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Exploring The Drivers of Technology Acceptance: A Study on Pakistani University Students

A Research Report submitted

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Acknowledgement/Dedication

We are very thankful to Sir Dr. Ali Raza for teaching us this course. His adaptable knowledge in writing research field and unique teaching style has developed our knowledge and has cleared many concepts of research. We are also very thankful to the helpers and advisors, who directly supported us with their assistance and knowledge to compose our report and accomplish the broader vision and visualize things in the research project. The success and outcome of this project required a lot of direction and support of group members and we are extremely lucky to have this all along with the completion of our project. All that we have done is only due to such direction and assistance and we would not forget to thank them all.

Abstract

The purpose of this study is to validate the technology acceptance model (TAM) in an educational context to explore the drivers of technology on students of Pakistani university. Technologies have extended the teaching quality and open the new doors for the student to make their career highly professional. The data were collected from 508 students through online questionnaire in Pakistan. For analyzing the research model PLS-SEM partial least squares method to structural equation modeling was chosen to analyze the effect of Trialability, Attitude towards technology, Behavior intention, perceived ease of use, perceived enjoyment, facilitating condition, Perceived usefulness, Technology complexity and demographic factors. The gap which we have find is about underprivileged countries that are poor in technology and have not get advancement and success in there so many countries yet. Limitation for this study are we have collected the data from university students. The research is based on descriptive research. Researchers choose a no probabilistic convenience sampling technique to collect data as it is fast, inexpensive and easy. The finding of this study is that all the independent variable has positive and significant relationship with dependent variable. We recommend that future researcher can add more variable to the research and use most updated software version.

Keywords: *Trial ability, Facilitating Condition, Technology Complexity.*

CHAPTER # 1

INTRODUCTION

1. Introduction

1.1 Background of the study

Technology has been making inroads into education and communication for many years but the android mobile revolution is converting training in extra crucial techniques than surely imparting a device that guarantees data. The usage of mobile equipment for gaining knowledge has become a vital part of informal reading. Sharing is a shape of on the spot among all people the usage of the equal content material, which ends up in the reception of immediately remarks and hints. It additionally brings sturdy portability through changing books and notes with small tools, the entire of tailor-made mastering contents. People typically ask the purpose of transforming education for youngsters at an equal time as it may be received inside an equal manner as our ancestors performed it. Irrespective of the truth that it can be justified through many reasons, but we want to evaluate a proper question right here. Generation is not always incredible beneficial for university students moreover for teachers. Getting prepared a lesson is a time-ingesting undertaking, but at the same time as it is protected with the generation, lesson making plans efforts are reduced, which in turn reduces the load on the academics.

As said with the beneficial resource by Davis, ease of use and rate are an idea to be possibly important determinants of device use. This Resembles with the views of Rogers (1983), who found that the adoption of innovative technology in general. Rogers also said that adoption is a function of a variety of different factors, including relative advantage and ease-of-use of innovative technology. Perceived ease of use is also one of the determinants of attitude toward use in the TAM model. (Davis 1989). On teacher's competence, education teachers in Nigerian secondary schools would not be competent in basic knowledge of computer operation and the use of generic software use (Yusuf, 2005), although they have a positive attitude towards the use of technology in Nigerian secondary schools said by (Yusuf, 1998). Studies had revealed that females have less

time to use computer technology (Schaumburg, 2001). Furthermore, research says that as compared to boys, girls have less confidence and also fewer computer skills and that some international studies have to examine boys, as compared to girls, scored better in computer courses and knowledge in the vast majority of countries. However, the three computer-related jobs are the success of career choices for men (Derbyshire, 2003). According to Kroker and Weinstein (1994), they found that differences in access and usage of ICT are about to become a central social problem in the technology Age. It is examined that computer literacy will soon be a key factor of social mobility as the ICT competent will be able to convert their capital to economic and cultural capital. Less Technology knowledge will become increasingly the risk of social and political exclusion as increasingly more economic and different activities to go online.

Also, the usefulness of construct measured by Davis (1989) and (Davis, et al., 1989; Deborah, Campeau, Christopher & Higgins, 2019) found that beliefs (or expectations) about outcome expectations, as does the salient beliefs construct used by Davis, et al. (1989). Thompson, et al. (1991) examine the model of personal computer use based on (Triandis, 1980; Deborah, Campeau, Christopher & Higgins, 2019), which is included perceived consequences as a central determinant of the behavior of an individual. Previous research indicates that perceived usefulness is an important element for technology acceptance (e.g. Chau, 1996; Jiang, Hsu, Klein, Lin, 2000; Taylor & Todd, 1995; Praveen & Suleiman, 2018). Perceived usefulness has a significant correlation with attitude toward usage behavior. Subramanian (1994) later this finding was confirmed by Fu, Farn, and Chao, (2006) and Norazah, Ramayah, and Norbayah, (2008) found that behavior intention was largely driven by perceived usefulness.

“Two types of subjective norm can be distinguished. The individual intention is social pressures to engage in behavior based on the perception of what other people want you to do

whereas DN is social pressures based on the observed or inferred behavior of others”. This study has been empirically supported (Cialdini et al., 1990; Deutsch & Gerard, 1955; Grube et al., 1986; Larimer & Neighbours, 2003; Larimer, Turner, Mallett, & Geisner, 2004; Reno et al., 1993; Rhodes & Courneya, 2003; White, Terry, & Hogg, 1994; Manning, 2009). Further potential element moderators of the relationship between norms and behavior intention involved the perceptions of whether a behavior is useful or pleasant of an individual. Behaviors can either be subdivided as utilitarian, in that they are view as practical and useful, or hedonic, in that they are more pleasant and satisfying (Hirschman & Holbrook, 1986; Manning, 2009).

According to Perrotta, (2013). Respondent’s use of digital technology within their teaching varies according to the different type of activity, the most valid use of technology was for course preparation with all but the help of a teacher using ICTs to research information and/or prepare notes and other lesson materials. Perrotta, (2013). Found that “To fully appreciate these variations, and to tease out more effectively the nature of the relationship between technology use and perceived benefits in different subject areas of a teacher”, a more in-depth and possibly qualitative insight would be required. To promote the use of technology, users must know how about how to use the technology, and it should be defined as the extent to how the technology is used to designed. Many of universities are expanding their investment in technology (IT), and promoting teachers to use of internet in university sector (Raza et al., 2017; Al-Nuaimy, Zhang & Noble, 2001; Bargeron, Grudin, Gupta & Sanocki, 2002; Chandler, 2002; Chen & Paul, 2003; Dringus, 1999; Huang et al, 2004 Kinshuk, 2002; Owston, 2000; Pahl, 2003; Richardson, 2003; Rovai, 2001). Cheung and Wayne (2005). Self-efficacy (SE) has a significant impact on customer attitude and adopted the processes of e-commerce. Eastin, (2002). This study represents an improved methodology of estimating the effects of accessibility and perceived characteristics of innovation affecting consumer’s adoption of technology-based service innovations. (Lee, Lee & Eastwood, 2003)

1.2 Problem Statement

The significance of the technology acceptance model has played a vital role in the developed country and also in the underdeveloped country in the whole world. Technology adoption always makes the country at a higher level and build up their economy as well. The entire world is searching or to create new technology for their country because it helps them to increase their GDP, GNP, communication, business operation, etc. The present study is to identify the factors motivating technology use in the context of Nepal because of the past research on the developed country instead of an underdeveloped country. The researcher used the Technology acceptance model to test the acceptance of TAM in the education department, business department or other fields (Zogheib & Elshaheli, 2015). However, since the mid of the 1960s, the technology directly impact on teachers and learners. Technologies have extended the teacher quality and made new opportunities for the student to make their career highly profession (Chai, Koh & Tsai, 2010). Many authors speak on a different topic and getting out the result in favor of the public. We aim to identify the technology acceptance model in the underdeveloped country by which factors are important to adopt and drop in an underdeveloped country. Future researchers have to be conducted in another underdeveloped country for getting a better result.

The gap which we have found about underdeveloped countries still deprives of the Technology acceptance model (TAM) and undoubtedly it keeps them poverty yet. Before researches done in Saudi Arabia, Malaysia, America, etc. In spite of this, we are working on a less privileged country that does not know the value of Technology, furthermore, we know it is difficult to collect data from the underprivileged country and no one has researched it but we found the results which are beneficial for all of one. We choose Pakistan for collecting the data from it because Pakistan has the potential to observe their weakness throw this paper and get the bounce back from the slogan of underprivileged country.

Descriptively we have organized the data with intending the few types of research have done in the past. We found the result by using descriptive statistics, standard deviation and then used the PLS-SEM approach it is suggested by Hair et al. (2011) which shows the mean, skewness, and some other values as well.

1.3 Research Objective

The objective of this study is to investigate the impact of drivers of technology acceptance on Pakistani university students. More specifically, we investigate students' intentions to use the Internet for learning purposes.

1.4 Research question

RQ: What drivers of technology acceptance explain the intention to use the internet for learning in the context of Pakistani university students?

1.5 Significance of the study

This study will be beneficial for those students who want to explore new technology for their studies and their career building. Technology can make learning more interactive, meaningful and fun. It is important to acknowledge that students are motivated towards technology and this research will help them to know what factors are needed to perceive student behavior towards technology. Moreover, this research also helps those people who further examine these variables by adding more independent variables.

1.6 Limitations and Delimitations

We collected the data from 500 respondents, due to the time limit we only targeted university students. Further research is needed in other countries also to know the student's perception about technology. We add limited variables if further research will be taken then the

researchers can add other variables. This study is conducted in Karachi, Pakistan. So, the result is according to the perception of university students.

1.7 Organization of the study

The study is organized as follows. In Section 1, the background of the study has been discussed. In Section 2 literature review is provided to identify the issues and gaps in the current literature that have driven this study. Section 3 continues with the research methodology; Section 4 explains the result and its implementation. Finally, in Section 5 conclusion, a theoretical and managerial implication for the study are presented, along with limitation and future research direction.

CHAPTER # 2

Literature Review

2. Literature Review

2.1 Theoretical Background

TRA points that individual behaviors are determined by behavioral intention where the behavioral intention of each individual's attitude toward the conduct and subjective norms which is surrounded by the performance of the behavior.

2.2.1 Technology Acceptance Model

The technology acceptance model (TAM) was formed by Davis (1989), which is based on the theory of reasoned action (TRA) (Fishbein & Ajzen, 1975) in emotional response research. According to Masron (2007) in (1989, 1993) Davis argued that at the core of technology acceptance behaviors were two personal beliefs—perceived ease of use (PEU) and perceived usefulness (PUS)—that regulate a user's behavioral intention to use the technology. These two beliefs were also tangled with perceived ease of use influencing perceived usefulness. These two originator beliefs influence a user's attitude (ATT) towards technology use and behavioral intention exerts an influence on the actual use of the technology.

Dependent variable substitute into independent variable like perceived usefulness depends on Attitude towards technology (ATT) and Behavioral Intention (BIN), another dependent variable is Attitude toward technology (ATT) depend on Behavioral intention (BIN), now this timedependent variable turns into Independent variable means behavioral intention depends on Use of technology. Computer self-efficacy (CSE), an individual trust that he or she can perform a specific task/job using the computer. CSE has a direct influence on both PEU and BIN. Technology complexity (TCY) an innovation is supposed as difficult to understand and use. Research has shown TCY to have a direct effect on an individual's PEU, PUS, and ATT. Trialability (TRY), an innovation may be experimented with on a limited basis. TRY has a direct influence on both PEU and BIN.

Facilitating conditions (FCN), an individual trust that an organizational and technical structure exists to support the use of the system. FCN has a direct effect on both PEU and BIN. Job relevance (JRE), an individual believes that the aim system applies to his or her job. JRE has a direct influence on PUS. Perceived enjoyment (PEN), h the activity of using an exact system is perceived to be enjoyable in its own right, aside from any performance values resulting from system use. PEN has a direct influence on an individual's PEU, PUS, and BIN. We also consider specific forms of social influence variables, namely, school influence (SIE), teacher influence (TIE), and peer influence (PIE), that such specific forms of social influence variables will influence perceived usefulness (PUS).

2.2 Empirical Studies

Campeau and Higgins (2019) discusses the role of individuals' beliefs about their skills to competently use computers (computer self-efficacy) in the purpose of computer use. Computer self-efficacy used as an independent variable and the outcome anticipation used as the dependent variable. A survey of Canadian managers and professionals was showed to develop and authenticate a measure of computer self-efficacy and to assess both its impacts and pasts. Computer self- efficacy was found to exert a significant influence on individuals' expectations of the outcomes of using a computer. The data was collected from 2,000 surveys mailed, 1,020 were completed and returned, and 91 were returned as undeliverable. Thus, the response rate was 53.4 percent, while this response rate is acceptable for research of this natural model. The Factor Structure Matrix (Table 1) presents the individual item loadings and cross-loadings and shows that the individual item loadings meet or exceed the 0.7 criteria except in 8 and the result shows that the Investigation of the loadings for the outcome expectations constructs indicated the possibility of multiple underlying dimensions for this construct. Loadings ranged from 0.42 to 0.83.

Reassessment of the items confirmed this hypothesis. Two distinct dimensions appeared to be represented in the scale, corresponding to the job-related and other, more personal, and outcomes of computer use. Job-related outcomes involved items such as "If I use a computer, I will increase the quality of output of my job," while the personal outcomes included "If I use a computer, I will increase my sense of accomplishment as well. Future research is necessary to address the boundaries of this research. First, longitudinal evidence is required. This research relied on cross-sectional data, making interpretation of interconnection problematic. Second, additional dependent variables need to be studied. This study focused on self-reports of computer use. Self-efficacy, however, is also claimed to influence the development of ability. Thus, future research should focus on how computer self-efficacy effects the development of computing skills.

Davis (2019) examined the findings of two studies that replicated Davis' work and test the validity of the ease-of-use and usefulness balances using independent samples for a variety of technologies. The perceived usefulness and ease of use have been used as an independent variable and Electronic mail and voice mail are used as the dependent variable. Study 1 examines the relationships between ease of use, usefulness, and usage for users of both voice and electronic mail systems. These systems share many common functions, i.e., both support asynchronous message interchange and can facilitate new forms of communication in an organization. The data was collected from 10 organizations that each use several different E-Mail and V-Mail packages. The questionnaire contained over 60 items about various user attitudes toward voice and electronic mail. The ease-of-use and usefulness items were randomly distributed among the 60 questions. It was estimated, based on pilot tests that the instruments would take 15 to 20 minutes to complete. The coefficient of determination for the independent variables, ease of use and usefulness, is 0.98, and for usage 0.93 for both the E-mail and V-mail models. These numbers provide further indication of the overall reliability of the measurement model. Ideally, future research will take

actions of actual usage; however, such an approach is often unfeasible because obtaining access to the system- monitored usage data is often difficult. Regardless, follow-on studies that service actual measures of system use would be an important stage in further defining the relationship between factors such as ease of use, usefulness, and usage.

Abbas (2016) discovered the student's relationship between predictor's influence of social, perceived ease of use and perceived usefulness with intention behavior in command to use an elearning by proposing the awareness that reveals the impact of learning via an electronic system, student purpose in order to involve and study apply electronic medium domain. The researcher betrothed 268 usable responses and tested them by employing structural equation modeling (SEM) techniques. Student's relationship between the predictor's effect of social, perceived ease of use and perceived usefulness is originating a significant relationship by offering the concept that discloses the influence of learning via electronic student purpose in order to involve to learn n utilize electronic medium domain. A conclusion suggests new prospects for growth and proposes to get diversity in marketing in learning via electronic structure students' acceptance and learning via electronic system student purpose.

Adedaja and Morakinyo, (2016) determined the Interface of interpersonal, Peer, and Media Influence Sources Online Independent Variables (peer influence) male and female undergraduate students toward portable learning. Dependent variables attitude of a student, perceived usefulness, intention to use, temporal dissociation, focused immersion and heightened enjoyment. Is the independent variable has been used as independent variables? The sample size is a total of 216 undergraduates. They collect their data through survey close-ended questionnaire and used it as their tool. The location and section are students who registered for a course titled "Introduction to Instructional Technology" that participated in the study. Out of these applicants, 130 were woman

while 86 were men. The Result is there is no doubt that gender-related subjects would continue to be topics of address among academics as far as technology acceptance and use are concerned. This is because all along women are being separated against since they are being denied equal opportunities with men.

Doleck, Bazelais and Lemay, (2016) examined the purpose to use sites of social networking, attitude, perceived ease of use and perceived usefulness association with intention to use sites of social networking by suggesting the technology acceptance model (TAM) in a wider viewpoint regarding university students for learning. There were 127 usable responses were established by employing basic equation modeling (SEM). The findings show substantial results i.e. intention to use sites of social networking, attitude, perceived ease of use and perceived usefulness association with intention to use sites of social networking by suggesting the technology acceptance model (TAM) in wider viewpoint regarding university students for education proposing the technology acceptance model (TAM) in wider viewpoint. Outcomes accomplish new openings for growth and approvals to meeting new modernism for sites of social networking acceptance model named technology acceptance model (TAM) in wider perspective

Doleck, Bazelais, and Lemay (2016) identified the consecutive linkages of student's behavioral intention, social identification and social influence on behavioral intention to use education via computer with technology acceptance model (TAM) to forecast students behavioral intention. They employed structural equation modeling to examine 237 usable responses. Results of their investigation maintained the entire suggested hypothesis and verify the positive linkages consecutive linkages of students' behavioral intention, social identification and social influence on behavioral intention to use learning via computer with technology acceptance model (ITAM) to forecast student's behavioral intention. A result accomplishes new visions for universities and

educational centers to use learning via a PC acceptance model called the technology acceptance model (IAM) in higher positions.

Doleck, Bazelais and Lemay (2017) examined the influences of student's intention to use Facebook, perceived ease of use and perceived usefulness on actual social medium learning approval for Facebook in forecasting student's acceptance utilizes Facebook student groups. Data of 214 respondents were designated to investigate the suggestion and attained results. The researcher employed structural equation modeling (SEM) on AMOS software to the investigation of the hypothesis. The influences of student's intention to use Facebook perceived ease of use and perceived usefulness on actual social standard learning adoption for Facebook in forecasting students' acceptance usage Facebook student batches showed positive and significant outcomes. The research delivers colleges, universities and educational institutions the methods to make stronger in forecast regarding student's acceptance of learning via Facebook a social media stage and providing admission implication to student's future intentions utilize Facebook student groups.

Doleck, Bazelais and Lemay (2017) discovered the student's suggestion among construct's influence of social, perceived ease of use and perceived usefulness with intention performance in order to utilize learning over electronic medium by recommending the awareness that leaks the effect of learning through electronic medium, student determination in order to implicate and study by utilizing learning through electronic medium. The researcher collected 111 usable responses and verified by using structural equation modeling (SEM) techniques. Student's association among construct's influence of social, perceived ease of use and perceived usefulness is found important association by suggesting the idea that reveals the influence of learning through an electronic medium, student purpose in command to involve and study by utilizing learning through an electronic medium. A finding proposes new visions for emerging and recommends to grow

diversity in educational centers in learning through electronic medium students' acceptance and learning through electronic medium student's intention

Lee, Baring, Maria, and Reysen, (2017) analyzed Attitudes towards technology, social media norm and grade-point average as predictors of global citizenship documentation in Filipino University Students. The dependent variable is Attitude toward technology and their independent variable is social network usage, Grade-point average and Global citizenship. Participants (N =3628, 52.2% women; Mage =17.95, SD =1.35) included students appearing De La Salle University in Manila, Philippines. Students completed the survey in one of their undergraduate general education courses. They collect them through a close-ended questionnaire. The indirect effect of knowledge attitude, a number of social networks and GPA were reliably carried by the antecedents on student`s global citizenship identification. Including items HAVE positive attitudes towards technology (.56–.81), normative environment (.71–.80), global awareness (.50–.80), global citizenship identification (.75, .77), intergroup empathy (.64, .79), valuing diversity (.75, .83), social justice (.62, .87), environmental sustainability (.79, .87), intergroup helping (.69, .85) and responsibility to act (.74, .75) The results highlight the links between technology and academic performance with a global identity and associated values. The relationship was small but important. The difference in result may be owed to the amount of time engaged in social sites.

Zogheib, Rabaa' I, Zogheib and Elshaheli (2015), to determine the University Student Perceptions of Technology Use in Mathematics Learning. Perceived ease to use, attitude, perceived usefulness, and behavioral intention are used as reliant on variables (endogenous variable) and self-efficacy, subjective norm, and user satisfaction are used as an independent variable (exogenous variable). The sample in this study contained of 228 university students joined in corrective and college algebra classes at a Central Eastern Secluded American University. This

study tested twelve hypotheses in which a few of them were found significant at a 0.05 significance level and the majority of them are significant at 0.00 significance level. Its future recommendation is that this same study should be done in different institutes before any simplification will be made. More participants should be included. It also recommended that it has to be extended in the higher level course the future work should examine different external variables more closely.

Alharbi and Drew (2014) analyze Using the Technology Acceptance Model in Kind Academics' Behavioural Intention to Use Learning Management Systems. Attitude towards technology, behavior intention and actual use of the system are used as a dependent variable and perceived usefulness, perceived ease to use, attitude toward technology and behavior intention is to use as an independent variable. This study is quantitative. The data was collected from 105 questionnaires distributed, 69 responses were recorded (65.71%) and only 59 responses yielded valid responses that were used for analysis. The study is significant and shows a positive relationship between the dependent and independent variables. The present study introduced LMS (learning management system) usage experience as a new moderator believed to affect the original TAM constructs. It has been suggested, therefore, longitudinal research may be more appropriate to better-predicting attitude and behavior, and hence facilitating a comprehensive understanding of the relationship between variables. This study is not free of limitation first and most importantly, this study was limited by time, the focus on individuals was the main theme of this study. Future studies request could focus on general ICT adaptation for teaching and learning. Additionally, collecting data from different groups could be affected by the increase in usage and experience of users.

Saleh Ajam and Nor (2013) study the Influencing Features on Behavioral Intention to Adopt Internet Banking Service, behavior intention to adopt IB (INTERNET BANKING) and

attitude towards the adaptation of IB are used as dependent variable and trialability, compatibility and relative benefit are used as an independent variable. All hypothesis is supported. The result is significant. The sample of this study is 1500 through which 1286 were collected after excluding the unfinished questionnaire this finding suggests that a positive effect on technologies by US consumers, The International intention to adopt Internet banking can be formed if the Journal of Bank Marketing, users have the opportunity to test-drive.

Wong, Idris, and Toe (2012) study the Influence of gender and computer teaching efficacy on computer acceptance among Malaysian student teachers. Attitude towards technology, behavior intention, perceived ease to use are used as dependent variables and computer teaching efficacy, perceived usefulness and attitude towards technology are used as independent variables. The sample of 302 respondents was collected which include student teachers from educational universities in MALAYSIA. An interesting finding from this study is that the effect of computer teaching efficacy on perceived usefulness and attitude toward computer use was significant for women, but insignificant for men. Future research should include different types of related variables in the study, to account for the unexplained variance for intentions towards the use of computers among student-teachers. As noted above, some questionnaires have been rejected, due to being only partially completed, thus future studies should consider giving more time for student teachers to fill out the survey question, maybe a week, instead of distributing and collecting the questionnaire within the final hour on the last day of lectures.

Margaryan, Anoush and Littlejohn, Allison (2011). This paper determines are digital natives a myth or reality? Student`s use of technologies for learning. The dependent variable is Social Work and Engineering. The independent variables are the nature and level of student`s use of technologies in official, casual learning and socializing, the nature and extent of lecturer`s use

of technologies in teaching, Student`s and staff`s views on the educational worth of these tools and the factors impacting their adoption and Student`s and staff`s views on the barriers to the integration of technologies within education. The data was collected using a paper-based questionnaire, followed by individual one-hour-long interviews. The survey was distributed to 160 Year 3 students on Social Work and Engineering courses at both institutions. Out of the 28 university students who offered for an interview, they had been eventually able to recruit 8 students (four students at each organization, collectively with from each field). Eight individuals of a team of workers have been interviewed at both institutions. The pattern consisted of 4 instructors, three help personnel, and a manager. The study shows that students` attitudes toward learning appear to be influenced by the approaches adopted by their lecturers. The effects component to a few age versions, with greater younger, engineering university students making in reality more active, albeit confined, use of equipment than the older ones.

Yusuf, and Balogun, (2011). This paper analyzes Student-Teachers` Competence and Attitude towards Information and Communication Technology: A Case Study in a Nigerian University. The attitude of a pupil, an attitude of teachers toward technology, Basic Computer Operation, and Issues, Use of Application Software, Use of Marginal ICT Equipment has been used as independent variables. Information and Communication Technology has been used as dependent variables., Location and Department are departments of the Faculty of Education, University of Ilorin, Ilorin, Kwara State five Nigeria. The sample size is 382 (181 males and 201 females). Survey Questionnaire is used as tools. The data analyzing tool is to test the instrument`s validity and reliability. Result in this study, it was discovered that student-teachers have a positive attitude towards the use of ICT. The results revealed that among the basic computer capability subdivisions, student teachers indicated competency in general computer operation, word processing, downloading and using basic internet resources.

Teo, and Noyes, (2011). This paper analyzes a valuation of the influence of perceived pleasure and attitude on the intention to use technology among pre-service teachers: A structural equation modeling approach. Perceived enjoyment use as a dependent variable and independent variable are perceived ease of use, intention to use technology, perceived effectiveness. The sample size is 150 and 100 are useable. The survey questionnaire is used as tool Participation in this study was voluntary and 153 pre-service teachers who were enrolled at the National Institute of Education (NIE) in Singapore agreed to take part in this study. An invitation to participate in this study was made to students enrolled in the 4-year Bachelor of Arts (with Education) and a one-year Postgraduate Diploma in Education programmed. A total of 77 and 76 students responded from each programmed respectively. Among them, 56.9% (n=87) were female. The mean age of all participants was 26.2 year and their data collection are Thus, future research could test the validity of this proposition, preferably with various user types and conditions of technology use. Multi-group analyses could be used as a technique to test for the invariance of the validity of perceived enjoyment as an external variable in the TAM and to assess further the role of attitude towards use by different samples, technology type, gender, and culture. These changes are the results of technological developments and changes in the demands of the teaching profession.

Parveen, and Sulaiman (2008). Technology complexity, personal innovativeness and intention to use wireless internet using mobile policies in Intension of a user has been used as the dependent variables and technology complexity is used as independent Variables. The data was collected using a self-administered questionnaire survey. A total of 350 questionnaires were distributed to mobile phone and Internet users randomly. From 350 copies distributed, 301 valuable responses were received and the questionnaire items were measured on a five-point Likert-type scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Respondents were required to indicate their level of agreement for each of the statements. Nearly 80.7 % of respondents use the

Internet, 92% use mobile phones and 32.6% use mobile devices for surfing the Internet. The respondent's perceptions of WIMD are demonstrated using mean values. The result shows that there is a medium correlation (0.329) between the variables, suggesting a moderate relationship between perceived usefulness and intention to adopt WIMD (H1) so the technology complexity always comes in people's lives but it gives a lot of advantages to the people as well. The result is showing clearly that only 32 % of people suffering from it because their intention to use this technology is very low. The study was shown among mobile phone and Internet users to find the intention to use WIMD in Malaysia using convenience sampling. The proposed conceptual model was supported by empirical data. The results show strong support for all the hypotheses. The overall results of the study show that to study the intention towards WIMD in Malaysia, the technology acceptance model is very appropriate with the implication value of 0.000 which is fewer than 0.01, so the model is important at 99%. The results show that behavioral belief, perceived usefulness have a moderate positive influence on the intention to accept WIMD and variables such as personal innovativeness and technology intricacy have optimistic impact on perceived usefulness and comfort of using WIMD. The study also found that people in Malaysia are willing to use WIMD now as well as short.

Mark Manning, (2009) examined A meta-analysis examined the effects of perceived injunctive (IN) and descriptive (DN) norms on behavior (BEH) within the theory of planned behavior (TPB). The behavior has been used as the dependent variables and the subjective norm is used as independent Variables. Two types of SN can be well-known. IN are social pressures to engage in behavior based on the perception of what other people want you to do whereas DN is social pressures based on the observed or inferred behavior of others. The data was collected from Searching the Psych Info and Psych Articles databases collectively yielded 882 articles, while the

Medline database yielded 559 articles. To gather unpublished studies a message was posted on the Society for Personality and Social Psychology (SPSP) listserv describing the study and the presence criteria and requesting data for the meta-analysis. Harvested statistics Reliability statistics for measures of each planned behavior variable were collected from the studies. One hundred and ninety-six behavioral outcomes were gathered from 152 separate studies. In choosing only one outcome from studies that featured multiple behavioral outcomes (to not violate assumptions of independence) 172 behavioral outcomes comprised the final meta-analytical dataset. Most behavioral measures were continuous (75.00%) with one study not providing data. Most target behaviors were coded as socially approved (90.12%), useful (82.56%) and less socially motivated (53.49%).

Ajzen and Fishbein (2005) have recommended including DN and IN in the same measure. Given the differences between the two norms about target behaviors, one might accomplish that these two constructs ought to be treated separately. Were we to have a larger sample of the DN–behavior relation effect sizes, we would be able to more confidently examine where moderators may have different effects. Given different sources of motivation for IN and DN (Cialdini et al., 1990; Deutsch & Gerard, 1955; van Knippenberg, 2000) there is a theoretical reason to conjecture the differential effects of moderators on the relations between the SN and behavior. As more studies use DN, either alone or in conjunction with IN, how different moderators affect the constructs can be examined, thus providing more data for conclusions as to whether or not these two constructs necessarily ought to be distinguished in measurement within the TPB. Additionally, further planned behavior studies that include DN offers the opportunity to empirically examine, the presence of a suppressing effect of IN in the relation between DN and behavior in a primary study.

Venkatesh, and Bala, (2008). This paper determined Technology Acceptance Model 3 and a Research Schedule on Interventions. The dependent variables are perceived ease of use, supposed usefulness, behavioral intention, and use behavior. The independent variables are individual differences, system characteristics, social influence and facilitating conditions. Data were collected from four different organizations sites A through implementing new ITs. These organizations providing an opportunity to test our research model in real_ world sets of IT operations. The research sites signified different industries, organizational contexts, and functional areas. Further, the types of information technology were different across the sites. We used authenticated items from prior research to test TAM. We used Partial Least Squares (PLS), a component_ based structural equation modeling technique, to analyze our data. PLS_ Graph, version 3, build 1126 was used to analyze the data.

Abbitt, and Klett, (2007). This paper analyzes Identifying influences on attitudes and selfefficacy beliefs towards technology integration among pre-service educators. The dependent variables perceived comfort with using computer technology, perceived usefulness of computer technology, and their independent variables are ratings of self-efficacy beliefs toward technology integration. Of these 108 applicants, 78.7% were feminine and 21.3% were masculine. The study used data collected through a survey instrument derived from two existing survey instruments. A limitation to the ability of the survey instruments and research design to identify the pattern of emergence of self-efficacy beliefs toward technology integration and the study was the limited numbers of paired measurements that were available for data analysis Also, this survey instrument is limited by its nature as a self-reporting instrument that relies on the ability of respondents to reliably respond to the survey items.

Cheung and Huang (2005), study the Proposing a framework to assess Internet usage in university education. perception and attitude, internet usage, and internet impact are used as dependent variables and organizational and individual factors, perception and attitude and internet usage are used as an independent variable. The research questionnaire was randomly distributed among 500 graduate students from different universities. The response rate was 66% which was obtained by 328 questionnaires which were completed and returned. Female students accounted for 77 %of the respondents. First-year students constituted 31% of the respondents, second-year students 41%, and third-year students 28%. This shows the positive relationship between independent and dependent variables. Our current research findings suggest that providing these types of support may lead to greater Internet use and more effective learning. Effective support requires both the necessary resources to provide adequate computer facilities for students to access the Internet. Research limitation to this study is that students of the first and second years may not have a clear understanding of future job prospects.

Lu, Yu, and Liu, (2005). This paper determined Facilitating conditions, Wireless get keep of as actual with and Adoption reason. This paper proposes a version of three latent constructs Facilitating conditions, wireless accept as actual with, and goal to apply WIMT, in which Facilitating conditions are impartial variable and based variable wireless hold in mind which, in flip, will affect reason to apply. The emphasis of this model is on explaining the antecedent beliefs of the purpose. The facts series from respondents belonging to 357 MBA university college students from a nearby college in Texas have been surveyed inside the educational. Accomplishing a survey regarding clients' perceptions and intentions is appropriate whilst you remember that it is the maximum direct manner to get popular records. Statistics amassed every semester had been compared and no statistically outstanding versions were diagnosed. route assessment of the postulated relationships installation a huge direct excessive brilliant impact from Facilitating

situations to wireless consider (0.77) and a medium direct effect from wireless believe to purpose to use WIMT (0.25), each has been big at 0.001. The hypothesized theoretical model and the relationships have therefore supported the use of the empirical facts. Sixty percent of the variance of wireless take delivery of as right with become described with the useful beneficial resource of Facilitating conditions. The variance described the wireless take into account come to be the handiest 6 percentages. The findings in particular display that the respondents' personal a lack of self-belief whether or no longer or no longer they'll be notified at the equal time as their private statistics are accumulated, whether or not or no longer or no longer or not they will be allowed to get proper of getting right of getting admission to the facts amassed from them, whether or not or no longer sound managerial and technical techniques exist to protect data and their non-public records. These studies are commonly recommended to get past the restrict of the scholar sample and use non-clients and clients primarily based mostly on random sampling strategies. This could assist to generate higher credibility and more potent persuasive strength, and at the equal time, grow to be aware of if personal experience in the use of WIMT makes any difference.

Saade and Bahli, (2005). The influence of intellectual absorption on perceived ease and perceived usefulness of use in on-line knowledge: an extension of the technology acceptance model. TAM described the relationships between the students' IUC, PU, and PEU. The cognitive absorption and perceived ease of use is dependent variable and perceived usefulness, intention to use, temporal dissociation, focused immersion and heightened enjoyment. It is an independent variable. A total of 102 students participated in this study. The sample contained of 52% woman and 48% man participants with an average age of 23 years. The majority of students (85%) were majoring in Accountancy, Management Information Systems, Finance, and Marketing. A survey procedure approach was taken to examination the relationships in the research model. The results may propose how people may think of preoccupation, flow, and engagement—they directly

prejudiced what people do. Finally, we verified the possessions of PEU and PU on CA. The results show a significant effect of PU on CA (path $\frac{1}{4}$ 0.38, $P < 0:001$) and a weak relationship between PEU and CA (path $\frac{1}{4}$ 0.094 $P \frac{1}{4}$ not significant). The measurement of the variance clarified (R^2) of CA was 26.2%. The results of the empirical analysis provide several interesting insights and suggestions: (1) cognitive absorption was shown to be an important antecedent to PU but less important to PEU; (2) TD did not load high on CA, (3) weak results were observed for PEU, however, findings provided strong support for the PU-IUC component of the TAM model, and (4) CA seemed to play a significant role in explaining purposes both directly and indirectly. There was a significant positive impact of both PU and PEU on the intention to use the ILS in another course, though the influence of PU was much more significant than PEU and approximately three times stronger.

2.3 Conceptual Model

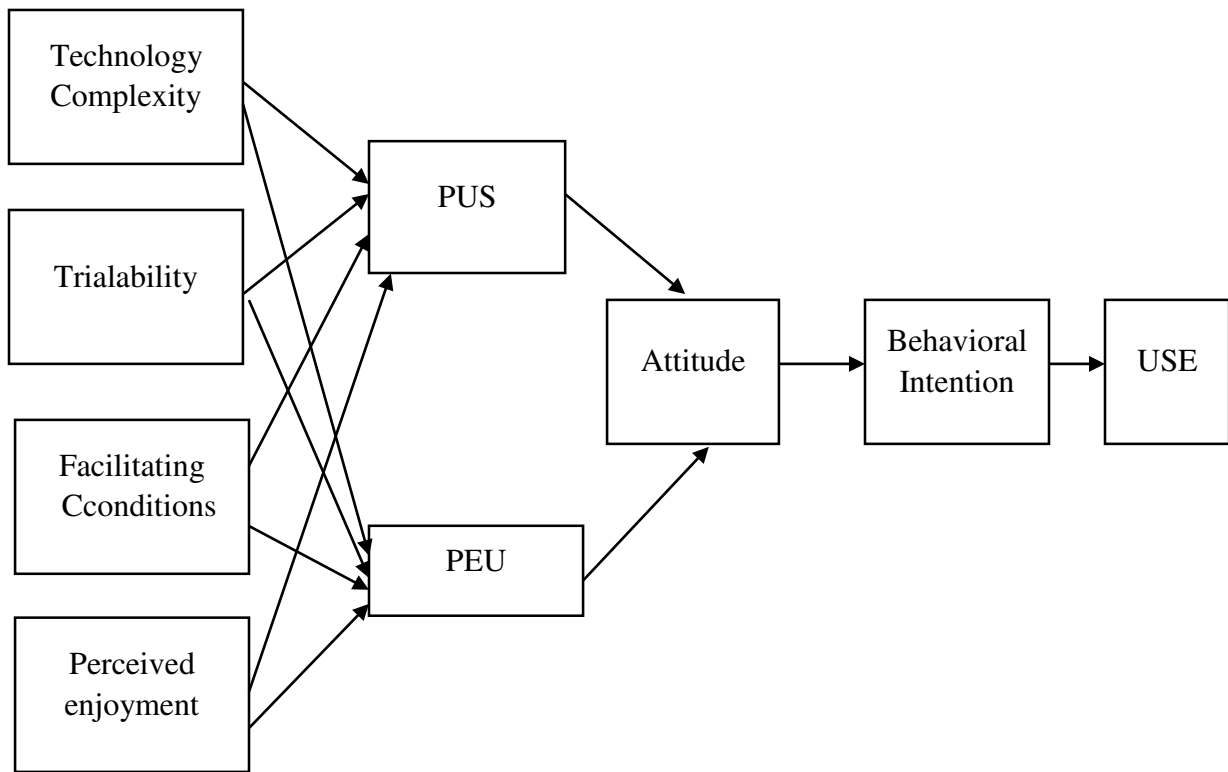


Figure 1: Conceptual Model

2.4 HYPOTHESES MODEL

H1: Technology Complexity has a significant relationship with Perceived usefulness.

H2: Technology Complexity has a significant relationship with Perceived ease of use.

H3: Trialability has a significant relationship with Perceived usefulness.

H4: Trialability has a significant relationship with Perceived ease of use.

H5: Facilitating conditions has a significant relationship with Perceived usefulness.

H6: Facilitating conditions has a significant relationship with Perceived ease of use.

H7: Perceived enjoyment has a significant relationship with Perceived usefulness.

H8: Perceived enjoyment has a significant relationship with Perceived ease of use.

H9: Perceived usefulness has a significant relationship with attitude.

H10: Perceived ease of use has a significant relationship with attitude.

H11: Attitude has a significant relationship with behavioral intention

H12: Behavioral intention has a significant relationship with use

CHAPTER # 3

Research Methodology

3. Methodology

3.1 Research Purpose

We used explanatory research purpose in this research. The reason behind selecting explanatory research is to extend the present model. Also, the purpose is to apply prior model in new context (Raza et al., 2020; Khaskheli et al., 2020).

3.2 Research Approach

The quantitative research approach has been used in this study. The data has been collected through an online questionnaire (Qazi et al., 2020; Raza et al., 2020).

3.3 Research Design

This study is built on descriptive inquiry. The researcher collected data through questionnaires from the survey and used correlation research design to control the kind of the connection between dependent and independent variables.

3.4 Sampling Techniques

Researchers choose a non-probabilistic suitability sampling procedure to collect facts as fast as possible. Researchers choose convenience while collecting data all the individuals from the population were not selected for the sample. By the using of convenience sampling, the samples are certain because it is stress-free to tactic by the investigator. This method is the simplest, inexpensive and minimum time-consuming.

3.5 Target Population

In this study male and female university students who use technology and consume so much time on the internet were targeted as this is a way to find out easily the rapport between dependent and independent variables.

3.6 Sample Size

The sample size is based on the recommended sample size i.e., a poor sample size to be 50, the good sample size to be 300, the very good sample size to be 500, and an excellent sample size of 1000 for factor analysis (Raza & Hanif, 2013; Qazi et al., 2020; Raza et al., 2020). Hence, we collected the data from 500 respondents.

3.7 Statistical Technique

A statistical method is mathematical components, models, and strategies that may be finished in a statistical evaluation of uncooked research data. All the data collected from questioner which is converted into numerical form through SPSS and PLS as it accepts the numerical value. The exam applies to the data by regression analysis, reliability analysis, and factor analysis.

3.7.1 Reliability Analysis

The test of reliability performed by SPSS in a very good manner to measure the internal consistency for example reliability of the measuring device (Questionnaire).

3.7.2 Factor Analysis

The drive of factor analysis is to decrease many character gadgets into a fewer number of dimensions. Factor analysis may be used to simplify information, inclusive of decreasing the wide variety of variables in the regression model

3.7.3 Regression Analysis

It is a dominant numerical tool that which inspect the correlation between two or more variables of concern.

3.8 Measurement Instrument

The facts for this analysis collected with the useful resource of the usage of the Likert scale questionnaire which involves strongly disagree (1) to strongly agree (5). The proofs of a questionnaire were done by the field professionals. Even as the most essential device is Google form. All the questions were closed-ended questions.

3.9 Ethical Consideration

Ethical considerations in research are important. Ethics are the norms or requirements for conduct that distinguish among proper and incorrect. They help to decide the difference between perfect and unacceptable behaviors. That is particularly crucial even as thinking about problems associated with data sharing, co-authorship, copyright hints, confidentiality, and hundreds of several issues. Researchers need to furthermore adhere to moral requirements for most of the people to guide and acquire as real within the research. In this study, the researcher will maintain the confidentiality of the artwork, its authenticity and don't intend to use all said statements in our names and no longer used collected records for a wrong motive. Most people want to be confident that researchers determined the incredible tips for troubles.

CHAPTER # 4

Data Analysis

4.1 Data Analysis

For analyzing the research model, PLS-SEM (partial least squares method to structural equation modeling) was chosen. Data was examined by using the Smart-PLS 3.1.6 software (Ringle, Wende, & Becker, 2015; Sharif & Raza, 2017; Raza et al., 2019).

4.1.1. Descriptive Statistics

The overall profile of respondents in terms of their Gender, Age and Education is represented through table 1.

Table: Respondent's profile (N=500)

Demographic items	Frequency	Percentage
Gender		
Male	301	59.25
Female	207	40.7
Age		
20-24	251	49.9
25-29	201	39.6
30-and above	56	11
Education		
Under graduate	215	42.3
Graduate	170	33.5
Post graduate	85	16.7
Other	38	7.5

With respect to Gender most of the respondents were males that are 59.25%, while 40.7% were females. With respect to age, most of the respondents were in the category of 20-24 years that are 49.9%, while among the respondents 39.6% belongs to the age bracket of 25-29 years and there were 11% respondents who belong to 30 and above age category. With respect to education category most of respondents were undergraduate students which is 42.3%, while some were graduates which is 35.5%, 16.7% were post graduates and only 7.5% of respondents belongs to other field of study.

4.1.2 Reliability analysis

Dependability alludes to the degree to which a scale produces predictable outcomes, if the estimations are rehashed various occasions.

Reliability analysis was done in order to determine the ability of the instrument to measure the phenomenon for which it is designed. Reliability of an instrument is measured in terms of Cronbach's alpha which is the coefficient of reliability

Table 2: Reliability Statistics

Construct	Cronbach's α	Items
		3
		3
		3
		3

ATT	0.905	
BIN	0.717	
FCN	0.795	
PEN	0.910	
PEU	0.783	
PUS	0.845	3
TCY	0.660	3
TRY	0.880	3
USE	0.821	2

Notes: ATT=Attitude toward technology, BIN= Behavioural intention, FCN=facilitating condition, PEN= Perceived enjoyment, PEU= Perceived ease of use, PUS=Perceived usefulness, TCY= Technology complexity, TRY= Trialability, USE= Use influence

Interpretation

Table 2 shows reliability analysis of all variables. According to Uma Sekaran (2003), the closer the reliability coefficient Cronbach's Alpha gets to 1.0, the better is the reliability. According to Tabachnick and Fidell, (2007) the Cronbach's Alpha should be more than 0.55.

The first variable attitude toward technology has 3 items and the value of alpha of these items is 0.905. In the second variable behavior intention has 3 items and the value of alpha is

0.717. In the third variable facilitating conditions has 3 items and the value of alpha is 0.795. In the fourth variable perceived enjoyment has 3 items and the value of alpha is 0.910. In fifth variable perceived ease of use has 3 items and the value of alpha is 0.783. In the sixth variable perceived usefulness has 3 items and the value of alpha is 0.845. In the seventh variable technology complexity has 3 items and the value of alpha is 0.660. In the eighth variable trialability has 3 items and the value of alpha is 0.880. In ninth variable USE has 2 items and the value of alpha is 0.821. Thus all meet the criteria of 0.55 given by Tabachnick and Fidell, (2007) and ensures the reliability of the data.

4.1.3 Factor analysis

Factor examination is a strategy that is utilized to lessen an enormous number of factors into less quantities of elements. This method removes greatest basic change from all factors and places them into a typical score.

Table 3: Factor Analysis

	ATT	BIN	FCN	PEN	PEU	PUS	TCY	TRY	USE
ATT1	0.924								
ATT2	0.928								
ATT3	0.897								
BIN1		0.805							
BIN2		0.827							
BIN3		0.751							

FCN1	0.890	
FCN2	0.875	
FCN3	0.749	
PEN1	0.705	
PEN2	0.795	
PEN3	0.811	
PEU1		0.875
PEU2		0.841
PEU3		0.773
PUS1		0.791
PUS2		0.850
PUS3		0.844
TCY1		0.741
TCY2		0.910
TCY3		0.836
TRY1		0.933
TRY2		0.877
TRY3		0.881

USE1	0.924
USE2	0.918

Notes: ATT=Attitude toward technology, BIN= Behavioural intention, FCN=facilitating condition, PEN= Perceived enjoyment, PEU= Perceived ease of use, PUS=Perceived usefulness, TCY= Technology complexity, TRY= Trialability, USE= Use influence

Interpretation

Factor analysis table result shows that each variable falls under their respective category which indicates that results are significantly appropriate. Correlation matrix show how each of the items are associated with each other. If the value lies in between 0.01 to 0.3it means the relationship between variable is weak. Moreover if it's within 0.31 till 0.7 therefore, it tells average commitment within terms and above 0.7 tells a powerful relationship between variables. Factor Analysis basically shows the loading of constructs in their respective construct having high or low relationship. Table 3 shows factor analysis. It is shown that all four variables have a high correlation with their respective variable as the values greater than or equal to 0.7.

Table 3 shows the Factor Analysis in which there were 26 items Factor 1 comprised of three items with a range of 0.897 to 0.928. Factor 2 comprised of three items with a range of 0.751 to 0.827. Factor 3 comprised of three items with a range of 0.749 to 0.890. Factor 4 comprised of three items with a range of 0.705 to 0.811. Factor 5 comprised of three items with a range of 0.773 to 0.875. Factor 6 comprised of three items with a range of 0.791 to 0.850. Factor 7 comprised of three items with a range of 0.741 to 0.910. Factor 8 comprised of three items with a range of 0.877 to 0.933. Factor 9 comprised of two items with a range of 0.918 to 0.924.

4.1.4 Regression analysis

Regression analysis is a quantitative research method which is used when the study involves modelling and analyzing several variables, where the relationship includes a dependent variable and one or more independent variables.

Table-4 Regression Analysis

Hypothesis	Regression Path	Effect type	B-Coefficients	P-Values	Remarks
H1	ATT -> BIN	Direct effect	0.319	0.001	Supported
H2	BIN -> USE	Direct effect	0.092	0.000	Supported
H3	FCN -> PEU	Direct effect	0.107	0.094	Supported
H4	FCN -> PUS	Direct effect	0.145	0.038	Supported
H5	PEN -> PEU	Direct effect	0.268	0.000	Supported
H6	PEN -> PUS	Direct effect	0.224	0.000	Supported
H7	PEU -> ATT	Direct effect	0.031	0.001	Supported
H8	PUS -> ATT	Direct effect	0.432	0.000	Supported
H9	TCY -> PEU	Direct effect	0.272	0.000	Supported
H10	TCY -> PUS	Direct effect	0.144	0.020	Supported
H11	TRY -> PEU	Direct effect	0.081	0.003	Supported
H12	TRY -> PUS	Direct effect	0.123	0.065	Supported

Notes: ATT=Attitude toward technology, BIN= Behavioural intention, FCN=facilitating condition, PEN=

Perceived enjoyment, PEU= Perceived ease of use, PUS=Perceived usefulness, TCY= Technology complexity,

TRY= Trialability, USE= Use influence

Interpretation

The result of regression analysis is reported in table 4. The result of the first hypothesis shows that there is a positive and significant relationship between Attitude toward technology and behavior as ($\beta=0.319$, $p<0.001$). In second hypothesis shows that there is a positive and significant relationship between Behavior intention and USE as ($\beta=0.092$, $p<0.000$). In third hypothesis shows that there is a positive and significant relationship between facilitating conditions and Perceived ease of use as ($\beta=0.107$, $p<0.094$). In fourth hypothesis shows that there is a positive and significant relationship between facilitating conditions and Perceived usefulness as ($\beta=0.145$, $p<0.038$). In fifth hypothesis shows that there is a positive and significant relationship between Perceived enjoyment and Perceived ease of use as ($\beta=0.268$, $p<0.000$). In sixth hypothesis shows that there is a positive and significant relationship between Perceived enjoyment and Perceived usefulness as ($\beta=0.224$, $p<0.000$). In seventh hypothesis shows that there is a positive and significant relationship between Perceived ease of use and Attitude towards technology as ($\beta=0.031$, $p<0.001$). In eight hypothesis shows that there is a positive and significant relationship between Perceived usefulness and Attitude towards technology ($\beta=0.432$, $p<0.000$). In ninth hypothesis shows that there is a positive and significant relationship between Technology complexity and Perceived ease of use as ($\beta=0.272$, $p<0.000$). In tenth hypothesis shows that there is a positive and significant relationship between Technology complexity and Perceived usefulness as ($\beta=0.144$, $p<0.020$). In eleventh hypothesis shows that there is a positive and significant relationship between Trialability and Perceived ease of use as ($\beta=0.081$, $p<0.003$). In twelve hypothesis shows that there is a positive and significant relationship between Trialability and Perceived usefulness as ($\beta=0.123$, $p<0.065$). The studies which supported that relationship includes

Shih (2007), Lee (2006) and contrast with the study of Lee et al. (2011)

4.2. Discussion

The first hypothesis is accepted as it shows positive and significant relationship between Attitude and Behavioral intention ($B=0.319$, $p<0.001$). Au, and Enderwick, (2000) found that in this study, the cognitive method which decided the “attitude in the direction of adoption” became determined to be stricken by six ideals: perceived issue; adoptive stories; suppliers’ commitment to the company; perceived advantages; compatibility; and improved cost. Integrated with the findings from different studies on the company innovation diffusion issues, the consequences from the contemporary observe offer the capability for the improvement of a more complete knowledge of the manner of organizational adoption. According to Alharbi, and Drew, (2014) they advanced an exquisite mindset in the direction of using it. Similarly, the perceived usefulness increased the diploma of positivity closer to usage, which ultimately affected the behavioral purpose to apply. Reputedly, the findings range a number of the user-business enterprise and then on-man or woman organization.

The second hypothesis is accepted as it shows positive and significant relationship between Behavioral intention and use ($B=0.092$, $p<0.000$). According to Kim, Mannino, and Nieschwietz, (2009) technology acceptance have a massive impact on technology popularity in the internal audit profession as influencing machine usage, perceived usefulness, and perceived ease of use. Machine usage, perceived usefulness, and perceived ease of use are immoderate in critical abilities and coffee in superior skills. As such, we count on that generation features might also moreover have a huge impact on generation recognition in special professions. Liu, Chen, Sun, Wible, and Kuo, (2010) found in their paper The aim to use an internet getting to know community is strongly and without delay affected by Perceived Usefulness and indirectly by using on line course layout.

The third hypothesis is accepted as it shows positive and significant relationship between Facilitating conditions and Perceived ease of use ($B=0.107$, $P<0.094$). According to Teo, (2011) that Facilitating conditions turn out to be every an immediate and oblique (via perceived ease of use) effect on behavioral goal to use generation. Whilst instructors perceived technical resource to be to be had, to be had, and properly timed, moreover they perceived the use of era to be specially unfastened from attempt and this could have strengthened their purpose to technology. Lu, Yu, and Liu, (2005) said in their paper that the hypothesized theoretical version and the relationships are consequently supported by the empirical statistics. Sixty percent of the variance of wi-fi trust was explained by using Facilitating conditions. The variance explained by wireless consider turned into best 6 percentages.

The fourth hypothesis is accepted as it shows positive and significant relationship between Facilitating conditions and Perceived usefulness ($B=0.145$, $P<0.038$). According to Lu, Yu, and Liu, (2005) that this finding for the primary time affords empirical evidence to the postulated courting in literature, offering us an important attitude in inspecting the formation of trust perception towards WIMT. Further, the regulatory region of facilitating condition seems lots extra essential for fostering accept as true with, in comparison to technical useful resource. Teo, (2011) in his study he examines, facilitating situations had an extra effect on teachers' purpose to perceived usefulness than subjective norm, suggesting that the surroundings wherein teachers engaged technology turn out to be more vital than their beliefs approximately whether the student whom they perceived to be significant they must use technology or not.

The fifth hypothesis is accepted as it shows positive and significant relationship between Perceived enjoyment and Perceived ease of use ($B=0.268$, $P<0.000$). Teo, and Noyes, (2011) found in their paper that in the research model, perceived enjoyment defined 46.8% of the variance in

perceived ease of use, extra than the variance in which the preceding had defined inside the surely one among a kind endogenous variables. According to Hussain, Mkpjojogu, and Yusof, (2016) that perceived usefulness, perceived Ease to used, and perceived enjoyment are every considerably related to user popularity. The three hypothesis tested on this study were supported and confirmed. Consequently, perceived usefulness has effective effect on user recognition of interactive mobile maps.

The sixth hypothesis is accepted as it shows positive and significant relationship between Perceived enjoyment and Perceived usefulness ($B=224$, $P<0.000$). According to Praveena, and Thomas, (2014) that Perceived enjoyment had the most powerful impact on mindset, observed by using Perceived usefulness and Perceived ease of use. Rather than the usefulness of internet, college students discover this as an enjoyment medium. According to Teo, and Noyes, (2011) perceived enjoyment defined the variance in perceived usefulness no longer greater than the variance wherein the former had explained inside the different endogenous variables like perceived ease of use.

The seventh hypothesis is accepted as it shows positive and significant relationship between Perceived ease of use and attitude ($B=0.031$, $P<0.001$). Edmunds, Thorpe, and Conole, (2012) found that students understand IT as both greater useful and easier to apply within the paintings context, by using comparison with path look at and leisure hobby. This have a look at points in the direction of the relevance of the paintings context especially as influencing both attitudes in the direction of and take in of IT greater generally. According to Teo, (2011) that from the direct affects, it is easy that once instructors perceived technology to be useful and that the use of generation would probable growth their productiveness, their purpose to use might be drastically extended

The eighth hypothesis is accepted as it shows positive and significant relationship between Perceived usefulness and attitude ($B=0.43, P<0.000$). Schepers, and Wetzels, (2007) found out that the specific TAM relationships had been confirmed. Both correlation analysis and SEM confirmed the importance of perceived usefulness and perceived ease of use inside the path of mind-set and behavioral intention to use. Evidence existed for a more potent dependence of a man or woman on utility than on decrease complexity while adopting new technologies. According to Kim, Mannino, and Nieschwietz, (2009) Perceived ease of use has greater impact on using superior features than perceived usefulness. Perceived usefulness has more effect on the use of primary functions than perceived ease of use. This evaluation furnished insights into generation popularity with the useful resource of characteristic complexity. The modern day scales had been determined to have strong psychometric properties and to expose off large empirical relationships with self-suggested measures of usage behavior. Furthermore, numerous new insights were generated about the man or woman of perceived usefulness and ease of use, and their roles as determinants of consumer popularity.

The ninth hypothesis is accepted as it shows positive and significant relationship between Technology Complexity and Perceived ease of use ($B=0.272, P<0.000$). Kim, Mannino, and Nieschwietz, (2009) they give justification in their research paper, while adopting new technologies, feature complexity is vital for inner auditors to simply accept these technology. If inner auditors aren't comfortable with the usage of superior capabilities, they may be lots less in all likelihood to apply that era, even when it is beneficial to their organization. For this reason, superior function education need to recognition on alleviating consumer issues approximately using technology in addition to its usefulness. Saadé, and Bahli, (2005) found in their study that end result changed into that cognitive absorption and technology complexity has a great effect on

Perceived usefulness with a better variance described of the latter assemble however smaller variance of Perceived ease of use.

The tenth hypothesis is accepted as it shows positive and significant relationship between Technology Complexity and Perceived usefulness ($B=0.144$, $P<0.020$). Saadé, and Bahli, (2005) said in their paper that technology complexity has end up determined to play an essential characteristic as an antecedent to Perceived usefulness so you can increase even as a person research a total engagement with the ILS and enjoys the satisfaction factors of the interaction with the ILS. Parveen, and Sulaiman, (2008) found in their paper that there may be a medium correlation suggesting a moderate courting between era complexity and perceived usefulness and perceived ease of use. Private innovativeness also confirmed a fantastic and moderate dating with perceived usefulness and perceived ease of use

The eleventh hypothesis is accepted as it shows positive and significant relationship between Trialability and Perceived ease of use ($B=0.081$, $P<0.003$). Etsebeth, (2013) found that the speculation that complexity of understanding has a direct terrible effect on trialability of cloud. Our outcomes strongly supported the speculation that complexity had a full-size terrible impact on Perceived ease of use. Further, the relative advantages and trialability had full-size high-quality influences on perceived ease of use. Those outcomes were consistent with previous research findings (Yang, 2007) computing services is not supported.

The twelve hypothesis is accepted as it shows positive and significant relationship between Trialability and Perceived usefulness ($B=0.123$, $P<0.065$). According to Etsebeth, (2013) the direction coefficient among perceived usefulness and trialability is notable at .042. The results display that trialability is a method to a stop. The IT decision makers' performance at the project does no longer have an extremely good effect on trialability. According to Lee, Hsieh, and Hsu,

(2011) they said that the outcomes suggested that trialability had a significant negative effect on Perceived usefulness. Mainly, the higher the trialability, the decrease the Perceived usefulness might be but, the test outcomes were incongruent with the previous findings.

Chapter # 5

Conclusion

5.1. Conclusion

The reason behind this research was to examine the impact of Technology acceptance model in those countries which fall into the category of underdeveloped countries instead of developed countries. when we researched about the Technology acceptance model we found out that research about Technology acceptance model (TAM) only exist in developed countries. Since we found out that there isn't any single research about (TAM) in underdeveloped countries we discovered that there is a gap and wanted to fill this gap in our country, because we are also part of underdeveloped countries so that was a great opportunity to researched on our own Pakistan country. We were very much confident about to know the actual technology acceptance in our own country so we have decided to do Quantitative approach for knowing the actual consequences of our citizen behavior towards technology. We have conducted this research by questioner forms which we have collected from 500 students and their point of view on technology acceptance. All students took participate on it and fill the form through their mobile phones and laptop. After the collection of data from Universities students then we run it or tested through PLS-SEM, REGRESSION, CORRELATION method which were used to find the factor and variable influence in our underprivileged country. The result shows very much interesting figure which definitely helps to the people who are really wants to bring some new technology in our country specially the citizen of Karachi. By the use of regression method, we know that attitude towards technology and behavior intension is directly affected to each other and the results of each variable are also given in this research paper. All of us know the power of technology is increasing day by day and number of countries invest their revenue in the technology field so that's why our wishes is also to someone come up with the new technology in our country and get some benefit from our researched paper. the Hypotheses are also available for every variable which show the significance

of our study. If we talked about the little bit description on results like H1 perceived ease of use (PEU) is significant relationship with the attitude towards technology (ATT) and perceived usefulness (PUS), its means technology is easy to use but only when the people attitude must be on the same direction means on technology acceptance. Obviously the attitude of people toward technology it definitely will be useful for the people who really wanted to get advantage from technology. Furthermore H2 (BIN) is straight connected with (UIE) which is supported by 0.092, H3 (FCN) is straight effected on (PEU) which is supported by 0.107 it clearly show that correlation ship between them is highly effective or strong relationship between them H4 (FCN) is straight connected with (PUS) which is supported by 0.145, H5 (PEN) is directly associative with (PEU) which is supported by 0.268, H6 (PEN) is directly connected with (PUS) which is supported by 0.224, H7 (PEU) is straight relationship with (ATT) which is supported by 0.031, H8 (PUS) is directly connected with (ATT) which is supported by 0.432, H9 (TCY) is directly connected with (PEU) which is supported by 0.272, H10 (TCY) is directly connected with (PUS) which is supported by 0.144 , H11 (TRY) is directly connected with (PEU) which is supported by 0.081, H12 (TRY) is directly connected with (PUS) which is supported by 0.123. These all of one's we have found by regression method which is clearly show that all of one shows the strong relationship between each other and this result helpful for all people who really want to do something in their life in term of technology. We hope all the underprivileged countries will become privileged countries by knowing the importance of technology, because Super power country is not recognized from their trading in all around the world but they recognized by their technology equipment which they are using in every single stores and war.

5.2 Managerial Implication

Consumers treat online recommendation agents as "Social actors" and perceive human characteristics (e.g. Integrity) in computerized agents. Furthermore, the study confirms that most of the respondents belonged to the category of 20-24 years and were about 50% and about 40% of them belonged to the category of 25-29 years. The particular models under investigation are the Technology Acceptance Model (TAM), the Theory of Planned Behavior (TPB), and a decomposed TPB model. According to the education category which lies between 42.4% has been noted and has been noticed by the survey which we did under the premises of the university.

The factor analysis table shows that each variable falls under their respective category which indicates that the results are appropriate, whereas the Correlation matrix shows how each of the items are associated with each other. Regression analysis is basically a quantitative research method which is used and the results are been tested when the study involves modeling, analyzing several variables and the relationship includes a dependent variable as well as one or more independent variables.

So, for Managerial implications it is to be recommended to all the managers that they need to focus on their customers' mind and to build up the attention of the customer towards their product and should market their products through advertisements, commercial ads. And through social media as well because according to a survey about 88% of our young generation (in between age of 20-30 years) use social media and social media have really gained a great market share in promotions. And if we talk about online business of any product, so our website which we have developed for our customers should have attractive features and user interface should be easy. Facilitating conditions meant a lot to the customers in the technology usage and the user may perceive that it is easy to use. The users of these applications have really perceived that the payment

option is simple, customer service center is available which notes the complaint, the delivery time is minimum, return policies are available. These are some of the recommendations for the future researchers which might help them to learn about technology advancement.

5.3 Future recommendations

Our future recommendation of the research exploring the drivers of technology acceptance is that as we have limitation to conduct research only on university students of Pakistan but other researcher have vast area for research and there is many gap in this research as they can conduct research on the colleges and schools. they also have area of conducting research on offices and take the employees perception and attitude toward technology (ATT) or behavior intention (BIN). This study has limited data as collective from small sample size other researchers have this area of gap in this research. It suggested that the researches should be done in every part of Pakistan for good understanding and results as we done research on variable like perceive usefulness, behavior inattention, perceive ease of use. End check the relation on facilitating condition, technology complexity and trial ability.

So as there are many variable is missing and It is recommended that research should also research on other variables like computer self-efficacy (CSE) and check the association between systems characteristics (external variables) and the chances of organism use (an indicator of system success). We were only used SPSS technique for analyzing our data, future recommendation researcher should go for latest data analyzing software.

CHAPTER # 6

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