TECHNOLOGY ACCEPTANCE MODEL: FROM 2015 UNTIL 2018

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ABSTRACT

This study will highlight the related studies using TAM from 2015 until 2018. All related studies will be listed according to its year. This study eventually will show us how TAM has been used extensively in the literature.
Keywords: TAM, UTAUT, Literature Review, Technology Acceptance Model

1   Introduction

Technology acceptance study is an important study to understand why people are using new technology. Facts remain that new technology introduced by related providers must be fully utilized. If new technologies are not fully utilized, then investments made by related parties will be a waste. Therefore, the study of technology acceptance is very important. There are several models and theories that have been used by researchers to understand why humans using a technology. Among them is Technology acceptance model (Davis, 1989), Unified Theory of Acceptance and Use of Technology (Venkatesh, Morris, Davis, & Davis, 2003) and many more. Based on TAM theoretical structure, there were four constructs namely perceived usefulness, perceived ease of use, attitude, intention to use, actual system use and external variable see Figure 1. On the other hand, UTAUT includes Performance expectancy, effort expectancy, social influence, facilitating condition, behavioural intention, use behaviour while gender, age, experience and voluntariness of use will serves as moderator.
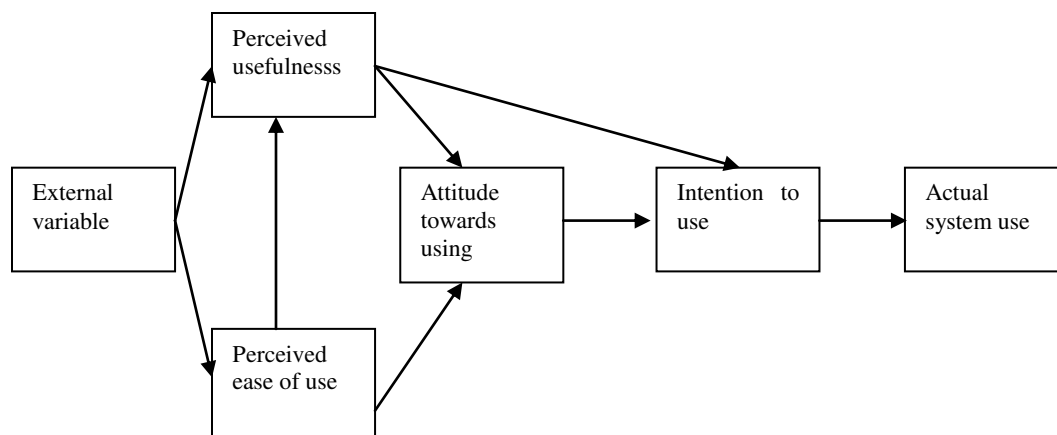

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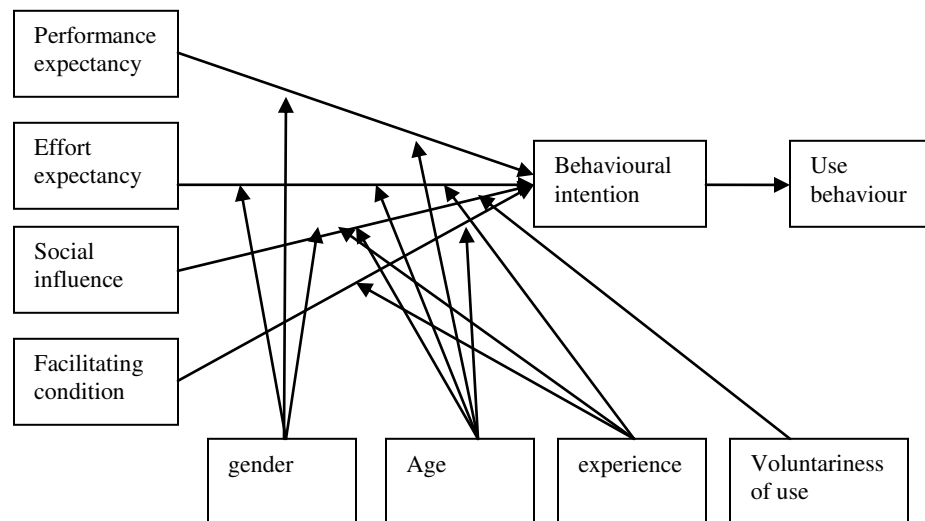**Figure 1: Technology acceptance model**

Figure 2 : Unified Theory of Acceptance and Use of Technology

2   PREVIOUS STUDIES USING TAM

2.1   *Study in year 2015*

Study by Erasmus, Rothmann, & Van Eeden, (2015) seek to test the technology acceptance model within a South African SAP® Enterprise Resource Planning user environment.Motivation for the study: No study could be traced in which the technology acceptance model has been evaluated in the South African. While study by Gao, Li, & Luo (2015) aims to investigate the factors associated with consumer's intention to adopt wearable technology in healthcare, and to examine the moderating effects of product type on consumer's adoption intention. Study by Huang & Liao (2015) aims to integrates the technology acceptance model and concepts of experiential value to investigate factors that affect sustainable relationship behavior toward using augmented-reality interactive technology (ARIT). While study by Ayeh (2015) proposes a model of consumer-generated media acceptance for the purpose of travel planning which integrates the Technology Acceptance Model with the Source Credibility Theory. Study by (Fayad & Paper, 2015) suggesting the extension of the TAM for its application in the E-commerce field. The original TAM will be extended, by adding four predictor variables. The four predictor variables are process satisfaction, outcome satisfaction, expectations, and E-commerce use. Study by Dahi & Ezziane (2015) This paper identifies the factors associated with the intention of citizens to use e-government services in the Emirate of Abu Dhabi in the United Arab Emirates (UAE). The proposed several factors, including the perceived usefulness (PU), perceived ease of use

(PEOU), trust issues, subjective norms and computer self-efficacy (CSE) of citizens in Abu Dhabi, and what motivates them in their intentions to use e-government services.

Study by Briz-Ponce & García-Peñalvo (2015) aiming to design, implement and verify the role of Technology Acceptance Model (TAM) to measure and explain the acceptance of mobile technology and "apps" within Medical Education. The methodology was based on a survey distributed to students and medical professionals from University of Salamanca.

2.2   Study in year 2016

Study by Bach, Čeljo, & Zoroja (2016) is to discuss a framework for investigating the adoption of business intelligence systems in companies, from the technology acceptance model perspective. We propose a research framework based on the technology acceptance model that is expanded using the concepts of technology driven strategy, information quality and project management in companies. Study by Kim & Woo (2016) The objectives of this study are to apply the TAM using the addition of perceived information to individuals' behavioral intention to use the QR code for the food traceability system; and to determine the moderating effects of food involvement on the relationship between perceived information and perceived usefulness.While Durodolu (2016) stated that the rationale for adopting the TAM in his study was to present a foundation for ascertaining the impact of external variables on internal beliefs, personal abilities, attitude, mind-set and intention in attaining Information Literacy (IL) skills.

2.3   Study in year 2017

Study by Wu & Chen (2017) is to propose a unified model integrating the technology acceptance model (TAM), task fit technology (TTF) model, MOOCs features and social motivation to investigate continuance intention to use MOOCs. While study by Hussein (2017) is to investigate the attitude of university students about the use of E-learning based on the Technology Acceptance Model. Specifically, the research is to analyze the relationship of university students' intention to use e-learning with three antecedents include attitude, perceived usefulness and perceived ease of use. Study by Ching-Ter, Hajiyev, & Su (2017) aims to determine the factors that affect university students' behavioral intention to use e-learning for educational purposes in Azerbaijan. Study by Chacko Punnoose (2017) adopted TAM and further extended it based on the recommendations from the literature Apart from the TAM variables, i.e., Perceived Ease of Use (PEU) and Per-ceived Usefulness (PU), this study has incorporated Perceived Enjoyment (PE) which is a measure of intrinsic motivation and Subjective Norms (SN) into the beliefs variables category. This stuy is located in Thailand.While study by Mugo, Njagi, Chemwei, & Motanya (2017) is aim to describes how the TAM has been used in predicting the acceptance and

utilization of various technologies in teaching and learning places. The study then arguments how TAM can be adopted in the development and utilization of the most recent technological innovation for teaching and learning:

2.4   *Study in year 2018*

Study by Boonsiritomachai & Pitchayadejanant (2018) is executed to determine the factors affecting behavioral intention to adopt mobile banking among generation Y. They used theoretical model incorporating the Unified Theory of Acceptance and Use of Technology (UTAUT) and the Technology Acceptance Model (TAM), this study revised and extended the theoretical model in order to better explain mobile banking adoption. Study by Nagy (2018) is focusing to examine the determining factors of students' video usage and their learning satisfaction relating to the supplementary application of educational videos, accessible in a Moodle environment in a Business Mathematics Course. In this research, the conceptual framework is based on the extension of *Technology Acceptance Model* (TAM), in which the core TAM constructs – perceived usefulness, perceived ease of use, attitude – and internet self-efficacy were included as the explanatory factors of video usage

3   CONCLUSION

TAM is a most extensively used acceptance theory by researchers. Based on literature highlights, the use of TAM is still in place though many other theories are available to explain the acceptance of technology. The reason is probably because of its parsimonius nature. Future should explore more on it's potential

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