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# **Knowledge Project Management** at a Saudi University

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Project Management; Knowledge Project Management (KPM); Saudi university ranking; University management; University structure; KSA vision 2030.

### **Abstract**

This study highlights the importance of managing knowledge projects in university, as it is an educational institution that works to build a society in various research, medical, educational, economic, industrial, social, political, military and environmental fields, and with the presence of a department specialized in managing knowledge projects that work to enhance internal and external sources of knowledge and seeks to Make strategic plans that achieve the highest results, and for this, we benefit from past experiences in some companies, where knowledge was entered into managing their projects by training and developing their human resources. This study sheds light on knowledge projects management and its importance in Saudi universities to achieve the vision of the Kingdom of Saudi Arabia 2030. The study population consisted of professors at King Abdulaziz University (professor, associate professor, assistant professor). The results showed the importance of knowledge projects management because there is no specialized management in Saudi universities concerned with managing knowledge projects in the correct scientific methods and universities spend very large amounts on developing knowledge among their employees in most university, and the results also showed that Saudi Arabia aims in its vision 2030 to increase the competitiveness of Saudi Arabia and raising the rankings of its university. From this goal, knowledge projects were launched at the Ministry of Education aimed at universities to raise their level to the highest international rankings of the university. The vision also included that at least five Saudi universities become one of the best 200 international universities by the year 2030. The researcher recommended the necessity of establishing specialized departments in knowledge projects management in Saudi universities.

**Disciplinary**: Education Management Information System.

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# 1 Introduction

The importance of this study is that it focuses on knowledge projects and managing them in a scientific and global manner, which helps to achieve the highest levels of success in Saudi universities.

The world is developing rapidly with the development of technology and the science of management [7, 8]. This helped to innovate and create in various sciences and disciplines. The Kingdom of Saudi Arabia has witnessed a renaissance in various health, educational, economic and military fields. Services have developed in various sectors, and universities were the main element in this renaissance. The number of universities during the past fifteen years increased from eight to twenty-eight Saudi universities; by 250%, these universities need management specialized in knowledge projects and managing them using the latest international methods.

The problem of the study is that there is no specialized department in managing knowledge projects in Saudi universities [9], where large sums of money are invested in knowledge projects from the universities 'budget and it is considered the second-highest item in the universities' budget after the salaries and bonuses item for university employees, and these universities need a department specialized in project management Knowledge, and that many Saudi universities face several challenges in managing their knowledge projects, such as planning, budget, management, implementation, follow-up, evaluation, evaluation and closing the project, and the pursuit of high quality and project management from potential risks such as economic, political, environmental, academic, health and social risks, and developing alternative plans until The project does not falter.

The researcher submits a proposal to establish a department specialized in managing knowledge projects that includes several units to achieve its goals and aspirations, and these units include the following:

The researcher submits a proposal to establish a department specialized in managing knowledge projects that includes several units to achieve its goals and aspirations, and these units include the following: Department of Planning and Studies, Quality Management, Quality Management, Managing internal and external relations, Risk Management, Human Resource Management, financial management, Academic Consulting Department, Department of Follow-up, Measurement and Evaluation.

This study attempts to answer the question: What are the scientific bases for establishing knowledge project management at the university?

### 2 Previous Studies

The researcher did not contact a scientific study specializing in the management of knowledge projects, nor did he continue to study specialized in managing knowledge projects in universities, but there are studies that have benefited from knowledge in managing their projects either by developing human resources or looking for experiences to work for them and to benefit from them directly in developing their products Or inventing new products and transferring these experiences and experiences to the company's human resources. This type of investment in

knowledge exists in companies as well as in universities, and the main goal is to transfer and share knowledge and enable the educational institution or commercial institution to achieve its goals.

The work [1] provided frameworks and proposals for building a knowledge management strategy for the general management of projects at King Abdulaziz University through analyzing the internal and external work environment, defining management objectives, and identifying The study relied mainly on the case study methodology using the quadratic analysis method (SOWT) Where experts from the General Administration of Projects were selected and their opinions were monitored through a questionnaire to identify the most important objectives and procedures that help in proposing a strategy for knowledge management, and the study showed a number of results and recommendations, most notably the work to include knowledge management within the departments of the administrative structure of the general management of projects, and to provide adequate support For the success of this administration by providing human and technical capabilities and infrastructure, and supporting it with specialized human competencies in managing knowledge, technical background and communication skills, and establishing an organizational environment based on creating a stimulating, encouraging and supportive culture to produce knowledge and share it with personal experiences Building effective networks in relations between individuals, and establishing an organizational culture supportive of sharing and exchanging knowledge. The study also adopted a proposal for 26 initiatives to build a knowledge management strategy and called for its implementation and implementation during the coming period [1].

The article [2] clarified the relationship between Knowledge Management and Project-Management and the human and intellectual capital it contains. The study recommended developing awareness among workers about the importance of knowledge management and its processes in the project lifecycle, through workshops and specialized training courses for knowledge transfer and sharing. [2]

In [3], the study uncovered mechanisms for documenting implicit knowledge of government projects in the Jeddah Governorate Municipality by revealing the reality of applying the mechanisms for documenting implicit knowledge and identifying methods The practice of transferring implicit knowledge into knowledge management processes (diagnosis - generation - participation), uncovering the mechanisms of documenting implicit knowledge, and determining the extent to which the knowledge center in the Municipality of Jeddah Governorate applies basic knowledge management processes in its various projects, in addition to revealing the significance of statistical differences between mean scores [3].

Applying the dimensions of implicit knowledge (experience, skill and thinking) in the Jeddah Governorate Municipality projects according to the different personal variables. Among the most prominent recommendations was the need to work on developing the knowledge center located in the Jeddah Governorate Municipality in order to achieve its desired goals, and the need o benefit from neighboring experiences by searching for the achievements of others in other municipalities,

and also to work on studying past experiences and experiences in similar environments, as the researcher recommended the necessity Adding a special tab in the Knowledge Center in the Unified Performance Charter, which includes the departments' strategy, performance indicators and manuals for their procedures and policies, and updating them periodically.

The study [4] searched for innovation projects in universities and factories and the possibility of improving them, especially to bring knowledge and new technology into commercial products This research work will explore how a new knowledge management model was created for innovation projects in the university-industry and support for universities, industrial companies, project managers and knowledge workers, to help improve innovation outcomes from these projects, with a focus on knowledge processes in the pre-project stage. During the project and upon completion of the project, the results show that the knowledge management model contributed to building the long-term knowledge platform.

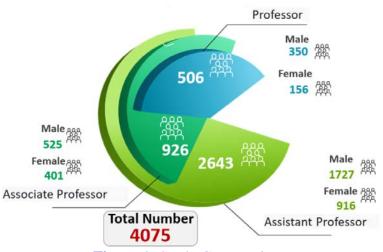
The work [5] investigated the transformation of tacit knowledge of projects into clear knowledge available in project management offices, and the use of case studies, where the information was collected on-site by observation, and interviews with Managers in the project management office, the results show the importance of transforming the tacit knowledge of the project into clear knowledge, and the importance of integrating knowledge into operational practices and preserving it in company databases, where organizational culture was presented as a major factor, as it affects the process of knowledge exchange between employees. [5]

# 3 Research Method and Procedures

The researcher used the descriptive survey method, as it is the appropriate method for studying reality in its realistic way in dealing with the research problem, given the researcher's presence at the heart of the field and the place related to the study; In order to identify the current situation, and study the strengths and weaknesses; To prepare proposals and perceptions that contribute to the establishment of a department specialized in managing knowledge projects in a Saudi university.

The study population is represented by the faculty members (professor, associate professor, assistant professor) at King Abdulaziz University, and the total study population was 4,075 from the teaching staff, with the sample size 207.

The study tool (the questionnaire) was used to collect data and information, and after reviewing the literature, and previous studies related to the topic of the current study, and in light of the data and the study's question and objectives, the tool (the questionnaire) was built, which in its final form consisted of sixty questions (thirty questions about the importance of Management of knowledge projects at the university, and thirty questions about the scientific foundations for the establishment of the management of knowledge projects at the university).



### Figure 1: Study Community.

# 4 Results & Discussion

In this part, we talk about the questionnaire after it was statistically processed using statistical treatments and methods, according to the requirements and variables of the study, where the researcher distributed the study tool to the total study population of (4,075) university professors at King Abdulaziz University, and the sample applied to the study was (207) faculty member And their percentage represented (5.07%) of the total population of the study, and the electronic questionnaire was distributed by the Deanship of Graduate Studies at King Abdulaziz University. There are sixty questions in the questionnaire and it is divided into two part.:

# 4.1 Results of the First Axis: the Importance of Managing Knowledge Projects at Saudi Universities

The results of the study showed that the importance of managing knowledge projects stems from its importance in supporting scientific research and innovation through knowledge projects available inside and outside the university, and it ranked first in terms of approval by the study sample members with an average of 2.94-3 according to the responses of the study sample members.

The results of the study revealed that the importance of managing knowledge projects at the Saudi University lies in the development and development of the capabilities of faculty members and leaders at the university through its knowledge projects such as scientific communication, scientific dedication, attending conferences, seminars, workshops and leadership training programs, and helps the higher administration to take appropriate decisions in its knowledge projects. Through the periodic and annual reports presented by the administration on its knowledge projects, these responses ranked second in terms of approval by the study sample, with an average of (2.92-3).

The results of the study indicate that the management of knowledge projects contributes to building basic strategies for knowledge projects at the Saudi University, and achieves excellence and knowledge creativity, and supports faculty members in supporting their research projects. 2.90-3.

The results of the study show that the management of knowledge projects highlights its importance in providing consultations and studies to the higher management of the university and that it contributes to supporting the faculty members to meet their scientific, academic and research needs, and gives a numerical indication of the achievements of knowledge projects to determine the position of the Saudi University in international rankings, and these responses obtained on Fourth place in terms of approval of the study sample with a mean of 2.90-3.

The results of the study showed that the Department of Knowledge Projects provides support and assistance to teaching assistants and lecturers in the field of scholarship, research and innovation, and works on preparing studies and reports on knowledge projects, whether inside or outside the university, to exchange experiences and benefit from the experiences of leading universities in research and innovation, and to enhance scientific communication between Saudi universities and institutions. And distinguished international universities, and are working on preparing studies that show the colleges and scientific departments' need for rare specializations that scientific departments need and work on solving them. These responses ranked fifth in terms of approval by the study sample, with an average of 2.87-3.

The results of the study concluded that the management of knowledge projects contributes to creating a balance in the implementation of knowledge projects in colleges and scientific departments, and contributes to the expansion of training programs for faculty members through conducting studies and academic scientific programs, and contributes to strengthening scientific links between universities and other scientific and research institutions within Outside the Kingdom of Saudi Arabia, these responses ranked sixth according to the approval and approval of the study sample, with a mean of (2.85 - 3).

The results of the study showed that the management of knowledge projects contributes to linking information bases with electronic systems to benefit from research and scientific messages, and it ranked seventh according to the approval of the study sample members, with an average of (2.83 - 3) according to the responses of the study sample members.

# 4.2 The Results of the Second Axis: the Establishment of the Knowledge Projects Department at Saudi Universities

The results showed that the establishment of the Knowledge Projects Department at the Saudi University contributes to achieving the goals of the Kingdom of Saudi Arabia 2030 vision, and it ranked first in terms of approval by the study sample members with an average of 2.96-3 according to the responses of the study sample members.

The results of the study concluded that the establishment of the Knowledge Projects Department contributes to achieving the strategic objectives of the Saudi Ministry of Education, and contributes to setting strategies and general policies for knowledge projects in universities and supporting scientific research, innovation and creativity to serve the aspirations of the Kingdom of

Saudi Arabia 2030 vision, and focuses on knowledge projects that serve the economy. The responses ranked second in terms of approval by the study sample, with a mean of 2.94-3.

The results of the study showed that the management of knowledge projects is an essential element for building modern strategies for knowledge projects at the Saudi University, and works to support senior management in decision-making by providing them with the necessary information, reports and statistics about knowledge projects, conducting scientific studies on projects, their feasibility and their need, and working to support projects In the event of facing challenges that impede the achievement of its goals, as there are many risks facing projects, such as natural environment, economic, health, academic, educational, research or security risks and other risks, and these responses ranked third in terms of approval of the study sample with an arithmetic average He reached 2.91-3.

This study results revealed that one of the tasks of managing basic knowledge projects is to analyze the problems facing knowledge projects and work to address them with the best appropriate solutions, and its tasks focus on providing studies and consultations to senior management, and not carrying out the tasks of the existing executive departments, and these responses ranked fourth among Where the approval of the study sample with a mean of 2.88-3.

The results showed the necessity of establishing internal management and units in the management of knowledge projects to contribute to achieving the goals and strategies of universities and achieving the vision of the Kingdom of Saudi Arabia 2030. The approval of the study sample members with an average of 2.87-3.

# 4.3 University Structure for KPM

This study suggests university structure for KPM as given in Figure 2.

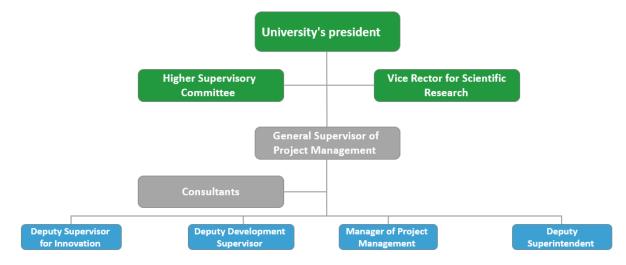


Figure 2: Organizational Structure of Knowledge Projects Management

# 5 Conclusion

The result of this study confirms the importance of managing knowledge projects in Saudi universities confirming the Kingdom of Saudi Arabia 2030 vision. We recommend the establishment of specialized departments in the management of knowledge projects in Saudi universities that contain these sections including Planning and Studies Department, Quality

Management, Department of internal and external relations, Risk management, Human Resources Department, Financial management, Academic Consulting Department, Administration of follow-up, measurement and evaluation.

We recommend developing strategies for managing knowledge projects in Saudi universities aimed at achieving the vision of the Kingdom of Saudi Arabia 2030. Also, we recommend setting up a unified system for managing knowledge projects in Saudi universities that include systems for acquiring, generating, transferring and sharing knowledge in scholarship projects, research and innovation projects, and scientific communication projects between Saudi universities and distinguished international universities.

In addition, we recommend the establishment of a permanent committee in the management of knowledge projects consisting of several members including the University Vice President for Postgraduate Studies and Scientific Research, Vice-Rector for Business and Knowledge Creativity, Faculties' deans, Dean of Postgraduate Studies, Dean of Scientific Research, Dean of the Research and Consulting Institute, General Supervisor of Knowledge Projects Management, Executive Director of Knowledge Projects Management, Director of intellectual property, Director of the Center for Knowledge Economy and Technology Transfer.

Further, we recommend that researchers be urged to increase interest in research related to knowledge project management and its role in achieving high results in knowledge projects in international universities. The study recommends applying the organizational structure for managing knowledge projects according to Figure 2.

# 6 Availability of Data and Material

The data for this study can be available upon a request made to the corresponding author.

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