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# PROPOSED KNOWLEDGE MANAGEMENT CONCEPTUAL MODEL TO ENHANCE TEACHING ACTIVITIES THROUGHOUT WEB 2.0 TECHNOLOGY FOR ACADEMICIANS

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## ABSTRACT

In the era of information technology, knowledge management became urgent need for raising the competitive advantage level. Universities considered as knowledge intensive base organizations. The knowledge are embedded in the academicians minds are sharing within students throughout various teaching activities. A valuable amount of knowledge that accumulated from academicians need to collected for sharing among the academicians community. The successful knowledge management processes of academician experiences lead to enhance the teaching activities. The learning process enhance by assisting academician to learn from each other and product high quality teaching activities. Most of academician's knowledge is faded due to the absence of standard system that could collect and share the teaching experiences. This research proposed knowledge management conceptual model that can enhance the knowledge processes of acquiring, storing, sharing, and reusing teaching experiences. Data collected by interviewing academicians from Iraq universities and obtaining the required data. The findings deployed to develop knowledge management model that could work efficiently and affectivity to enhance the teaching activities in Iraq University.

## INTRODUCTION

Nowadays, business organizations considered knowledge management as essential aspect to determine the competitive advantage and achieve the required goals [1]. The right implementations of KM can upgrade the annual profits by enhancing the operations of identify, capture, store, share, and reuse knowledge [2]. Consequently, universities need to take advantage of the possible benefits that could derive from implement KM successfully. [3],[4],and [5] argued that university can considered as a business organizations since they have the processes of creation, acquiring, and sharing of knowledge that involve spontaneously. Therefore, there are high possibilities of implementing KM processes in official use. Teaching activities are producing a large amount of knowledge that need to



transform into systematic platform. the deployment of KM platform will promote the teaching activities which in turn will enhance the learning processes for the students [6],[7]. Thus, academicians are need to improve their knowledge and teaching activities in a way that satisfy the students demands. In additions, academicians are required to align with the ongoing obstacles in this century. Students became more creative and in need to professional teachings techniques, the high level of technology that require modern teachings activities. Consequently, academicians should get along with the development in information technology sector [8].

This research focuses on the educational environment in Iraq. The universities in Iraq are struggling to cope with the developments that continuously happen in information technology sector [9]. Most of universities are not geographically located in the middle of cities. This may lead to difficulties of reach its locations. Most of universities are far and in urban area. Consequently. These geographical distributions of universities trigger the need to implement information technology system that could capture, store, and share the knowledge automatically without the need to face to face interactive [10]. Another reason that can also trigger the need of the implement KM system is the retirement of the academicians, specifically the professors who have valuable expertises that require to store electronically. The retired academician has unique knowledge that will lose and faded. Moreover, most of academicians have no enough time to share their knowledge by face to face communications due to their heavy responsibilities and tasks such as researching, supervisions and teaching activities. Apparently, the traditional interact are no longer capable to keep the momentum of efforts and an urgent need of KM system is rise to overcome these obstacles.

Academicians will encourage reusing the knowledge and refining it if there is a reliable system to collect, store, and share the knowledge efficiently. Knowledge that produced from one class can be capture, store, and reuse for the other academicians who teach the same class. In this way, the academicians can save the time and the efforts to use it for enrich their researching and supervisions activities instead of spend it for recreate the same teaching materials over and over. Academician's time is so a valuable and they have many tasks that need their availabilities [11]. Thus, this research aims to investigate the academician perspective of the affectivity of using web technology to enhance their teaching activities. An empirical study is conducted to develop effective knowledge management model for teaching activities (KMTA) for academicians in Iraq universities. Effective KM system can upgrade the educational output and enhance the teaching quality for students. Accurate knowledge will deliver to the student that will improve their understanding and absorbing for the teaching materials.

## RELATED WORK

Universities as educational institutions are necessarily producers and custodians of knowledge. Knowledge management initiatives are therefore very critical to such institutions. Main resource of knowledge is the teaching activities. The accumulated knowledge that could collected from teaching activities throughout many years of teaching can enhance the ongoing teaching practices and lead to better educational output. The result of such

enhancements can improve the students learning process. In general. Universities are producing a large amount of knowledge in many teaching subjects. In each subject, academicians are capture, store, and share their knowledge individually depending on their skills and traditional methods. Academicians are used to preserved their knowledge as documents, papers as (know what knowledge).In contracts, they omitted to preserve another type of knowledge which is (know how knowledge).

The teachings expertises are not just abstract knowledge. The main part of it is needed to interpret deeply and clearly. It is a human fact that it's difficult to capture the (know how knowledge) such as practical methods. Problem solving. Cognitive skills and best practices. Thus, the lack of preserved this kind of knowledge can affect the educational process by reducing the academicians performance regarding how they produce and deliver their knowledge [12]. To overcome these obstacles, universities need to cape with the development of information technology such as social networking tools, data bases, and management tools [6].In general, these tools can help saving the knowledge as well as supporting the sharing of knowledge. However, the mentioned tools are not support the transformation of academicians knowledge (know how knowledge) such as teaching expertises and skills[13].Thus, there is a need to develop a specific KM system that can collect ,store , share, and reuse the knowledge among the academicians in term of their teaching expertises and activities [9].

Furthermore, the Previous studied are focused of develop KM system from the students perspectives and views. In addition, few researches in Iraq explore KM concepts and theories in universities environment [9]. Moreover, there is a lack in research that focus on develop KM system that could manage the (know how knowledge) efficiently. Thus. There is a urgent demand on develop a singular system that can manage the teaching knowledge successfully in term of collect, store, share, and reuse knowledge successfully [10].

## RESEARCH METHODOLOGY AND DATA COLLECTION

This research used semi-structured interviews as qualitative method to collect the required information from academicians [14]. The interview is conducted with 25 academicians in random Iraqi universities. The participation was optionally. The information is obtained from academicians by sending the interviews in emails that randomly distributed via the official emails for academicians. The interview was validated by two experts in KM field to ensure the internal validity of parts and related questions in each part [15]. The interview aim to reveal the current situations of knowledge sharing activities among the academicians in Iraqi universities. In addition, the interview aimed to figure out the academicians need to new KM sharing system to share their teaching expertises and the academician's perspective of adopting web 2.0 technologies as a new KM system for sharing teaching activities.

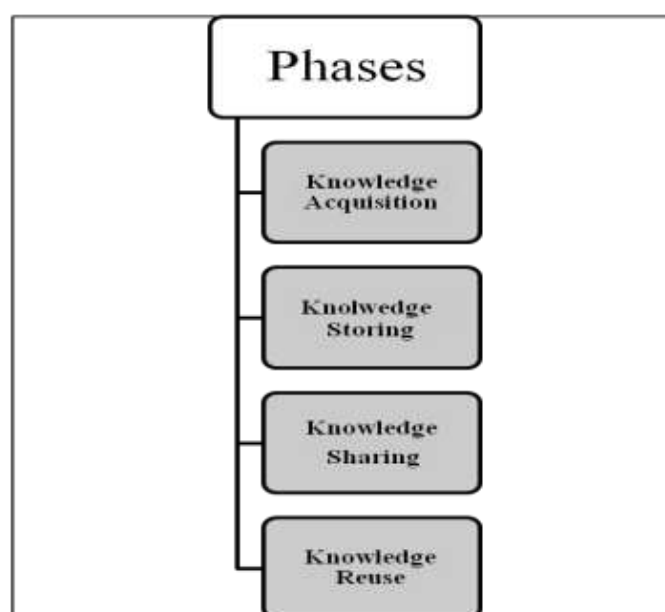
## DISCUSSION OF FINDINGS

The analysis of the qualitative data that derived from this research reveal certain issues to address the current situations of knowledge sharing activities among academicians in Iraqi universities and the academicians actual need to new KM system to share their teaching expertises and activities. Firstly, the findings reveal that there is no standard system or tools that used currently to manage the academicians knowledge. Academicians declared that they rely on some informal methods to store their knowledge such as save it as word documents at the end of each semester or save these documents on their personal hard disks. In addition, academicians clarified that they personally try to share their teaching expertise by face to face interaction which consume their time and efforts. The findings also reveal the academicians complained about spend their valuable time and stress themselves to schedule face to face meeting to directly exchange their knowledge and expertises [16]. Furthermore, the results shows that the academicians are suffering from the lack of motivations, they declared that the top management i.e. heads of departments are not encourage them to store and share their knowledge to other colleagues. There is no formal policy to reward or promote the academicians who share their teachings expertises. The findings also confirm pervious related works findings which found that one of the most common barriers of sharing knowledge among academicians is the absence of top management motivation [17]. Consequently, this findings can advocate the top managements in Iraqi universities to adopt a rewarding system that could distinguish the academician for participating efforts in sharing teachings expertises[18]. On the other hand, the findings of the interview shows that most of academicians believed in the possible advantages of sharing the knowledge, specifically, the teaching expertises. They believed that by sharing the knowledge to each other, this can help to improve the teaching quality and enrich the classroom with student's curiosity and attention [19]. Additionally, academicians stresses on the importance of sharing the knowledge in specific subject within specific resources. They emphasised on the advantage of sharing to help academician who teach specific subject to shape the course syllabus. Furthermore, they also emphasised on the benefit of sharing the knowledge to reduce the duplicated errors and problems that might affect the teaching quality. Furthermore, academicians confessed that they really struggle without the expert's expertises regarding the teaching activities. they said that they need to spend daily hours to absorb certain subject while this efforts can eliminate by having previous knowledge form expert colleagues who teaches the same subject previously. For instance, academicians who teaching computer subject explained that they spend many hours to build knowledge in this subject by doing self-professional development and learning to learn programming language skills and instructions. Thus, it can be concluded that academicians strongly agreed that sharing the knowledge of teaching expertises is essential process to enhance their teaching activities and overcome the previous obstacles.

#### THE PROPOSED KNOWLEDGE MANAGEMENT CONCEPTUAL MODEL FOR TEACHING ACTIVITIES (KMTA)

The findings of this research indicates that there is no formal KM system that used officially to collect, store, share, reuse, and refine knowledge of teaching expertises. Thus. This

research develops a conceptual model as KM system for enhancing the teaching activities. The proposed model are shaped based on the good practices cycle model[20] and the knowledge creation theory[21].the proposed model is designing to motivate the academicians to store and share their teaching expertises by deploying rating and feedback method. The main aim is to convince the academicians to involve in sharing their knowledge intensively. The proposed model is formulated of four phases. As shown in figure 1.



**Figure 1:** The Phases of the Proposed KM Model

**1. Knowledge Acquisition**

This phase is concern of acquiring the knowledge assets from various teachings activities. The obtained explicit knowledge are codified and classified into each specific subject in each academic department in the university i.e. subject syllabus, problems and solutions, questions and answers [22]. On the other hand, the tacit knowledge that embedded in the academicians mind is also documented and transfer into explicit knowledge in order to preserved it in the knowledge repository.

**2. Knowledge Storing**

This phase is concern of gathering the acquired knowledge that obtained from phase one. The academicians as known from the research findings were used to store their knowledge personally in hard disks. The stored knowledge was uncoded and unstructured. Thus, this knowledge need to store in central repository in formal structured format [23]. This phase will save the time and the efforts for academicians

by providing accurate, clear, and organized knowledge. Ultimately, there is no need to duplicate the teachings expertises and store it over and over in each semester.

### 3. Knowledge Sharing

This phase is concern of sharing the knowledge materials that related to teaching activities. The academicians as declared from the research findings were used face to face communications, social networking tools, and emails to share their knowledge with other colleagues. The academicians complained about the efficiently of these methods. They said that these methods consume their time and efforts due to the limitations of time and place. Thus, this phase provide efficient method to share their knowledge electronically. The academicians can search and download the needed knowledge by download-based. In addition; academician can upload the knowledge that related to teaching activities in specific subject by uploaded-based [24].

### 4. Knowledge Reuse

This phase is concern of reusing the knowledge that acquired and stores in the previous phases. The academicians declared that they need the other colleagues teaching expertises in order to enhance their teaching activities. This phase can provide the academicians with the needed expertises in codified format. The academicians can download the required knowledge, save it, print it, and reuse it again. On the other hand, this phase can support the evaluation of each academician sharing knowledge to distinguish the good teaching expertises throughout scoring them with points and feedback. This can motivate the academicians to develop the teaching expertise that they shared. Ultimately. The reusing of experts knowledge can enhance the teaching activities as well as the sharing abilities for the academicians.

Based on the above phases, the proposed KM conceptual model are shaped and formularized as shown in figure 2.

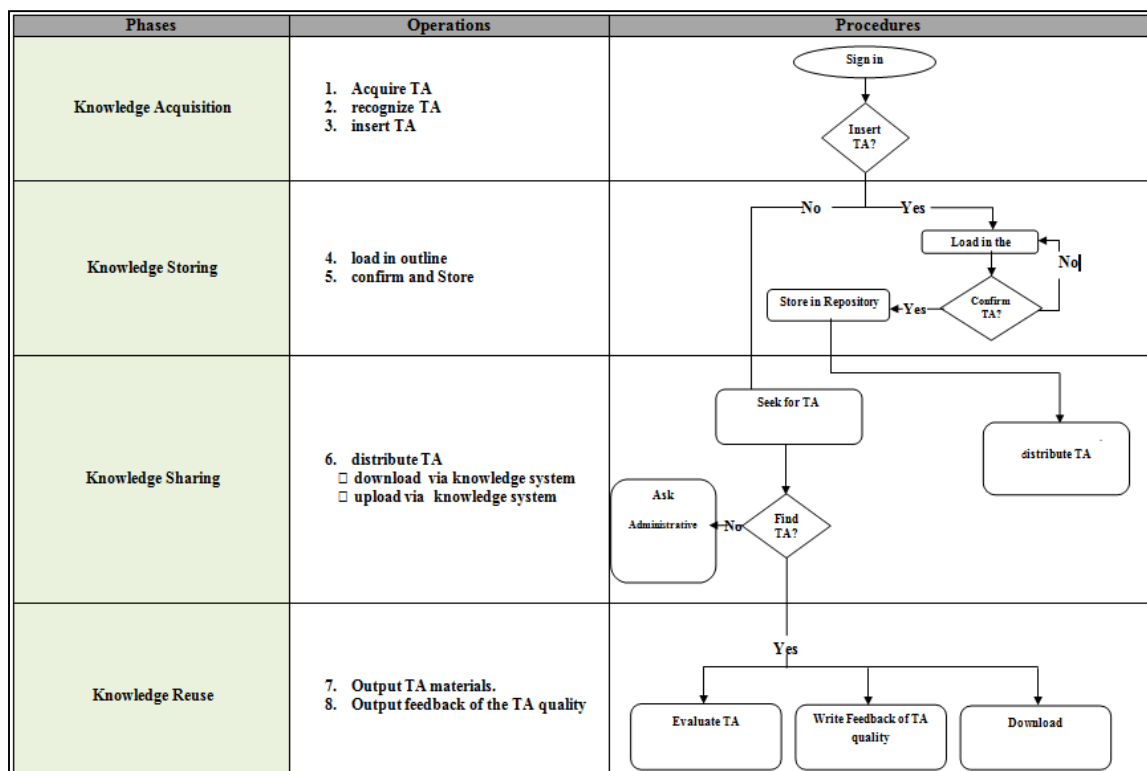


Figure 2 : The Proposed Knowledge Management Conceptual Model for Teaching Activities (KMTA)

## CONCLUSION

This research aim to reveal the current situation of KM implementations in Iraqi universities. The main concern was to understand the real need of academicians for a new KM system to enhance their teaching expertises and activities by developing conceptual model for academicians needs specifically. The proposed model are design to support the collection, storing, sharing, reusing of teachings expertises in order to enhance the overall teaching activities. The analysed findings reveal that the Iraqi university do not have a standard system that officially implements KM processes for teaching activities. Perhaps, there are some informal methods that used currently among academicians such as s social networking tools, traditional data bases, and mobile applications for chatting. In addition, this research reveals that the academicians are in need to new KM system can save their time and efforts that spend in seeking knowledge from other colleagues. Academicians expected from the top managements in their universities to supply them with such system to enhance their teaching activities. Moreover, the research indicates that most of academicians are willing to adopt new KM system that could replace the face to face communications to modern electronic communication. Thus, this research advocates the top management to deploy the proposed



model as a new KM system that could enhance the educational output and satisfy both of academicians and students by utilizing the overall teaching process. However, this research needs to implement practically in Iraqi university environment as a practical system. Further work is recommended to transform the proposed conceptual model to practical system. Further work is needed to identify how web 2.0 technology deployment can enhance the teaching activities among academicians in Iraqi universities.

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