knowledge management and creativity.

(N) The study of Judges' (2017) entitled: ***"The Impact of the Internal Work Environment on Creativity and Innovation in Private Jordanian Universities"***. The study aimed to reveal the existence of an impact of the internal work environment with its dimensions on the level of creativity in private Jordanian universities and to reveal the presence of an impact of the internal work environment with its dimensions on the level of innovation in private Jordanian universities. The study sample included (234) respondents and the researcher used the descriptive analytical method as a method for the study as well as the questionnaire as a tool for the study. The researcher reached many results, the most important of which are: There is a statistically significant impact of the internal work environment in its dimensions.

(O) The study of Assaf (2016) entitled: ***"Indicators of innovation management in Palestinian universities and ways to activate them."*** The study aimed to identify the degree of estimation of faculty members in Palestinian universities for the reality of indicators of innovation management, and to identify the study population of all faculty members of Palestinian universities in Gaza Governorate, who numbered (989), in the academic year (2014-2015). The study sample included (200) members (173) male and (27) female. The researcher used the descriptive analytical method as a method for the study and the questionnaire as a tool for the study. The researcher reached many results, the most important of which are: -

- The evaluation of faculty members in Palestinian universities for the reality of innovation management indicators was highly; Where the field of intelligence and systemic thinking came in the first place. This may be due to the fact that the mixture between the latent or subjective knowledge of the individual and the external knowledge that comes to him from external environmental sources is necessary and indispensable to one of the other.
- There are no statistically significant differences at the significance level (0.05) between the mean scores of the study sample members on the assessment of faculty members in Palestinian universities for the reality of innovation management indicators due to the gender variable.

- There are no statistically significant differences at the significance level (0.05) between the mean scores of the study sample members on the assessment of faculty members in Palestinian universities for the reality of innovation management indicators due to the college variable.

The study recommended several recommendations, the most important of which is the necessity of training employees on strategic planning that supports the development of future scenarios and alternatives for their roles in community service, and holding training courses periodically and during working hours as a matter of motivation, through which it demonstrates the process of empowerment contributions to achieving quality and satisfaction.

(P) The study of Nour and El-Sayed (2016) entitled: ***"The Role of Open Innovation in Improving Knowledge Transfer Processes within Egyptian Universities: Application to Egyptian Public Universities"***. The study aimed to reveal the existence of a relationship to apply the open innovation methodology and improve knowledge transfer processes. The study community may consist of faculty members, their supporting bodies, and university leaders in Egyptian public universities, whose number is (72979), a faculty member and an assistant body, and the study sample included (319) members. The researchers used the descriptive approach as a method for the study and the survey list as a tool for the study. The researchers reached many results: the most important of which are: There is a positive, statistically significant relationship between the application of the open innovation methodology and the improvement of knowledge transfer processes, which means that the more attention is paid to the application of the open innovation methodology, the more this leads to the improvement of knowledge transfer processes. The study recommended several recommendations, the most important of which is that universities should open networks to facilitate knowledge transfer processes, and the need for universities to open up abroad to transfer new knowledge.

3. IMPORTANCE OF KNOWLEDGE MANAGEMENT

The role of institutional knowledge as a basic principle for achieving competitive excellence lies in its emphasis on the areas of strategic management. The basic concept of competitive excellence depends more mainly on placing institutions in the first places in the industry and owning the

balance of economic power against competitors, which was indicated by Rahimli (Rahimli, 2012, P. 38) when he emphasized that institutions can gain sustainable competitive advantage through acquiring information sources, and the main source of competitive excellence is institutional knowledge, which is difficult to imitate and must be acquired. Nowadays, the success of organizations in a competitive market depends largely on the quality of knowledge that is applied by organizations in the core operations of the existing business. In this context some of the reasons why knowledge management should be taken into account can be addressed: **First: Competition:** The market is a highly competitive area, and knowledge-based management is being developed day by day, so knowledge must be developed at a faster rate. **Second: Customer focus:** The cornerstone of every organization is to develop interactive values with the customer. The imperative to engage in the international context: Because of globalization, organizations have acquired foreign customers and suppliers, and therefore, organizations need to create effective knowledge management to enable them to deal with competitors.

The importance of knowledge management is also represented in immunizing the organization against threats that may lead it to provide services of lower quality or not compete within the market as required, which was pointed out by Omotayo (2015 P. 11) when he stressed that the importance of knowledge management is based on survival fears, the term survival fears is not restricted to profit and non-profit institutions or even public agencies only, but everyone understands the importance of knowledge management, and it should be noted that without adequate attention to knowledge and how it is managed, the institutions will not perform optimally. The result of this will be the manufacture and delivery of products or services that are not effective and influential, which will lead to disgruntled customers and this will lead to an inevitable result which is the demise of the institution. As all profitable and non-profit institutions compete in sectors, knowledge management is the main driver of competitive differentiation because it supports the ability of institutions to innovate and this will make them different from the rest of their competitors, and institutions that are unable to innovate and creativity do not have the ability to attract customers, and this will lead to its end.

Knowledge management works on evaluating the level of management of various organizations and institutions which was indicated by Al-Qahwi (2013, pp. 27-28) when he stressed that knowledge management contributes directly to raising the level of performance of business organizations and achieving their desired goals. These organizations are to identify what knowledge is used in their work and applications and then how to work on raising and developing this knowledge in order to achieve the goals.

Employing knowledge is the purpose of managing it and it means investing it. Obtaining, storing, and participating in knowledge is not sufficient, but the important thing is to transform Knowledge to implementation, the success of any organization in its knowledge management programs depends on the amount of knowledge implemented in comparison to what it has, and the gap between what it knows and what it has implemented of what it knows is one of the most important evaluation criteria in this field.

The importance of knowledge management can be represented in terms of benefiting from knowledge in a practical and applied manner which was indicated by Jaradat, Al Maani and Al Saleh (2019, pp. 82-83); when he stressed that the importance of knowledge management for the contemporary organization comes through the goals that the organization seeks to achieve, as Knowledge management seeks to provide organized knowledge on a permanent basis, and translate it into practical behavior that serves the goals of the organization by achieving efficiency and effectiveness through planning knowledge efforts, and organizing them in a way that leads to achieving the strategic and operational goals of the organization. To keep pace with the requirements of the environment of all kinds and the importance of knowledge management for contemporary organizations comes through its ability to identify intangible assets and realize how knowledge flows within the organization, sharing, and using it to increase the effectiveness and impact of the organization's knowledge. Knowledge management is of great importance, both for the organization and for its employees, and the importance has increased in recent years with the increase in innovation and renewal rates. Ibrahim (2013, pp. 176-177) has indicated the importance of knowledge management in the following:

- Knowledge management leads to benefiting from the knowledge available inside and outside the organization in the best way in order to improve the administrative process and productivity, which in turn leads to improving the quality of service, so that it is easy to understand fast and safe.
- Knowledge management helps to reduce cost and increase profits which is an essential objective of any organization.
- Knowledge management helps to exchange information and ideas which encourages innovation and continuous renewal for improvement and development.
- The application of knowledge leads to continuous learning at the organizational level, through the transfer of knowledge within the organization, and its addition to the existing organizational knowledge in integrative ways through which the knowledge of the organization grows.
- Enabling the organization to grow and develop permanently through the use of individual,

collective and organizational knowledge of all the human resources of the organization.

- Knowledge management encourages employees to participate in and manage knowledge, through the involvement of workers

4. KNOWLEDGE MANAGEMENT OBJECTIVES

The element of improving efficiency is the main goal that knowledge management seeks to achieve which was indicated by Giard, & Girard, 2015, P. 9) when they emphasized that knowledge management aims to collect, analyze, store and share private knowledge and information by the institution; Whereas, improving efficiency is the primary purpose of knowledge management and that is done by reducing the need to re-explore it. It should be noted that the concept of knowledge management is the term that organizations use in a careful and accommodating manner to collect, arrange, share, and analyze knowledge in terms of sources, documents, and personnel skills.

The objectives of the knowledge management process are to increase the technological and informational capacity that in turn develops the knowledge stock of the human resource sector, as indicated by Ming-Ru, Yang, Ho, & Chang, 2015, P. 424- 425) when they emphasized that the widespread and growing popularity of knowledge management for large organizations lies in the fact that it does not possess an adequate amount of knowledge, and this is one of the main objectives of knowledge management, which lies in the prevention of those problems, which is the loss of knowledge and the result is the loss of income. As this type of management is the common factor in creating a network of relations between the human factor and the technological factor, and this network can preserve the intellectual property of the institution, which is what matures the knowledge resources of the institution, and this leads to achieving the best possible results. In order to be moving from an industry-based economy to an information-based economy, it is necessary to use superior systems of knowledge management, in order to protect competitive frontiers, and the ability to learn. The ability of organizations to take advantage of wise rationality provides them with the competitive frontiers in the modern market. There are also many goals of knowledge management, and Titi (2010, p. 45) touched on the most important of these goals in the following points: -

- Focus on developing the social, cultural and organizational aspects of knowledge management.
- Contribute to discussions of government policies and procedures related to the management and development of the knowledge society infrastructure.

- Defining and raising awareness in a holistic manner of the meaning of knowledge management and development, and spreading it among businessmen, so that the principles of knowledge management are used more, and the generalization of benefit by crystallizing opportunities for knowledge management work.
- Studying the social, cultural and economic conditions and related systems that affect the effectiveness of knowledge management initiatives.
- Work on developing social and cultural factors that encourage individuals to share knowledge within the region.
- Work to increase the number of people who can access computers, the Internet, and related technologies.
- Develop data and guides for work related to the knowledge society.
- Contribute from a business perspective to multilateral forums interested in topics related to the global knowledge society.
- Representation of the business community in institutions with regard to issues related to the knowledge society.
- Developing foundations and qualification criteria for knowledge management that help in developing the professional and educational aspects of knowledge management professionals.

The objectives of knowledge management are to create an organizational environment within the institution, provide learning and professional development, measure the extent of organizational effectiveness, in addition to developing aspects of the economy, which was indicated by Muslim (2015, pp. 26-27) when he stressed that with regard to the objectives of the management of knowledge The knowledge can be covered as follows:

- Creating the organizational environment that encourages each individual in the organization to share knowledge, to raise the level of knowledge of others.
- Building learning capabilities, spreading a culture of knowledge, motivating its development, and competing through human intelligence.
- Ensuring the effectiveness of the organization's technologies, transforming tacit knowledge into apparent knowledge, maximizing returns from intellectual property through the use of inventions and knowledge in its possession, and trading in innovations.
- The transformation of organizations from the traditional economy to the new scientific economy "knowledge economy", and works as a network of

activities, as it contributes to the transformation towards broad economic networks.

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From the above, it can be concluded that the knowledge management process targets a set of important points whose structure is formed in the organizational context on the one hand, and the professional context on the other hand. These points are represented in achieving the effectiveness and professional efficiency of the employees within the institution, and the organizational and economic aspect of the institution on the other hand; Knowledge management helps target the institution's dissemination, regardless of its functional area of information, which ensures the quality of its services and products.

5. KNOWLEDGE MANAGEMENT PROCESSES

The elements of knowledge management lie in three factors, namely knowledge management practices, knowledge management processes, and knowledge management infrastructures. The most important element in this context is the knowledge processes component. This was indicated by Shujahat, Ali, Nawaz, Darshat and Kianto (Shujahat, Ali, Nawaz, Durst, & Kianto, 2018, P. 202) when he emphasized that the importance of the knowledge processes component lies in two reasons that can be mentioned as follows:

- The first: that knowledge management processes exist naturally and without official support for knowledge management initiatives, which means that knowledge management processes must exist even if the application of knowledge management does not have a real applied entity on the institutional ground.
- The second is that most of the descriptions of knowledge-based innovation are based on the assumption that knowledge processes are indicators that are closely related to each other.

Knowledge management processes refer to a set of main processes and sub-activities required to generate knowledge and these knowledge and processes are the key to understanding knowledge management and the best ways to implement it. It should be noted the elements or components of knowledge management processes that are knowledge creation, knowledge acquisition, knowledge sharing, knowledge transfer, knowledge use, knowledge retention, knowledge codification, and knowledge development

6. OBSTACLES TO APPLYING KNOWLEDGE MANAGEMENT

Knowledge application processes require the possibility of deriving it, representing it, and reusing it, whether at the explicit or implicit level, which is what Al-Taher indicated (Altaher, 2011, P. 266). When he emphasized that knowledge had begun in the human mind, and knowledge management practices must determine the ways in which during which it is encouraged and aroused the sense of employees of the organization to develop new knowledge. The methods of knowledge management and technology used in knowledge must be effective ways to elicit, represent, arrange, reuse, and also renew that knowledge, as well as knowledge support processes from exploration, capture, and sharing and application of both explicit and tacit knowledge of the individuals involved.

Titi (2010, pp. 31-32) has confirmed that some problems have become clear in the practical application of contemporary institutions that urge workers to participate in knowledge management processes, as many attempts have appeared to launch the principles of knowledge management, which include the design and implementation of knowledge management systems, However, the implementation of knowledge management in many areas is considered an unsuccessful process, as there are many attempts to implement knowledge management that have failed to enable workers with knowledge and experience to share this knowledge for the benefit of the organization.

The talk about the requirements for the application of knowledge management is lengthy, but the main and necessary requirements for the application of knowledge management can be summarized. The greater the institutional capabilities, the greater the requirements for the application of knowledge management, but the four basic requirements for the application of knowledge will be discussed, and they are as follows: First: Institutional Planning: The development of institutional performance is determined by the strategy used, and the strategy is a general plan that explains the competitive position of the organization, and the strategy is a set of methods that are used to promote, produce and sell products or services, which was referred to by Unissula (Unissula, 2018, P. 2) when he emphasized that The institutional strategy is considered as a pattern of decisions used in addressing important things and is used as follows:

- From being the constitution of the institution in the face of the surrounding environment
- It affects the internal matters of the organization even its structure or operations.
- Affect institutional performance, as the strategic quality, which is established through the quality of

strategic planning, the quality of strategic implementation, and the quality of strategic evaluation.

- Ignoring the primary goal of knowledge management of creating shared contexts through dialogue.
- Not realizing the importance and role of tacit knowledge, and discouraging its manifestation, in addition to isolating knowledge from its uses.
- Weakness of rational thinking and reasoning, i.e, failure to identify modes of reasoning, rational conclusions, assumptions, and prevailing beliefs.
- Focus on the past and the present instead of thinking and focusing on the future.
- The failure to realize the empirical importance, and the substitution of technological communication instead of human interaction, that is, direct face-to-face dialogue.
- Striving to develop direct measures of knowledge only.

Singh (Singh, 2013, P. 216) also emphasized that the obstacles facing knowledge management are cultural, administrative and informational consequences. Therefore, in this context, and with regard to cultural barriers, managers are concerned with implementing managerial change, the ability to persuade individuals to volunteer their various knowledge, and also the ability to persuade business units to share their knowledge with other business units (especially business units responsible for profitability in the organization). In addition, there is also a concern about what the institution's responsibility is to bring and assemble those responsible for knowledge management who are involved in the development of knowledge management systems, and this includes the technical team, corporate librarians, documentation team, archivists, and rules officers Data and knowledge experts, and concern about how to implement knowledge management systems in a way that ensures effectiveness for the benefit of the organization.

Al-Mulhim (2015, pp. 174-175) also added that there are many obstacles that prevent effective employment of knowledge management, including:

- Institutions become accustomed to the centralization of management, and the lack of delegation of powers.
- Workers' resistance to change in the various stages of the administrative process.
- Not giving the creative and distinguished employees the opportunity to take responsibility for decision-making.
- The administration's bureaucracy continues with a large number of procedures and a large number of signatures and accreditations to allow the completion of a step of the administrative work.

- The lack of proficiency of workers and leaders in modern technologies, and the superficiality of dealing with computers for those who have been trained to use it.
- The lack of awareness among leaders and workers of the importance of knowledge management and its requirements, in addition to the unrealistic institutional evaluation, and the failure to evaluate the performance of workers.
- Not planning for coordination between institutions to be an effective knowledge system.
- Lack of knowledge management experts in institutional sectors.
- Not appreciating the importance of information, and the need to classify it, and keep it as a basic source of knowledge that can be employed when needed.
- Not appreciating those with creative experiences and skills, each in his specialization.
- The prevalence of some organizational conflicts that prevent creativity and the employment of knowledge, and the lack of a future vision for the leadership of institutions.

From the above it can be concluded that knowledge management within any organization faces a set of obstacles that can be addressed as follows briefly:-

- The prevalence of organizational conflicts between professional, managerial and operational individuals.
- The lack of sufficient professional competencies and individuals trained to use knowledge from its explicit and implicit sources.
- Lack of awareness of technological culture and the inability to use modern devices and mechanisms to use, generate and store knowledge.
- Lack of knowledge and financial funding through which the stored knowledge can be applied in various professional fields.
- The institution's lack of organization and planning factor between it and the existing sectors.
- The workers and managers show a degree of resistance to changes and developments that may help them manage knowledge in a more sophisticated manner, which calls for their rejection of traditional mechanisms.

7. THE ROLE OF UNIVERSITIES IN SUPPORTING INNOVATION

Universities have a prominent role in adopting innovation, and graduating a generation of scholars and

individuals who achieve the foundations of modernity in various fields, which was indicated by Crampton (Kempton, 2012, P. 489). When he stressed that the importance of the role of universities in supporting regional development and innovation has been recognized for a long time, especially in less developed or marginal areas that often lack institutional density in their core areas, and that in recent years, there has been an increasing importance in the role of universities, which goes beyond the basic roles of teaching and research towards a more developmental role and capacity building in their local economies. In particular, this is a critical role in areas that may suffer from innovation gaps in research from their universities. Where this could spread to regions with higher levels of absorptive capacity. These trends have been discussed since 2008 and have led to increased demand from policy makers for publicly funded institutions to demonstrate their value and contribute to social and economic development. As this enhanced and deeper role of universities in regional development has been strongly reflected in recent strategies and policies.

Universities have also contributed to the development of the sectors of entrepreneurship and the economy in general, which was indicated by Christian (Christian, 2014, P. 193). When he emphasized that the globalization of educational services and the emergence of the knowledge economy brought a gradual paradigm shift from the traditional role of universities to innovation and entrepreneurship. As universities are now facing more challenging problems of global competitiveness and are now looking for ways to provide more useful and relevant educational services, this also stems from the need to respond to the demands of unprecedented globalization by redesigning their curricula to provide the future generation of graduates with skills, knowledge, attitudes, in order to meet productivity challenges; But it was noted that the high level of education in general and higher education provide the foundations for the ability of nations to innovate, and to contribute more than any other social institution to the development of civil society. It was also noted that countries over the years use university education as a source of growth.

For example, China has embarked on a knowledge-based growth path by attracting foreign direct investment and then building domestic knowledge efficiency through massive investment in education and scientific research. Kagiri, Andrew, & Makabila, 2013, P. 6 emphasize that it is worth noting the role that training and development play in the development of innovation in public universities; As universities support the development of innovation not only by funding training, but also organized through seminars and workshops; In addition, universities recognize those individuals who have received training related to both innovation and its development and adoption, methods and stages.

The role of the university in supporting innovation is represented in the mechanism of communication and interaction between local and global blocs which was indicated by Grant & Kronstal, 2010, P. 351). When he emphasized that universities support innovative adoption processes by linking local blocs with global knowledge. , and that universities are also a pillar of creativity that builds social integration and cohesion, and produces diverse and tolerant societies; Where it has been emphasized that universities in small towns produce diversity and tolerance by supporting innovative processes, and promoting and developing talent, while it has been found that the regions and universities that attract talented are the societies that show the most potential for tolerance and retention of talented workers.

Paez-Logreira, Zamora-Musa, & Velez-Zapata, 2016, P. 5 have emphasized that universities support innovation and science development through their scientific and technological capabilities and also make efforts in research producing knowledge and finding solutions to community problems in addition to teaching. Accordingly, universities play an essential role in the process of transformation of society, because universities are the institutions that have a place on the public stage to provide knowledge that modifies and transforms social and economic dynamics. Despite this, the education sectors and universities are faced with the demands of knowledge production; highly qualified teaching research, research, and innovation; Where both researchers and university professors are based on achieving these goals, it should be noted that universities focus their efforts on developing projects, developing scientific research, and doubling productivity to meet high-efficiency requirements in teaching, research and innovation.

From the above facts, it can be concluded that the university's role in supporting innovation is that the university is an institution that disseminates knowledge to individuals, and works on graduating thoughtful generations that make a difference in various industrial, economic and technological fields. Most of the innovations that benefit the world are due to patents that have been well marketed through the university, which is represented in its societal and institutional weight in strengthening the pillars of innovation in a way that ensures the achievement of the goals of societies, through the dissemination of knowledge and encouragement of critical and creative thinking, as well as improving interaction machines. communication between the private and public sector, local and global institutions; where communication is one of the most important requirements underpinning innovation.

8. CONCLUDED COMMENTS

The paper reviewed the nature of knowledge management and the processes that can be relied upon to achieve innovation within the university through the agencies; it is building for knowledge creativity in an attempt to harmonize the university's outputs with the requirements of the labor market, which is represented by its permanent development. This was done by addressing the first topic, "Knowledge Management", by listing the most prominent concepts of knowledge management, its importance, objectives, and its processes. As for the second topic, "Innovation", it dealt with the concept of innovation, its importance, stages, and requirements for its application. The most prominent models of innovation and innovation obstacles were identified, in addition to the identification of the role of universities in supporting innovation.

For knowledge acquisition, administrator in academic institution should pay adequate attention to nurturing a culture of being open to new-to-the world things, sharing and exchange. Infrastructure must be supportive for smooth communication including technological infrastructure. Budget must be spent on learning materials, software, intellectual products and even human resource of high quality. Though, cross-functional training scale statistically failed to meet up reliability requirement in this research, it still need to consider in practice.

For knowledge dissemination, different platforms, forums and resource centers must be available for knowledge sharing. Organizational knowledge must be well organized and easy to get access to. Priorities must be given to developing different form of publications, organizational database and repositories. In addition, system of seminar, conference and symposium must be periodically held together with running apprenticeship or novice teacher mentoring program. On of very important factor in knowledge dissemination is that stakeholders of the institution must be provided with formal, informal and virtual space to interact with each other for knowledge exchange. Although patent and copyright of organizational knowledge in not now well-perceived in Vietnam, it needs sufficient care in practicing KM.

REFERENCES

- [1] Ibrahim Alsaied Mabrouk. (2013). Administrative communication and knowledge management of libraries and information facilities. Cairo: Dar Al-Wafa Ladina Printing and Publishing.
- [2] Ali, Osama Mohamed Sayed. (2013). Contemporary management trends: knowledge management. Cairo: Dar Al-Ilm and Al-Iman for Publishing and Distribution.
- [3] Chen, C., Huang, J., & Hsiao, Y. (2010). Knowledge management and innovativeness The role of organizational climate and structure. *International Journal of Manpower*, 31(8), 848-870.
- [4] Rahimli, A. (2012). Knowledge Management and Competitive Advantage. *Information and Knowledge Management*, 2(7), 37-43.
- [5] Omotayo, F. O. (2015). Knowledge Management as an important tool in Organisational Management: A Review of Literature. *Library Philosophy and Practice (e-journal)*, 1238, 1-23.
- [6] Al-Qahwi, Laith Abdullah. (2013). Knowledge management strategy and organizational goals. Jordan: Al-Hamid Library for Publishing and Distribution.
- [7] Jaradat, Nasser Muhammad Saud; Maani, Ahmed Ismail; Al-Saleh, Asma Rashad. (2019). knowledge management. Amman: Ithraa Publishing House.
- [8] Girard, J., & Girard, J. (2015). Defining knowledge management: Toward an applied compendium. *Online Journal of Applied Knowledge Management*, 3(1), 1-20.
- [9] Ming-Ru, Z., Yang, C., Ho, S., Chang, C. (2015). A study on Enterprise under Globalization Competition Knowledge Management and Creation Overhead Construction. *Journal of Interdisciplinary Mathematics*, 17(5-6), 423-433.
- [10] Titi, Khader Misbah Ismail. (2010). Knowledge Management: Challenges, Techniques, and Solutions. Jordan: Dar Al-Hamid for Publishing and Distribution.
- [11] Muslim, Abdullah Hassan. (2015). Knowledge management and information technology. Jordan: Dar Al Moataz for Publishing and Distribution.
- [12] Shujahat, M., Ali, B., Nawaz, F., Durst, S., & Kianto, A. (2018). Translating the impact of knowledge management into knowledge-based innovation: The neglected and mediating role of knowledge-worker satisfaction. *Human Factors and Ergonomics In Manufacturing & Service Industries*, 28(4), 200-212.
- [13] Altaher, A. M. (2010). Knowledge management Process Implementation. *International Journal of Digital Society*, 1(4), 265-270.
- [14] Unissula, W. (2018). Grand Theory Model Of Strategy Quality: Strategic Asset Approach At Industry. *Academy of Strategic Management Journal*, 17(2), 1-10.
- [15] Singh, J. (2013). Practicing Knowledge Management System. *International Journal of Information , Business and Management*, 5(4), 209-230.
- [16] Melhem, Wigdan Nasser Abdel Mohsen. (2015). Activating knowledge management in Saudi pre-university education institutions: a theoretical study. *The Arab Journal of Educational and Human Sciences Studies and Research*, (1), 154-182.
- [17] Kempton, L. (2015). Delivering smart specialization in peripheral regions: the role of Universities. *Regional Studies, Regional Science*, 2(1), 489-496.
- [18] Christian, I. O. (2014). Entrepreneurial Human Capital Development and Economic Future of Nigerian Graduates. *Developing Country Studies*, 4(12), 193-198.
- [19] Kagiri, A. W., Andrew, K. O., & Makabila, G. (2013). The Role Of Training And Development On Innovation Development In Public Universities Of Kenya. *International Journal of Social Sciences and Entrepreneurship*, 1(8), 1-7.

- [20] Grant, J. L., & Kronstal, K. (2010). The social dynamics of attracting talent in Halifax. *The Canadian Geographer*, 54(3), 347–365.
- [21] Paez-Logreira, H., Zamora-Musa, R., & Velez-Zapata, J. (2016). Relation Analysis of Knowledge Management, Research, and Innovation in University Research Groups. *Journal Technology, Management, and Innovation*. 11(4), 5-11.
- [22] Al-Sawy, Yasser Muhammad Muhammad. (2020). The role of the learning resource center specialist in the application of knowledge management in private universities in the State of Kuwait: a field study. *Journal of Research in Library and Information Science*, (24), 129-158.
- [23] Shahram Shafiee,, Mojtaba Eskandaripour and Samira Soltani, (2020), The Effective Factors on Knowledge Management in Universities from Physical Education Instructors' Viewpoints, *Physical Culture and Sport. Studies and Research*, Vol. 86 , Issue 1.
- [24] Kamal El-Din, Hisham Mustafa; Abu Zeid, Mohamed Mahmoud. (2019). The reality of knowledge management application and its impact on institutional performance excellence in Saudi universities: a case study of Najran University. *Jerash for Research and Studies*, 20(1), 177-213.
- [25] Andi Nu Graha et al (2019), The Role of Knowledge management in Organizational Performance: Case Study of University of Malang- Indonesia, *Problems and Perspectives in Management*, Volume 17, Issue 1
- [26] Farjoun, Khaled Mohamed Mohamed. (2019). The application of knowledge management in Libyan universities to achieve excellence in scientific research. *Al-Bayan Scientific Journal*, (3), 34-53.
- [27] Andi Nu Graha et al (2019), The Role of Knowledge management in Organizational Performance: Case Study of University of Malang- Indonesia, *Problems and Perspectives in Management*, Volume 17, Issue 1
- [28] Farjoun, Khaled Mohamed Mohamed. (2019). The application of knowledge management in Libyan universities to achieve excellence in scientific research. *Al-Bayan Scientific Journal*, (3), 34-53.
- [29] Sirorei & Fombad, (2019): "Knowledge management processes in the St Paul's University Library in Kenya", *SA Journal of Information Management* 21(1)
- [30] C. Musa, Amal; Bouajimi, Jamal. (2018). The contribution of knowledge management technology to improving the administrative performance of local universities: a case study of the state of Medea. *Al-Hikma Journal for Media and Communication Studies*, (13), 181-197.
- [31] Iman M. Adeinat , Fatheia H. Abdulfatah (2019), Organizational culture and knowledge management processes: case study in a public university, *VINE Journal of Information and Knowledge Management Systems*, Vol49, Issue 1.
- [32] Peter Milley et al (2019), The Landscape of Social Innovation in Canadian Universities: An Empirical Analysis, *Canadian Journal of Nonprofit and Social Economy Research*, Vol11, No.1
- [33] Caliskan, G., & Izmirli, O. S. (2020). Teachers' Communication Channels In The Innovation-Decision Process. *Education and Science*, 45(203), 367-395.
- [34] Gardashi et al., 2019" entitled: "Innovative Capacity in Universities of Medical Sciences: A Qualitative Study in Iran", *J Education Health Promot*, e-collection.
- [35] Assaf, Mahmoud Abdel Majeed Rashid. (2018). Indicators of innovation management at Al-Azhar and Islamic Universities in Gaza Governorate from the point of view of faculty members and ways to activate them. *Educational Journal*, 32(128), 225-269.
- [36] Ngoc-Tan, N., & Gregar, A. (2018). Impacts of Knowledge Management on. *Innovation in Higher Education Institutions: An Empirical Evidence*, *Economics and Sociology* 11(3):301-320
- [37] Judges' Study (2017) entitled: "The Impact of the Internal Work Environment on Creativity and Innovation in Private Jordanian Universities", *International Business and Management*, Vol.5, No.2
- [38] Nour and El-Sayed (2016), "The Role of Open Innovation in Improving Knowledge Transfer Processes within Egyptian Universities: Application to Egyptian Public Universities", *Journal of Open Innovation: Technology, Market, and Complexity*, Vol.5, No.1