

# Understanding the Knowledge Sharing Capabilities of LMS: an exploratory research

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**Abstract.** The objective of this research is to understand the knowledge sharing capabilities of Learning Management Systems among professors and researchers; this exploratory qualitative research was implemented on a focus group comprised of MIS and E-business professors at applied science university. The researcher used in depth interviews to collect research data from professors using an open source Learning Management Systems. Most of the professors thought that Learning Management Systems enhance Knowledge Sharing among their peers. Professors can share lecture notes, power point presentations, electronic books, quizzes, exam questions, case studies and other learning materials. Our research findings indicate that learning management systems are an excellent tools for the transfer of knowledge in a university setting and are considered a true source of knowledge creation, captures, transform, collaborate and share.

**Key words:** Knowledge Sharing, Learning Management Systems, E-Learning

## 1. INTRODUCTION

Knowledge Sharing involves the actual interaction between people which facilitates knowledge transfer from one person to another. In a university setting professors tend to share information during formal and informal sessions. The social interaction between professors stimulates knowledge sharing. Professors like to share their experiences with their colleagues (Khalil Yaghi, et al 2011). This research intends to explore the knowledge sharing capabilities of Learning Management Systems.

The research does not tend to a certain Learning Management System platform but look at the general capabilities of learning management systems as perceived by university professors.

Professors determine the ability of LMS tools to facilitate knowledge sharing among peers using on-line tools. For a LMS to enable knowledge sharing it must allow for social interaction among university professors (An Fengjie, 2004). knowledge is created and transferred through the dynamic interactions among individuals and between individuals and their environments (Nonaka, 1994). Knowledge sharing is a social activity that must be supported by the LMS platform and tools.

There is no real effort to differentiate and evaluate the knowledge sharing capabilities of Learning Management Systems from the user point of view. Knowledge sharing in a university setting is most important among professors, and students. This paper shall investigate the knowledge sharing capabilities of LMS in a University setting.

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This research shall follow an exploratory and investigative approach. The authors shall relay on data gathering techniques such as interviews and online sources. Relaying on previous studies if available shall be taken into consideration.

## **2. Learning Management Systems**

There are several definitions to learning management system (LMS), however it is generally defined as a software system for the management and running of online courses. This involves the documentation and tracking of student's progress (Juliana Lucas, 2007). Therefore, the delivery of courses using electronic means from a distance is called e-learning through the use of Learning Management Systems.

learning management systems are tools that help instructors to provide college courses through online platforms (Samer Barakat 2013). It has the tools to document all the course materials including pdf, ppt, word, rtf, and flash files. Its workflow enables educators to monitor course progress and students achievements.

Learning Management Systems are used today as collaborative tools between students and professors and among the student body.

A Learning Management Systems uses an infrastructure that delivers and manages instructional content (Heng-Li Yang 2006). It is designed to tracks the progress of learners and measuring their achievements in relation to the organizations goals. Learning Management System delivers content and has additional features that facilitates the registration process, management course content, tracking student's achievements, and provides a reporting tool for administration.

## **3. Knowledge Transfer**

The knowledge Cycle Model (Figure 1) facilitate knowledge transfer, sharing and collaboration. (Kablinc: accessed 2015) it shows how information moves right from the Publish phase which convert knowledge into explicit knowledge that can be felt by the user suche as emails and other forms of documentations. Web forms enable organizations to capture knowledge and store it inot a centralized system for organizations to use.

The cycle is followed by the Discover phase which allows for the documentation to be discovered by people using the system it also allows for sharing of the documentation.

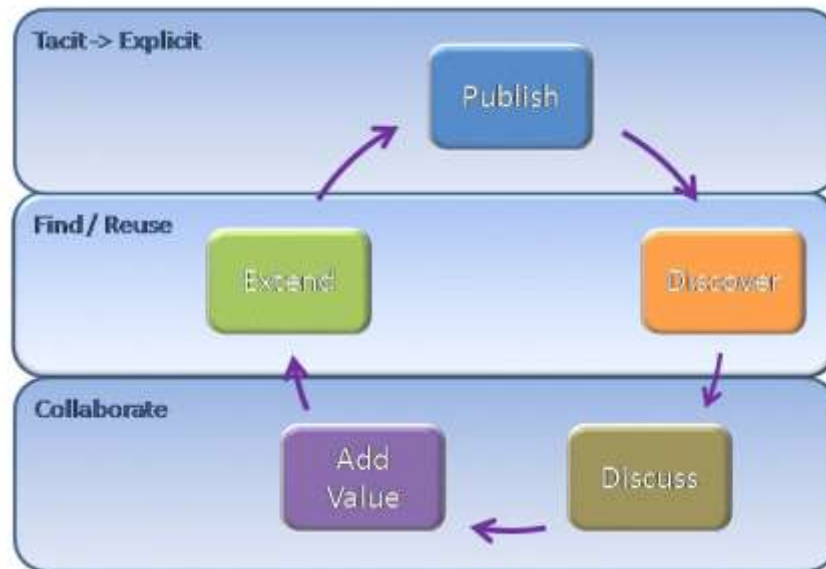


Figure 1 (Kablink: accessed 2015)

The Discuss phase comes next which allows for discussions to be formed based on the available information which enhance the understanding of captured knowledge. The Add Value phase allow the information discovered and discussed to be incorporated into the understanding of topics. This were collaboration is centered around adding value to the existing knowledge. After that comes the Extend phase, which is used in the application of the captured knowledge. Finally we reach the Open Collaboration phase which is vital fro knowledge transfer (Kablink: accessed 2015).

#### 4. LMS as Knowledge Sharing systems

The main benefits of Learning Management Systems are capturing instructors knowledge (tacit and explicit), sharing of knowledge among students and professors in a collaborative environment across difference platforms (Samer Barakat 2012). LMS is also used to enhance organizational learning and knowledge creation. Based on the knowledge Cycle Model and reviewing the answers of the LMS users at the university, it became clear that LMS allows for the Publishing, Discovery, Discussion, Adding Value and the Extension of the knowledge transferred by instructors to students using a Learning Management System. Therefore, Collaboration is a major corner stone of LMS and this in return proves that an LMS is an excellent Knowledge Sharing System.

## 5. CONCLUSION

To understand the knowledge sharing capabilities of Learning Management Systems among professors and researchers an exploratory qualitative research was implemented on a focus group comprised of MIS and E-business professors at applied science university. The researcher used in depth interviews to collect research data from professors using an open source Learning Management Systems based on The knowledge Cycle Model. The results was that most of the professors thought that Learning Management Systems enhance Knowledge Sharing among their peers. Professors can share lecture notes, power point presentations, electronic books, quizzes, exam questions, case studies and other learning materials. Our research findings indicate that learning management systems are an excellent tools for the transfer of knowledge in a university setting and are considered a true source of knowledge creation, captures, transform, collaborate and share.

## ACKNOWLEDGEMENT

The author is grateful to Applied Science Private University, Amman, Jordan, for the full financial support granted to this research project (Grant No. DRGS-2014-2015-57).

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Kablink: A Fresh Take on Collaboration

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