The ICT-Induced on Behavioral of Lecturer and Society Change in Libya Universities

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Abstract

Information communication and technology has changed the lifestyle of people and influences their behavior towards their daily activities. ICT has become a significant part of people, community or society by influence behavior people towards their attitude, and it has several of activities that can change individual activities pertaining their behavior to interact with the system. However, previous studies have been investigated ICT in a different context in Libya but there is lack behind to explore what motivate, encourage and induced lecturer to use ICT for teaching and learning in Libya university. This study intends to investigate the ICT induced on behavioral of lecturer and society change of Libya University towards the use of ICT. This paper is conceptual by employed technology acceptance model (TAM) and theory of planned behavior (TPB) and attitude, perceived ease of use, perceived usefulness, behavioral intention, and social influence were used to explain the use of ICT. Therefore, this paper found that when lecturers have an adequate knowledge about ICT may influence them to use. The future study can focus on empirical evidence to support the lecturer behavior towards the use of ICT.

Keywords: attitude, perceived ease of use, perceived usefulness, behavioral intention, social influence, ICT.
1. Introduction
Information communication and technology has changed the lifestyle of people and influences their behavior towards their daily activities [8]. ICT has become a significant part of people, community or society by influence behavior people towards their attitude, and it has several of activities that can change individual activities regarding their behavior to interact with the system [28]. Therefore, higher education institution around the world has been invested and curiously adopts ICT to their institution, which had a major change to their university context of teaching as well as the organization entirely.

The ICT has induced on societal change, which has led to information knowledge that people have access to information through the use of technology. However, inducing of ICT occurred through social influence as major influence between ICT and society to accept the use of ICT [27]. ICT has changed the method of teaching and learning in many universities, and they perceived the potential of ICT either from student or lecturer. Although, Several studies have been indicated that there are various factors that can motivate or influence the use of ICT in the context of the university including ease of use, usefulness, enjoyment, effort expectancy, and others were categorized as induced to use ICT [2][3][5][6][23][27]. However, ICT can change the attitude and they people interact with each other’s when they perceive the usefulness and benefit of using ICT. Some studies highlight that to understand the benefit and changing the behavior of the individual to use ICT through the social influence such as friend or family influences them to use ICT.

Moreover, ICT induce has been studies in a different context in higher education institution research such as ICT performance in education, adoption, intention to use, acceptance and implementation of ICT, which had been studied for the last two decades [15], but little attention has been focused on behavior of lecturer in university and how ICT change their behavior. Though previous studies have been explored the influence and impact of ICT among the university in Libya, there is the big portion that most of the research are lack behind from previous research. Researchers neglect and ignore the motivation and encouragement of lecturer to use ICT and they are behavioral after adopting ICT by changing the method and process of delivering the lecture to the student. This study intends to contribute to the body of knowledge by investigating induce of lecturer behavior towards the use of ICT in Libya university.

This study employed TAM model and TPB theory change to investigate the induced of ICT among the lecturer in Libya Universities. This paper uses the conceptual technique by adopting the variable of perceived ease of use, usefulness, attitude behavioral intention and social influence toward the use of ICT in Libya universities.

2. Background of Libya education
Libya is located in North Africa with a population of 6,404,219. Libya got independent in 1951 from Italy, which they are practicing presidential system of government and the official language is Arabic. However, Libya is among of oil countries in the world with sound economic [24].

Accordingly, for the past few decades, the literacy of Libya is between 50 to 60 percent but now every individual has a right to education. The government provides free education from basic education to postgraduate study for every Libyan citizen, government compulsory for every citizen to hold at least school leaving certificate and more than 90 percent in Libya can read and write [12][15]. Additionally, Libyan government provides the opportunity for any citizen who
prefers to study outside the Libya either to study degree or postgraduate study is fully supported by the government.

Accordingly, the education system of Libya is classified into two public and private, which both are provide or operate basic education or primary education, secondary school, polytechnic, vocational, technical school, university, and postgraduate. In addition, children between 6 years of age to 15 years to attend primary and secondary school for free, and it is optional for citizen either to continue or further their study into the degree, vocational, technical school, diploma or postgraduate.

The language of an instructor is Arabic and English as a medium of teaching and learning. Currently, the English language is taken as a course in entire faculties in all universities in Libya [15]. According to [15], highlighted that some faculty in Libya University are using the English language to teach their studies such as medicine and engineering.

Furthermore, in 2005, Libyan government partnership with United Nations Educational, Scientific and Cultural Organization and other private company to install LAN and WAN in public university to have access to the internet. Although, number of students enrolled in to universities increased every year, which has led some universities to implement the use of ICT as new method of deliver lecturer to the student such as E-learning installation of projector inside the lecturer room, using power point, video/ audio and any others application of ICT [12]. Therefore, implementation of ICT in Libya University is not fully adopting in some university and there is required to investigate behavior of users of ICT.

3. Literature review

Study has been investigating the impact ICT to influence behavioral and societal change in different context of research such as [28] studied the impact of ICT on travel behavior through the accessibility of the website and the finding ICT change the way access the travel behavior when they interact on website than face to face. Moreover, most of the developed and developing countries based on their different political and social backgrounds, follow different paradigms in educational innovations and reforms concerning information and communication technologies (ICT), from the perspective of education [17]. Using ICT in most of the university is helping lecturer to manage and engage lecturer and student in a meaningful communication and learning activities [3]. Similarly, ICT helped lecturer to manage the course, research material and student assignment faster than traditional assessment. Additionally, [13] stated that provide common ICT tools such as the internet, projector and video will motivate lecturer to use ICT for teaching in the lecture room. Hence, teaching student with modern ICT tools will provide easiness to the lecturer as well as clearly understand to the student such video clip relating to the lessen [26]. [9] revealed that ICT has changed the way of receive knowledge, communication between lecturer and student, as well as level of access information relating to research methodology is improve the education system. Hence, lecturer realized that utilized a certain technology can be induced their behavior and help to use ICT for teaching designs for better respond to today’s students’ abilities, interests and learning styles.

Furthermore, [21] stated that ICT has been changed the learning process and educational environment in term of teaching and learning from traditional perspective to the use of ICT system. ICT has changed numerous of learning process and method of delivering lecture to the student, which has been motive and influence both lecturer and student as a new method of
communication. However, [6] argued that teacher has influenced to use some tools which will improve the effective use of ICT in teaching and learning. Therefore, this has been proved that using ICT can change the educational society from the traditional process of teaching to use of ICT. Many universities have perceived the potential of change the method of delivering lecture to student has to increase the performance of lecturer as well as student engagement. In the context of Libya university, ICT can persuade lecturer to be active in the class, time save and enhance easiness of communication between lecturer and the student, may increase or bring a strong relationship to the educational environment.

4. Technology acceptance model
[10] developed technology acceptance model to investigate the degree of acceptance of new system or technology. The model proposed how the organization would accept or reject new technology is easy to use or difficult to operate or interact. The model developed two variables perceived ease of use and usefulness to measure acceptance of the technology. This TAM has shown the relationship between the individual beliefs and intention to use or accept new technology. In the past, the technology acceptance model sought to explain why people accepted or rejected a particular technology ([18]; [10]. However, the researcher has been expanded and added an extension to the TAM model in a different context of research such as learning management system (LMS) [3]. Use of ICT in sports education [19], mobile learning [18], e-learning [24].

Previously, TAM has gained popularity on acceptance of technology ICT and system either the user will accept or reject to use a particular system [9]. Information technology model is one of the influential models that use to determine the use of technology or system. Although, TAM has several limitations which are called for the extension and for more explanation such as time factor, human control environmental or social change and user behavior is limited measure and explain from TAM model [22]. Although, the previous study has been used TAM to investigate acceptance of ICT in education such as learning management system (LMS) and the result from the study revealed that TAM is significance to explain or investigate acceptance of LMS [3].

Therefore, TAM model has been employed in this paper to find out ICT-induced on the behavior of lecturer towards the use of ICT and society change of university in Libya. Although, [10] suggested that perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance [4]. From the outset, the researchers intend how ICT motivate and encourage lecturer and change their behavior toward teaching and learning to perceive both the usefulness and would probably indicate their ease of use of ICT tools in their classroom environments.

5. Theory of planned behavior
The theory of planned behavior (TPB) is the extension of the theory of reasoned action in 1980. TPB developed to measure the behavior of human to engage in specific behavior. The theory is intended to explain the ability and intention of individual [1]. TPB adding an additional variable of perceived behavioral control. The TPB consisted of three factors, attitude towards the behavior, subjective norms, and perceived behavioral control that predict behavior and intention. TPB has predicted behaviors. Also, all the variables of the TPB have a significant effect on intention and behavior. Therefore, the theory measures users’ behavioral intention to adopt and use a given ICT. Since measuring actual system use is difficult, behavioral intention is normally used as a reliable predictor of actual use [10]. Though, the previous study has been employed this
theory to explain the different context of research in the field of ICT. In this paper, TPB adopts to measure how ICT can change the behavior of lecturer to use a specific ICT. [20] examined the TPB theory on technological innovation, the findings reveal that TPB can measure the behavior of user to use technology.

6. Behavioral intention

According to TAM, behavioral intention defines the actual use of a given IS system and therefore determines technology acceptance. According to [27] highlighted that there are various factors influence users to use ICT, which has enumerated of individual differences, social influences, beliefs, attitudes and situational influences as factors that encourage individual intention to use technology and encourage them to accept it. [11] revealed that individual behavior can influence and change other people’s intention to perform a certain behavior, which it will engage their behavioral intention to use ICT. [3] found that lecturer has the intention to use ICT but their fairness of use. Meanwhile, fairness of the lecturer is affected their intention and courage to use ICT in the classroom may have negated influence to use ICT.

6.1 Perceived ease of use

[10] explained that the perceived ease of use is “the degree to which a person believes that using a particular system would be free of effort” [10]. According to [10], the intention to use technology can be influenced when the user has seen the technology as ease to use. In this case, this paper employed ease of use to investigate how easiness of ICT motivates lecturers to use ICT for teaching and learning student in the lecture room. Although potential users could believe that a given technology is useful, they may, at the same time be against (for some reason) its use in their lecturer. They may perceive that there aren’t sufficient performance benefits for using mobile learning technologies [25]. [3] stated that lecturer can have the courage to use ICT when the perceived that a particular system is ease to use will motivate or influence to use by lecture. [2] claimed that using ICT tools in the classroom is not the major problem but how to motivated lecturer to seen ICT tools as ease to use in order to bring the strong relationship between lecturer and using the ICT tools in the classroom. [7] argued that to influence lecturer to use IC, there is required to understand what can motivate and encourage lecturer to use new ICT innovation. Similarly, when a lecturer in Libya universities induced that use a certain ICT tool in ease to operate will motivate and change their behavior to use.

6.2 Perceived usefulness

Perceived usefulness is another major determinant in the adoption of technology. It is the tendency of users to believe that the new technology will help them perform their job better [10]. [3] claimed that lecturer will use ICT when there is awareness of benefit of use and usefulness of the system that It’s free from harm or difficult to operate will change the behavior of lecturer to use ICT for teaching and learning. [23] found that instructor understands the level to which they perceive ICT tools can enhance their efficacy in the performance of a task. [14] argued that lecturers in the university have a significant factor to influence and perceived usefulness of ICT when the university provides training and workshop on a particular ICT tool. Therefore, the usefulness of ICT can enhance teaching and learning performance of lecturer in Libya universities.
6.3 Attitude

[1] define attitude as “an individual's positive or negative feelings (evaluative affect) about performing the target behavior” (p. 216). Hence, literature revealed that lecturer attitude towards the use of ICT can influence their behavioral intention to use. Attitude towards anything or practice to utilize ICT in class tend to open up professionals to the different accessible choices, along these lines making the teaching practices possible. Therefore, distinctive research indicates that the successful reconciliation of ICT into the classroom relies on the attitude of the instructors [17].

[6] studied the influence of ICT toward the teacher attitude to use ICT for teaching and learning process, the findings reveal that ICT has high reliability to influence the attitude of the teacher to use ICT. [17] argued that empirical evidence revealed that instructors always have a positive attitude towards the use of ICT. Therefore, positive attitude of lecturer will help them to see the input and give the impact of ICT knowledge to the students. Similarly, when the Libya lecturer in universities is encouraged to use ICT, they can transfer the knowledge to the student and society as well.

6.4 Social influence

Social influence is defined as “the degree to which an individual perceives that important others believe he or she should use the new system” [29]. However, Social influence is the extent to which people are influenced and motivated by either through friend or family to use a specific technology or system. Furthermore, social influence is determined by changing or influencing people in the society and change the behavioral intention of the individual to use ICT [5].

According to [16], academic staff in the higher institution can influence change other lecturers to use ICT and benefit them in term of teaching and learning process. [11] claimed that there different factors that encourage and persuade lecturer to use ICT when they perceived social influence from their co-lecturers will change their behavioral intention to use ICT.

7. Conclusion

This paper is conceptual research that focuses on lecturer in Libya University. Therefore, this paper concludes that ICT-induced is lacking or limited among the lecturer to understand the potential of using ICT. The objective of this study is to investigate factors motivate and encourage lecturer behavior to use ICT as well as how this influence change society in Libya university. TAM model and TPB theory have employed to persuade the behavioral intention of lecturer and how ICT encourage lecturer to use. The lecturer can use ICT for teaching and learning when there is training or social influence from friend or co-lecturer to motivate that using a particular system or ICT tools are easy to use and the usefulness will benefit them. Hence, each university has been implementing the use of ICT as a new method of teaching and learning process such as how to operate or communicate with the student can be another way to motivate lecturer and it can change them from traditional method to new modern ICT tools for teaching and learning. Moreover, this paper recommends that each university in Libya should provide training to their lecturers on how to operate any ICT tools relating to teaching student inside lecture room such as a projector, power point, video clips and others. Though there is limited influence or motivation among the lecturer to use ICT, university management can to those that have knowledge about how to use or operate ICT to teach or explain to them when they are in need of help. The university also can provide help center for any lecturer who needs some help regarding how to operate the ICT to teach student inside the lecture room.
Additionally, future research can look for deep investigate either qualitative on quantitate method to provide good evidence to support the ICT induce among lecture in Libya universities.

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