Conceptual Framework Of Mobile Learning Among The University Students

Perh Channar, Khalil Khoumbati, Imran Ujan, Arifa Bhutto, Kamran Taj Pathan

Institute of Information and Communication Technology
University of Sindh Jamshoro

perhbashir@gmail.com, khalil.khoumbati@usindh.edu.pk, imran.ujan@usindh.edu.pk, arifa.bhutto@usindh.edu.pk,
kamran.taj@usindh.edu.pk

Abstract: In higher education mobile devices are being used as vital educational technology component. Mobile devices in education make it possible for students to get knowledge, work in partnership, and contribute to thoughts among each other. Thus, the intend of this work is to investigate and recognize the vital facts that influence users' behavioral intension to accept m-learning with the particular focus in Sindh province and to explore in-depth understanding of users perceptive of m-learning. The research framework is grounded on technology acceptance model (TAM) and unified theory of acceptance and use of technology (UTAUT). According to the proposed intangible construction, behavioral intension to accept m-learning can be determined through exploratory variables such as perceived usefulness (PU), Perceived ease of use (PEOU), m-learning self-Efficacy (MLSE), Social influence (SI) and performance expectancy (PE). The conceptual framework is validated through SPSS version 21, based on the sample data of the responses.

Keywords: Mobile Learning, TAM, MLSE, Framework

I. INTRODUCTION

The ability to learn is possessed by humans. The process of acquiring new knowledge is learning [1]. Electronic learning is described as learning throughout electronic gadgets, for example, (desktop/PCs/DVD players). These gadgets were introduced in the 80's as a rival to customary techniques [1]. The improvement of e-Learning in instruction keeps on developing relentlessly [2]. In many under developed countries like Pakistan, the most imperative apparatuses of learning at everywhere [3]. Because of physical restrictions of PC, students can't get to learning materials in an areas or place.

In the 90s, learning was uncovered, to be specific, the mobile learning (m-Learning) [4]. The writing audit delighted that analysts have focused on m-Learning and its condition, for instance, clients' acknowledgement in m-learning [5], setting the environment for m-learning [6] and therefore the utilization of m-learning in developed countries [7]. It is made by mobile learning likely for students to gain knowledge, work together, and distribute thoughts with each different with the carry of web and technology know-how increases. Mobile learning gives students extra and interesting learning support, adaptability

to get, a more extensive channel of correspondence and less fleeting and spatial restrictions. Advanced education students and employees regularly utilize the term web-based social networking conversely with web 2.0 to regularly characterized by the qualities, or specialized plan designs. These devices permit students to associate and work together with each other and teachers as well.

II. LITERATURE REVIEW

Handheld mobile technology like sensible phones expands associate degree person's capability to right to use, accumulation, produce, and change knowledge is like by handheld mobile technology. Whereas used extensively to seem at the acceptance of computers in education, to a restricted extent in mobile learning in instruction analysis have entirely been accustomed by IS model. Exploratory determine of mobile devices in education among universities students are build upon the body of IS analysis the research study. To expand the UTAUT for mobile devices in education with the added variables of intentional of utilize self-management of education and perceived playfulness is analysis seeks the mobile learning. [8] Wang, et al., (2009) he suggests, "Is adoption theory models, like

UTAUT, won't completely address the distinctive context of mobile data systems". In implementation hypothesis, the alternatives concerning the acceptance or rejection of a given innovation were examined by the scientist. In terms of individual activity modification was measure by the results of adoption theory square. Discourse, cognitive, and emotional factors were understood by those determinants.

Although the final community wide uses smart gadgets, there is just restricted analysis makes use of Technology acceptance models to usage of mobile device in learning and recognize features poignant the reception. Just giving smart phone tutorial materials is not sufficient to form positive students utilize them. Hu, Clark and Ma (2003) counsel that whereas the function of information technology in university circles has exaggerated, user conflict to technology continues to be sizable. There are so many models for Information Technology acceptance models but researcher have used UTAUT and TAM unit a method to appear at the variables poignant student utilize of and motive to use smart phone gadgets. UTAUT has been elected as a result of the hypothetical structure for this written material.

III.   DEVELOPMENT OF TAM THEORY

According to the Venkatesh et al.1996, it was discovered that the correlation between PEOU, PU, and BI are not pre-determined by attitude alone, thus, leading to its removal from TAM; it is thought out that attitude is not a tight-fisted element, to begin with [9]. He further added other elements in the models. With this, the earlier TAM was modified as TAM2. TAM2, because of its reliability, has been found to be applicable in almost all IT systems. TAM also surpasses the TRA wherein it can foresee the acceptance in technology for both involuntary and voluntary set-ups. Furthermore, several studies also appraised that the TAM could be applicable in the pursuit of foreseeing the acceptance for various technologies [10].
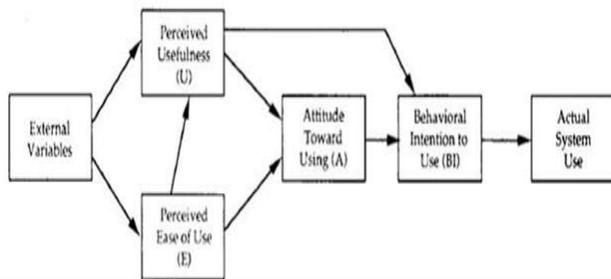

Figure 1: Technology Acceptance Model (DAVIS, 1989)

For the reason that of the TAM's nature, it incurs several limitations, and one of these is its lack of capacity to include the external challenges or obstacles that purportedly prevent people from their usage of IS. Past studies suggest that external factors cannot be overlooked as it also influences one's acceptance of the technology. In relation to

this, more researches were conducted to be able to determine the qualifications of the PU and PEOU. The TAM's framework had then been re-modelled to account for its limitations and the resultant models/theories are UTAUT or Unified Theory of Acceptance and Use of Technology and TAM2, TAM3 [10].

IV.   DEVELOPMENT OF UTAUT THEORY

The UTAUT theory search for to clarify motive to utilize degree system as well as later practice performance. The UTAUT model has these variables facilitating conditions, performance expectancy, effort expectancy and social influence unit straight determination of data system usage motive and usage performance as illustrated in figure 2 [11]. Venkatesh, et al., (2003) advised that voluntariness of utilize, age, gender and experience reasonable the effect of the four key variables on usage motive and performance.
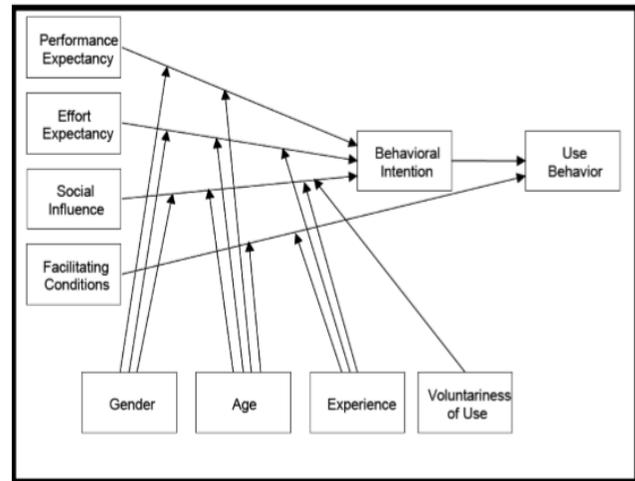

Figure 2: Utaut Model (VENKATESH, 2003)

The UTAUT model researchers carried out an Associate in experimental work to examination eight competitive IS models. The UTAUT constructs and connected theories. To attend to the boundaries of earlier analysis and hypothesises the researchers targeted on every intentional and needed procedure of structure technology. Applicants have been from association rather than world. Dimensions have been selected at the beginning of the technology likewise as many levels of the applicant's activities with the technology. The kind was formed using a five point Likert scale. The variable calculates selected had earlier valid things to be employed in technology and structure analysis.

V. CONCEPTUAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

A. Behavior intension

Behavior intention is determined as "The extent to which an individual intends to adopt or purchase the technology, system or a product in the future" [11]. The mobile learning Information System perspective is intended to measure or expect a possible education professional's actions.

B. Mobile learning self-efficacy

Self-efficacy (SE) pertains to the idea "in one's capabilities to organize and execute the courses of action required to produce given attainments" [12]. The notion has been utilized to learn about person manners, concert, and intention in a range of areas. It is self-assessment approach that influence conclusion on doing precise action, as nicely as the effort that an individual exerts throughout hard situations [13].

- **H1: Mobile learning self-efficacy (MLSE) has a positive significant effect on Perceived usefulness (PU).**

- **H2: Mobile learning self-efficacy (MLSE) has a positive significant effect on Perceived ease of usefulness (PEOU).**

C. Perceived Usefulness

It is determined as "the extent to which a person believes that the usage of a particular technology/service will enhance his or her performance", [14]. The major variable of TAM is PU. The PU performing an essential function in Mobile getting to know information system, and it also has an effective influence on the education professional's environment.

- **H3: Perceived usefulness (PU) has a positive significant effect on Behavioral intention (BI).**

D. Perceived Ease of Use

It is defined as "the degree to which a person believes that using a particular system would be free from effort" [14]. It is an occasional predecessor to PEOU. The significant relationship between perceived ease of use and perceived usefulness has received much experimental support [15]. Moreover, the encouraging association among behavioral intention and perceived usefulness to utilize the technology was proved the validity in many studies [16]. In our circumstance, an encouraging connection between technological predecessor as well as behavioral intention are required to have better MLIS to engage in the Mobile learning information system.

H4: Perceived ease of usefulness (PEOU) has a positive significant effect on Behavioral intention (BI).

E. Performance Expectancy:

It is described as the levels to which individual confidents the use of an information system will be support person acquire advantages from work performance. The UTAUT model recommends that behavioral intension is the heavy interpreter of a person's by the performance expectancy to utilize of technology and is major on all spots of evolution for obligatory and setting of intentional [17].

H5: Performance Efficacy has a positive significant effect on Behavioral intention (BI).

F. Social inflience

It is defined as "the degree to which an individual perceives that important others believe he or she should use the new system" [11]. This study observes the association among behavioral intention to utilize and the independent construct social influence.

H6: Social Influence has a positive significant effect on Behavioral intention (BI).

VI. PROPOSED MODEL

The conceptual framework of research shows that behavioural intention to accept MLIS is jointly determined by Perceived Usefulness (PU), Perceived ease of use (PEOU), Performance Efficacy (PE), Social Influence (SI) and Mobile Learning self-efficacy (MLSE) as shown in Figure 3.
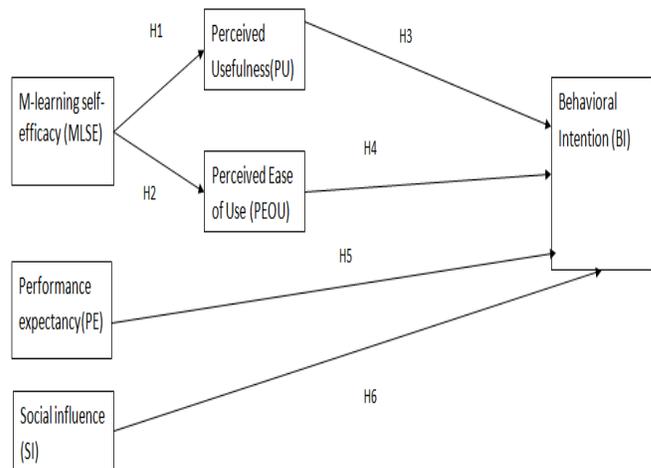

Figure 3: Conceptual framework and hypothesis relationships among various constructs

The incorporation of external variable as the antecedents of PEOU and PU in the proposed model was based on previous studies (Abbasi, 2011, Fida Chandio, 2011, Davis, 1989, Gefen, 2004).MLSE has importance to explain the individuals' behavior towards IT and measure the performance of using IT.

VII.   CONCLUSION

Mobile learning study is quickly developing as well as escalating. On the other hand, there is limited work on smart phone educational information procedure and use of mobile devices in learning in higher education. This exposition contributes to the body of mobile in education and awareness in technology acceptance and as well as offers groundwork for same study in the upcoming. In the background of a three distinct Universities, these find out about verify the TAM independent variables perceived ease of use, perceived usefulness and behavioural intention and capability of the UTAUT's independent constructs social influence, performance expectancy. Additional this study requires examining its consequence as a forecaster. Universities educationists can additionally utilize these facts as a base for information technology applications.

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