

The Determinants of Consumer's Intention towards Adoption of Mobile –Commerce in Pakistan

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Abstract: The Mobile Commerce & Electronic-Commerce are emerging way to gaining profits and competitive advantage in any type of businesses. There is level of using and adoption rate is low in Pakistan as compared to other developed countries. In this study the researcher aims to investigate and analyze the determinants of consumer's intention towards adoption of mobile commerce also examine the factor which decrease the average revenue per user in the adoption of mobile commerce and identify the factors which slow the adoption of m-commerce. The intention of consumer's has been detected by analyzing and observing the phenomena or theories which are describing in (m-commerce). This research which supported with TAM model and diffusion of innovation theory and other variables such as perceived ubiquity, social influence and compatibility. In this study to check the effect of these variables with help of perceived usefulness on intention towards adoption of (m-commerce). The research was conducted through specific (questionnaire) with the sample of 300 people of students & employees of colleges, university, Banks and users of m-commerce who have smart phone and some experience about mobile commerce in Bahawalpur, south Punjab Pakistan. There is the problem of load shedding of electricity in Pakistan for internet user and other social media players. Therefore use of mobile devices over down that problem and can access easily anywhere, anytime to m-commerce. The compatibility has significant impact on PU towards intention to adoption of m-commerce. And also social influence good effect on PU towards adoption of m-commerce. The main contribution of the study is that suggest many valuable strategies for the adoption of m-commerce in Pakistan. The adoption rate going to increase by giving free trial to customers, of m-commerce.

Keywords: Adoption of M-commerce, technology acceptance model, perceived usefulness, perceived ubiquity, social influence and compatibility

Paper Type: Research Paper

INTRODUCTION

Background

There are two innovative and emerging industries in the world mobile communication and internet have led to the creation of a developing market for E-commerce and M-commerce (E-C and M-C). Before understanding of E-COMMERCE and M-COMMERCE first of all we understand what commerce is. Singh (2016) defined commerce as commerce is exchange of good or services usually on small and large scale from place to place. The sale and purchase of products through mobile online is enhancing day by day so the mobile trade market is comparatively improving.

Chong, Chan and Ooi (2012) clarified E-trade (E-C) has changed business since it first gain ordinariness in 1990s. The acquaintance of E-commerce with business changes to aggressiveness. Anyway with the development of remote correspondence advancements portable business (M-business) in now observed as the plan of action because of internet business. There are a greater number of purchasers who have a cell phone than the individuals who have a PCs. The development of PCs for internet business in the late 1990s and mid-2000s. The present capability of m-business far exceeds that of internet business, given the expanding number of individuals who possess cell phones (Chong, Chan and Ooi, 2012).

In the present aggressive condition, organizations challenge to offer better items and administrations to shoppers (Wei et al., 2009). Mobile trade has turned into a wonder accentuation by scholastics, specialists, and purchasers (Chong, 2013; Ngai and Gunasekaran, 2007) because of its noteworthy effect on society and the business (Hung et al., 2003).

In the last two decades Mobile advancements have infiltrated customer showcases all through the world. The worldwide framework for versatile (M) correspondences (GSM) mobile phone framework and the Internet are seen as two awesome worldwide correspondence systems. As per Internet World Stats (2007), current web clients are 1.24 billion while the cell phone supporters are 2.7 billion out of 210 nations and regions (Mobile World, 2007; Wikipedia). As per the advisors McKinsey and Company, by 2010, portable business will be the second-biggest industry on the planet.

. In Pakistan, there is a shockingly rising number in the selection and utilization of remote innovation for M-commerce as more buyers currently claim a cell phone in respect to having a PC at home. Scholars/Researchers have performed expansive investigations in various parts of m-commerce selection. This study depends on speculations and models created in past examinations and with respect to the attributes of portable society, it will pick one of them as the premise of research.

Research gap

Most of the researchers use different theories to determine the determinants of consumer's intention towards adoption of mobile commerce like the theory of reasoned action, theory of planned behavior, the unified acceptance theory & technology acceptance model, , the Diffusion of Innovation Theory, but not dynamically way. In this study we have applied all these theories in one conceptual model and these theories best explain the determinants of consumer's intention towards adoption of mobile commerce. The independent variables, perceived usefulness is measured by different sub variables in different previous studies but now we measure that variable as a mediating variable with three independent variables like perceived ubiquity, social influence & compatibility. The dependent variable intention towards adoption of M-commerce.

Many previous studies had done in different countries in the corresponding area but now we conducted this study in Pakistan in the area of south Punjab in the region of Bahawalpur and targeting the population including all students, employees, businessman's etc., of the city of Bahawalpur.

Objectives of the study

There is strategy of this study to explore the factors that influence the adoption of M-commerce services, businesses, mobile-commerce companies, per user revenue etc. among mobile users in Pakistan to understand and empirically investigate the impact of Intention on Perceived ubiquity, Social Influence and Compatibility in Pakistan. And also analyze the relationships between variables of this study.

Research questions

- Is there exist a relationship between perceive ubiquity and intention to adoption of m-commerce?
- Is there exist a relationship between social influence and intention to adoption of m-commerce?
- Is there exist a relationship between compatibility and intention to adoption of m-commerce?
- Is there exist a relationship between perceive ubiquity and perceived usefulness?
- Is there exist a relationship between social influence and perceived usefulness?
- Is there exist a relationship between compatibility and perceived usefulness.
- Is there will exist a relationship between perceive ubiquity and intention to adoption of m-commerce with the mediating effect of perceived usefulness?
- Is there will exist a relationship between social influence and intention to adoption of m-commerce with the mediating effect of perceived usefulness?
- Is there will exist a relationship between compatibility and intention to adoption of m-commerce with the mediating effect of perceived usefulness?

Problem statement

The mobile-commerce is reach at high stage after the uprising of e-commerce in nowadays. This examination will concentrate on the potential grounds behind the prominence of M-business over E-trade. As compared to other developed countries Pakistan faces many difficulties to adopting new technology and ideas. Mobile commerce is the emerging field in today technology. In currently environment the philosophy about parents that to give the phones or tablets to the 3 years old children it is very easy way to quite and comfort them.

Still, this issue is not conferred in this study. On the other hand, improving the mobile commerce can be a reason for the expanding challenge of the mobile phone. Preference to buy online in Pakistan is questionable. The main problem for this study is to find the reasons of why average revenue per user is decreasing while the number of users, overall revenue of the companies is increasing and also the population rate is uprising day by day

Significance of the study

The hugeness of this investigation is to recognize and dissect the variables which can impact the determinants of shoppers' aims towards selection of M-trade with regards to south Punjab Bahawalpur. This research is beneficial for the researchers, professors, scholars, marketers, engineers, mobile users, telecommunication companies /authorities in Pakistan, internet companies around the world.

As this examination centers around the productivity of the principle components of versatile trade (for example practicality, adaptability and dependability), it will give rules to the business in the field of banking to encourage them get upper hand by utilizing it as a technique. This investigation can help these intended interest groups to add to their current information in goals towards reception of M-trade. Besides, by applying a scholastically created model to the contextual analysis, I mean to expand the legitimacy of the model for end-clients of the portable business. Thus, the suggestions get from the significant scholastic discoveries, hypotheses and the aftereffects of this examination.

Limitation and scope of the study

Limitation

- The target population is the including students and employees of IUB departments and Banks we considered students as actual users while in reality situation may be different.
- Sampling techniques we using simple random sampling method could be a limitation of our study because the respondents we are choosing on random basis may not be reliable. So in future other sampling methods should be chosen which can represent the whole population.
- Due to time limitation we conducted this study in southern Punjab, Bahawalpur. Further studies can extend the area of analysis on the national level and can also extent the context of the research among various sectors of the study.
- The security issues, weak connections of networks and fear of change in the government rules & regulations (Wen & Mahatanankoon, 2004).

Scope of the study

M-trade is a piece of electronic business, which demonstrates remote web based shopping with the assistance of handheld gadgets (cell phones and tablets). Portable trade have wide scope everywhere throughout the world like that simple access to looking for each client of versatile business to buy or deal items from anyplace, whenever, wherever. Expanding the quantity of clients/supporters of advanced mobile phones, tablets, PCs and media transmission organizations everywhere throughout the world. . M-trade is the accessibility of novel advertising channels. Have you found out about I Beacons? These are unique gadgets put some place physical (for example, around some store in the shopping center, on a billboard, or on a rack with items) that can send messages to close by cell phones. A versatile application turns into an individual shopping partner. There are m-business instances of brands altering the market with portable advances. A trademark case is the Rebecca Mink off brand, which utilized an omni-channel procedure. "Omni-channel" in exchanging means joining disconnected and online encounters. The Mobile-trade decreased the time and showcasing costs there is no compelling reason to print an enormous pennant in your disconnected store – you can simply send a pop-up message to cell phones of clients. With every one of the upsides of m-trade applications, you are getting the long haul cash sparing prospects and expanded profitability.

LITRATURE REVIEW

Perceived ubiquity (PUQ) and Intention towards Adoption of M-commerce (ITAMC)

Junglas and Watson (2006, p. 19) characterized ubiquity as "the drive to approach data unconstrained by existence". They proposed ubiquity to comprise of the sub-ideas of openness, reachability, and compactness. In this unique circumstance, PQ is viewed as "Anyplace nature or consolidated adaptability of existence" of a portable innovation (Okazaki & Mendez, 2013, pp. 98). The effective meaning of perceived ubiquity would comprise of the interrelated components of efficient and spatial adaptability (Okazaki, Molina & Hirose, 2012). These researchers proposed a reality where business exercises are stimulated through remote innovation and would empower client to defeat hindrances of time, space and gadget while performing business exercises.

M-trade, in the uniqueness of internet business is considered by its ubiquity; it is the office about all over the place and every one of the occasions. Wong et.al, (2005) suggested that utilizing portable trade is firmly determined by the convenience of mobile administrations, for example, ubiquity, restriction, arrange security, timetable, uniqueness, operationalization and personalization. The proceeds with correspondence and exchange among firms and its investors without minding of spot and time, which change the conventional business to m-trade is just because of the utilization of ubiquitous network (Watson et al., 2002). As PU describe as “how much users have efforts that using the specific framework to improve their performance (Davis, 1989), so the ubiquity nature of innovation increment will increase the perceived usefulness of intention towards adoption of m-commerce. In this way the hypothesis is proposed;

H1: Perceived Ubiquity (PU) and intention of m-commerce (ITAMC) have positive relationship by mediation of perceived usefulness.

Social influence (SI) and Intention towards Adoption of M-commerce (ITAMC)

Social impact (SI) is "how much an individual client saw the significance that others accept the person in question should utilize a development" (Chong et al, 2010) and portable internet providers (Lu et al, 2005). The impact of other's perspectives about your qualities, sentiments, feelings, conclusions or practices is called social impact. As indicated by Wei aet al, (2009) relatives, companions, relatives and broad communications correspondence (TV, radio, magazine, paper, web) likewise impact the customer choice to receive a framework. Any item or administrations which is generally worthy in the public arena can be helpful for everybody and force them to build up the expectation towards appropriation of M-commerce. As per Sharif et al, (2014) there is certain connection between and perceived usefulness in appropriation of versatile- trade (MC) dependent on above examinations, this exploration hypotheses are proposed;

H2 (1): social influence will have positive impact on intention M-trade (ITAMC).

H2 (2): social influence will have positive impact on M-trade “ITAMC” by mediating effect of perceived usefulness.

Compatibility(C) and Intention towards Acceptance of M-trade (ITAMC)

Compatibility is characterize as how much another innovation or a framework is perceived as being dependable through the present abilities, past happenstances and likely adopters' wants (Rogers, 1995). Tylor and Todd, ((1995) contended that similarity of any innovation or framework with clients' needs and their past encounters have changed the buyers mentalities towards use of framework all the more emphatically. Rogers, (1995) likewise expressed that any thought which isn't perfect with the qualities and standards of a general public won't be acknowledged as quickly as an advancement which is good. Chong et al, (2012) proposed that standards of social frameworks are decidedly connected with perceived convenience, so the similarity of new innovation in all habits, for example, with clients' past involvement and with the qualities and standards of a social framework will build the buyer view of value. Along these lines the accompanying hypothesis is proposed;

H3: compatibility (CMP) will influence the adaptation of m-commerce positively by mediating impact of PU.

Perceived Usefulness (PU) and Intention towards Adoption of M-commerce (ITAMC).

The connection between PU and ITAMC is certain Davis et al., (1989) and venkatesh et al, (2000). PU is considered as "the point to which one consents that using a framework will improve their activity execution" (Davis 1989). In its adjustment to m-business buyer conduct, the scientists characterized apparent convenience as the degree to which a customer accepts that m-trade would improve their adequacy, efficiency in acquiring items. Perceived usefulness has been recognized to influence shopper aim towards reception of m-business (Davis, 1989; Taylor and

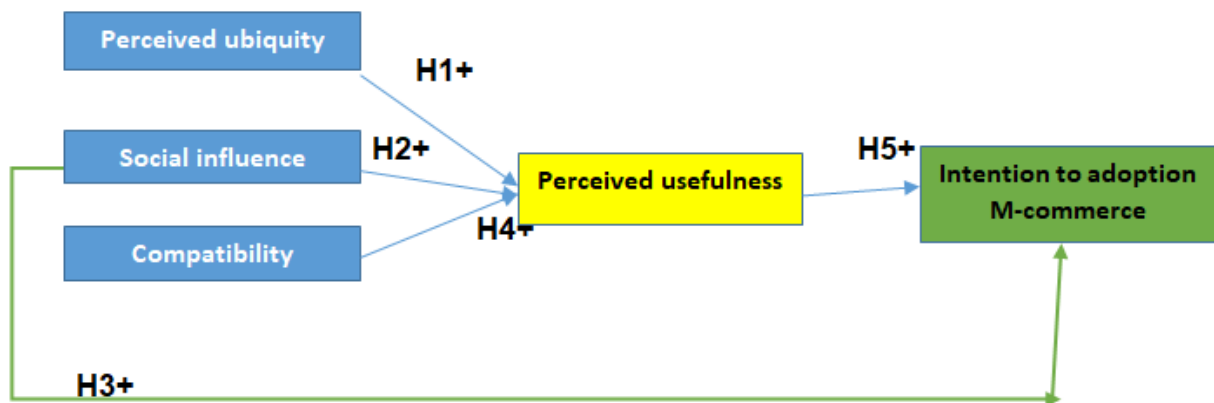
Todd, 1995).

Tan and Teo, (2000) contend that apparent handiness (PU) is a significant variable in foreseeing the reception of development. Bhattacharjee, (2002) expressed that a character's status to do with a specific framework is as of now considered as apparent handiness (PU). In selection of innovation shopper aim is anticipated by apparent handiness and convenience of the innovation (Adam et al., 1992). Gong and Xu, (2004) depicted the apparent helpfulness (PU) as client emotional plausibility that utilizing a particular application framework will build his desires. Goal towards selection of m-business is impacted by apparent handiness (Malhotra, Y.1999). Chan, (2004) called attention to that the procedure in which client includes the individual in question receives instigated conduct may be unique.

Past investigations have given exact evidence of the precarious impression of apparent value (PU) on probability to embrace m-business (Venkatesh & Pikkariainen et al, 2004). The connection between perceived usefulness and buyer aim towards appropriation of m-business is emphatically founded on customer's discernment about the framework. In this way, the proposed hypothesis is:

H5: Perceived usefulness (PU) will have positive influence on intention toward adoption of m-trade (ITAMC).

Proposed Conceptual framework



METHODOLOGY

Introduction:

It is the most fundamental components in any type of research. Research methodology is alluded to the different advances consolidated by an analyst in examining an issue or a problem with specific indicator in context. As indicated by Blaxter (2002) "All exploration includes the accumulation and examination of information, regardless of whether through perusing, perception, estimation, posing inquiries or blend of these or different techniques". This part amalgamates the data on the exploration techniques executed alongside the significance of those strategies being applied to essentially lead this examination. Furthermore this segment likewise gives the exploration procedures that would be applied for the examination and how these methods will be explicitly used for supporting or distorting the speculation. This examination is a blend of quantitative and qualitative techniques with the previous ones being prevalent in the investigation, and the two strategies are utilized with the end goal of information accumulation. The flow of surveys alongside study conduction and online through connections caused to separate results dependent on the measurable certainties. The approach picked helped in social event information and pertinent substance to accomplish the goals indicated in the examination.

Researcher should know the validity, reliability, suitability, efficiency and accuracy of research methods being applied in the study. (Research methodology) is well planned and includes the scientific way for elaborating being a value-neutral (Rajasekar & Philominathan, 2013). Methodology helps to check the (reliability & validity) of research results so both need to be focused.

Research Objective and Rationale:

This research investigates the determinants of consumer's intention towards adoption of (MC) and finding gap by three four main components of I.V perceived ubiquity, social influence and compatibility. This study is important for IUB organization (specified groups) in south Punjab, Bahawalpur, Pakistan.

Research approach;

Two basic approaches used for the research are Qualitative and Quantitative.

Qualitative approach:

A scientific method used for observations to gather non-numerical data. A type of data that refers to the idea, feelings meanings, concept definitions, qualities, images and portrayal of things. Subjective examines methods are applied crosswise over several scholarly trains, focused especially on features of regular and social science (Crossman, 2019). Subjective strategy (QUR) are best for portraying and translating into explicit ideas. You may expect to deliver relevant genuine learning about the practices and shared convictions of individuals

Quantitative Research:

The quantitative methodology will gathered data from a larger number of people using review technique (Stefko, 2014). Quantitative research incurred on facts & figures, social networks, mathematical info and adding it up crossway over congregations of people or to clarify a specific phenomenon. It is a numerical examination of data assembled through poll and review utilizing computational methods. These techniques are best for positioning distinctive examples, creating speculations and approximating.

In a quantitative trial study, you may expect to deliver generalizable learning about the reason for a wonder. Legitimate research requires a painstakingly planned examination with controlled factors that can be duplicated by different specialists.

There are two important benefits of quantitative study:

- The results are measurably reliable.
- The results can be predicted to the public.

Under this worldview, this examination manages the ideas that has recently been concentrated by different scientists. The separating variable of this examination in any case, is that the three builds under scrutiny have been connected to one another and it is a conventional report because of the way that it involves a high level of conceptualization which consequently makes this a study research study.

Research Strategy:

Researcher has to formulate the strategy for the study on hand. Research questions which already had been designed needs to be answered. It should be clearly objective on the bases of data collected for research. This study is basically a cause and effect study, as we are going to examine the possible cause and their effects with reference to our model.

Procedures:

The researchers approached the sample general population after getting approval from the general public (specific groups) in Bahawalpur. Participants were asked to fill a consent form and only those people are selected who showed willingness to participate in the research voluntarily. Intention and purpose of the study was made clear to every respondent. It was assured to them that all information share by them, would remain secret, and would be used only for the research purpose. After that the data are collected and analyzed using both descriptive and inferential statistics.

Measurement of Variables:

Likert scale of (1=strongly disagree..... 5=strongly agree) is used to measure the questions of Intention to mobile commerce, perceived usefulness and three Iviess.

Demographic Information:

Respondents were asked to answer demographically; Gender, age, qualification, and job title or occupations.

Research Scope:

This research has been carried out by students and employees of, (university, bank) to study the relation between independent variables & TAM and intention to adoption of mobile commerce. The scope of this research is that researcher get the knowledge about how many people are adopting m-commerce and developing intention to the adoption of that system. And the other hand scope is that at one place overall statistics about adoption rate & average revenue per user is calculated by researcher in this study for informative of any population in the Pakistan.

Research Instrument:

. The data were collected from general public of Bahawalpur (IUB, BANK) by using seven standardized study instruments. Following are the details of instruments.

- 1) "Intention towards adoption of mobile commerce"
- 2) "Perceived usefulness"
- 3) "Social Influence"
- 4) "Perceived ubiquity"
- 5) "Compatibility"

Data Collection:

It is the process of assembling, adding, and summing & measuring information on targeted variables in a methodical situations. Data Collection is an important part of research. Required data and information is gathered by using different techniques here. In data collection process the one thing which is important to follow is ethical consideration as should be access with ethical boundaries. The study is quantitative i.e. causal in nature therefore, a questionnaire survey involving of written questions, for the collection of primary data was conducted from the students and employees of all departments in Bahawalpur, Pakistan to obtain their view regarding the determinants of consumer's intention towards adoption of mobile commerce. The present study have based on survey method. Data was collected via survey questionnaire. It is send by the researcher to people using e-mail & social networks in soft form. The used of Internet enabled response to be collected throughout Pakistan. Questionnaire were used as the main instrument for the collection of data for this research. Further, this process can be distributed in two major

Categories. Primary and Secondary resources.

Basically there are two sources of data collection. One is Primary and other is secondary data source. The source through which data is gathered on first hand is called primary source. While on the other hand, secondary data is the one, which have already been collected for some other purpose.

Primary Data:

Primary data refers to data originally observed or data collected by a researcher means of survey, interview or questionnaire.

A set of questionnaire are developed to carry out this study. The questionnaires are divided into two sections.

Section A: Demographic data

Section B

Part A: Questions on independent variable measure the (perceived ubiquity, social influence and compatibility).

Part B: Questions on mediating variables measure the perceived usefulness, Part C: Questions on dependent variable which measure the intention towards adoption of M commerce.

Secondary Data:

The data are also known as second hand data. This type of data are which already occur and might have been used. They are usually collected through books, theses, magazines and textbooks internet, social media, articles and case study etc.

Pilot survey

It is define as the pre-test research to tell us that there is significant understanding between you and your respondents about questionnaires. In that study the intellectualizing and re-conceptualizing the purpose of the research to make sure that this survey will go on effectively and have good impacts are not missing (Oppenheim, 1992). The wording, grammars, spellings, conception and accuracy was checked by researcher's supervisor who have good English language skills and field of interest in m-

commerce & e-commerce. After the correction of grammatical, spelling errors the questionnaires was divided to 21 people in IUB, Bahawalpur Pakistan. The statistical product and service solution (SPSS) software was use for the analysis from the pilot study of data collection. Using that software to analyzing the reliability and validity were measured. The reliability and validity were tested by the calculated Cronbach's alpha and exploratory research components factors analysis. That test were applied on the all measurement for discriminant & convergent validity. After a little bit efforts the researcher start the briefly work on that study and distribute the whole sample to the target population.

Population and Sampling

Population:

Bull (2005) defined population as "The total collection of all members, cases or elements about which the researcher wishes to draw conclusion". The target general population of city

Bahawalpur include students and employee's (university (IUB) include department of Management sciences, commerce department, mobile palazas and banks of Bahawalpur) and users of mobile commerce south Punjab in Pakistan. The estimated population of these departments of Islamia University of Bahawalpur, banks is approximately 1500 in the city of Bahawalpur, south Punjab, Pakistan.

Sample and Sample Size:

The target population for the purpose of gathering data is choose from the sampling frame of general people like students & employees of (university (IUB) Departments, mobile phone plazas and banks within city of Bahawalpur. The populace that was principally under thought were the individuals from "college, universities and banks" of Bahawalpur which shaped a basic piece of the inspecting outline. The sample size fill around 281 question respondents to achieve precise outcomes and to keep up objectivity in the information. The probability testing technique was embraced for this examination under its authentic structure which is random sampling that was explicitly applied on the exploration. Irregular inspecting (RS) advances out as the best decision for leading the exploration as the people of clients is high in sum thus, for staying away from preference and keeping up nonpartisanship this investigation would apply random testing to keep an equivalent open door for everybody to get picked. This technique was also used to collect data through self-administered as well as online questionnaire mediums such as Google forms. Besides, a few inspecting methods have minimized to ending up either old or obsolete. Moderately, the random examining strategy can be described as the most mainstream technique due to these reasons.

A subset of population is termed as sample. According to Moore (2009) Sample is defined as a part of population from which we collect data and draw conclusion about the whole population. The sample size of survey is almost 306 people from "employees & students of university (IUB) departments, m-plazas and banks" of city Bahawalpur but we deliver 320 to the population for accurate results in our study. The researcher received the 310 questioners from public. The 29 questionnaires from that sample size were not filled by public in which 15 no responses, 8 half-filled and 6 damages at the time of data entering. For a good sample size, a 95% confidence interval is used that mean there is a chance of 5% that the result of study can differ from the actual result. The sample size was calculated by the sample size table of (Krejcie & Morgan, 1970).

Sampling Technique:

Sampling have two type's probability & non-probability. The sampling techniques the researcher used was convenience sampling, a type of non-probability sampling. Convenience sampling is basically used for collecting a large number of completed surveys. The researcher herself administrated the questionnaire by visiting different areas of general public population in Bahawalpur. The researcher have inform about the research topic completely and request to fill the questionnaire.

"Mobile Commerce" as designated as the dependent variable in this study, "while Perceive usefulness" was considered as the mediating variables. The Questionnaire is originally composed of seven scales, to measure the Perceived ubiquity, Social Influence and Compatibility of Perceive usefulness. The Consumer's Intention towards adoption of mobile commerce scales has 6 items, the perceived usefulness scales has 6 items, the perceived ubiquity scales has 6 items, the social influence scales has 6 items, the compatibility scales has 6 items. Questionnaire are designed through five point Likert scale for with the well validated and reliable items.

DATA ANALYSIS

There is whole information about the demographic variables and every variable include its dimensions. The finding about all variables like "perceived ubiquity, social influence, compatibility, perceived usefulness and intention towards adoption of

mobile commerce”. There is using the (SPSS) (Statistical Package for Social Science), statistical software for the purpose of analysis to evaluate the Cronbach’s alpha, it is a measurable procedure that permits the scientist to evaluate the connection among needy and autonomous variable. It can give data about the model all in all, and the general commitment of each of the free factors that make up the model), and also provide the overall knowledge about model (Correlations) (Bivariate correlation dealings the association between two nonstop factors without building up directional causality), relapse investigation (it depicts the connection between at least one indicator variable and the reaction variable) and portray measurement (it depicts a lot of information with proportion of focal inclination and proportion of scattering).

Reliability analysis

The validity & reliability tell about the items in a degree are confirmed by test-retest reliability and a Cronbach’s alpha. The Cronbach’s alpha checked internal reliability of that measures. The determinants of consumer’s intention towards adoption of m-commerce have value of Cronbach’s alpha is (0.945) of 43 items that is significant value of that (0.5), (0.6) by (Nunnally, 1970 & Moss et al., 1998). The 43 items are reliable and valid by that value to measure “the determinants of costumer’s intention towards adoption of mobile commerce” and researcher can apply the statistical test and find out the accurate results.

Statisti		cs index	
Cronbach's Alpha		No. items	
.945		43	
Reliability instruments		of	measurement
scales		Cronbach's Alpha	No. of Items
Perceived usefulness		.739	6
Perceived ubiquity		.812	6
Social influence		.745	7
compatibility		.759	6
Intention to adoption m-commerce		.813	6

The table shows that about the results of Cronbach’s alpha of every variables in this research instruments. The value of Cronbach’s alpha for each variable is fairly more than the not reject able and suggested. It describe that individually every variable is reliable and able for further results interpretation.

Response rate

Questionnaire Delivered	Questionnaire Received	Questionnaire received completed fully	Response Rate
320	310	281	87.81%

Demographic details

Respondent of Gender

The figure below represent that the information of demographic respondents. The male (22.48%), female (18.36%) and others (93.66%) with the frequency of 43 items out 281 respondents. The female rate is low due to the fact that questionnaire fill in university of Bahawalpur some specific areas like students and employees of colleges & university, banks and also convenient user of m-commerce. And mostly people are male which have the good tendency to adopting the new technology in the city of Bahawalpur Pakistan.

gender				
	Frequencies	Percentage	Valid Percentage	Cumulative Percentage
Valid male	125	44.5	44.5	44.5
female	153	54.4	54.4	98.9
others	3	1.1	1.1	100.0
Total	281	100.0	100.0	

And below these results about male, female and others (gender) are generated in the graphical presentations (Histogram Chart) with the estimation of these continuous variables.

Respondent of Age

We can see in the table of age demographic variable it can be found that most of the respondent are from the age of 18-25years which is 86.8% of the total population. A respondent from the age of above 30 year are lowest one which 1.4%. The number of respondent those chose above 30 year are just 4. There are Only 21 respondent those are from the age 24-30 years which is 7.5%. Respondent from the age of 30-35 which is 4.3%.

Age of respondent

		Frequencies;	Percentage.	Valid Percentage.	Cumulative Percentage.
Valid	18-25years	244	86.8	86.8	86.8
	25-30years	21	7.5	7.5	94.3
	30-35years	12	4.3	4.3	98.6
	Above35years	4	1.4	1.4	100.0
	Total	281	100.0	100.0	

Respondent of occupation

Most of the respondent are student approximately 82.8 %, only 3 respondent select the option of others. Number of employee who participate in that study are 30 and the number of business are

16 which is 5.7%.

Occupation					
		Frequencies	Percentage	Valid Percentage	Cumulative Percentage
Valid	student	232	82.6	82.6	82.6
	Employee	30	10.7	10.7	93.2
	Businessman	16	5.7	5.7	98.9
	others	3	1.1	1.1	100.0
	Total	281	100.0	100.0	

Respondent of Education Level

Most of the respondent are bachelors approximately 48.4%, only 3 respondent select the option of PhD which is 2.8%. Number of master who participate in that study are 101(35.9%) and the number of MS (MPhil) respondent are 36 which is 12.8%.

		Education level			
		Frequencies	Percentage	Valid Percentage	Cumulative Percentage
Valid	Bachelors	136	48.4	48.4	48.4
	Masters	101	35.9	35.9	84.3
	M.S(MPhil)	36	12.8	12.8	97.2
	PhD	8	2.8	2.8	100.0
	Total	281	100.0	100.0	

“Correlation Analysis”

The connection among two variables is dignified by correlation analysis. It suggest one variable is change due to the change of another variable. This arithmetical instrument will measure the affiliation between variables and also clear about negative or positive relationship. This connection of variables is checked by the Pearson correlation and to find out the perfect covariance of variables with each other in the research. The value of correlation coefficient range from +1 to -1 labels the forte of relationship & symbol with the value defines the way of link either positive or negative correspondingly. Tabachnick and Fidel (2001) argue that (Bivariate correlation actions the overtone between 2 constant variables lacking starting reversing causation)

Correlations

variables	avgPU	avgSI	avgCMP	avgITA MC	avgPU Q
Pearson	1	.584**	.717**	.545**	.551**
Correlation					
avgPU		.000	.000	.000	.000
Sig. (2-tailed)	281	281	281	281	280
N					

Pearson

Correlation

avgSI	.584**	1	.610**	.580**	.576**
Sig. (2-tailed)	.000		.000	.000	.000
N	281	281	281	281	280

Pearson

Correlation

avgCMP	.717**	.610**	1	.652**	.649**
Sig. (2-tailed)	.000	.000		.000	.000

	N	281	281	281	281	280
	Pearson	.545**	.580**	.652**	1	.998**
	Correlation					
avgITA MC	Sig. (2-tailed)	.000	.000	.000		.000
	N	281	281	281	281	280
	Pearson	.551**	.576**	.649**	.998**	1
	Correlation					
avgPUQ	Sig. (2-tailed)	.000	.000	.000	.000	
	N	280	280	280	280	280

Where:

Perceived-usefulness=PU

Social-influence=SI

Compatibility=CMF

Perceived-ubiquity=PUQ

Intention to adoption of mobile commerce=ITAMC

Collecting the results of coefficient correlation are describe in the above table that mostly the values significant p-value of 0.000 or less than 0.005. Perceived usefulness and perceived ease of use have significant relationship with the p-value of 0.000 which is less than 0.05 and this relationship moderately positive with a value 0.535 which is less than +1, Perceived usefulness and social influence have significant relationship with the p-value of 0.00 which is less than 0.05 and this relationship moderately & positive with a value 0.584 which is less than +1, Perceived usefulness and compatibility have significant relationship with the p-value of 0.000 which is less than 0.05 and this relationship strong moderately and positive with a value 0.717 which is less than +1, Perceived usefulness and self-efficacy have significant relationship with the p-value of 0.000 which is less than 0.05 and this relationship moderately and positive with a value 0.561 which is less than +1, Perceived usefulness and intention to adopt of (m-c) have significant relationship with the p-value of 0.000 which is less than 0.05 and this relationship moderately positive with a value 0.545 which is less than +1 & Perceived usefulness and perceived ubiquity have significant relationship with the p-value of 0.000 which is less than 0.05 and this relationship moderately positive with a value 0.551 which is less than +1. Social influence and compatibility have significant relationship with the value of 0.00 which is less than 0.05 and this relationship moderately positive with a value 0.610 which is less than +1, Social influence and intention to adoption of m-commerce have significant relationship with the value of 0.00 which is less than 0.05 and this relationship moderately positive with a value 0.580 which is less than +1 & social influence and perceived ubiquity have significant relationship with the value of 0.00 which is less than 0.05 and this relationship moderately positive with a value 0.576 which is less than +1, Compatibility and intention to adoption of mobile commerce have significant relationship with the value of 0.00 which is less than 0.05 and this relationship moderately positive with a value 0.652 which is less than +1 & compatibility and perceived ubiquity have significant relationship with the value of 0.00 which is less than 0.05 and this relationship moderately positive with a value 0.649 which is less than +1. Intention to adoption of mobile commerce and perceived ubiquity have significant relationship with the value of 0.00 which is less than 0.05 and this relationship strongly moderately and positive with a value 0.998 which is less than +1.

Regression Analysis

Control Model:

Control model is the first model about demographic variables (gender, occupation, age, and education level) in regression analysis. Table show the different multiple regression analysis for demographic variables. The logic that 11.2% change in intention to adoption of mobile-commerce by these demographic variables.

Model Summary

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1					
1	.335 ^a	.112	.100		.71373

a. Predictors: (Constant), Education level, gender,

Occupation, age of respondent

Hypothesis testing using multiple regression:

2nd model describe about the multiple regression analysis. Seven variables are use as predictor in this study perceived ubiquity, social influence, compatibility, self-efficacy, perceived usefulness, perceived ease of use and intention towards adoption of mobile commerce”. The results of these analysis are given in the table multiple regression run for the all independent variables that 99.6% variance in intention towards adoption of mobile commerce is caused by all above all variables.

Model Summary

Model	R	R Square	Adjusted Square	R Std. Error of the Estimate
1				
1	.998 ^a	.996	.996	.04988

a. Predictors: (Constant), avgPUQ, avgSI, avgCMP

Hypothesis testing and discussion:

1st hypothesis: Perceived Ubiquity (PU) and intention of m-commerce (ITAMC) have positive relationship by mediation of perceived usefulness.

As beta for perceived ubiquity is .839 and the p-value is .000 which is significance and the hypothesis is accepted so there is significant impact of perceived ubiquity on intention towards adoption of m-commerce by mediating effect of perceived usefulness.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Results
	B	Std. Error	Beta			
(Constant)	2.124	.075		28.179	.000	significa nt
1					.000	
MxPUQ → ITAMC	.125	.005	.839	25.758		

a. Dependent Variable: avgITAMC

2nd hypothesis: social influence will have positive impact on M-trade “ITAMC” by mediating effect of perceived usefulness.

As beta for social influence is .639 and the p-value is .000 which is significance and the hypothesis is accepted so there is significant impact of social influence on intention towards adoption of m commerce by mediating effect of perceived usefulness.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Results
	B	Std. Error	Beta			
(Constant)	2.554	.107		23.897	.000	

MxSI → ITAMC	.088	.006	.639	13.871	.000	Significant
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a. Dependent Variable: avgITAMC

3rd hypothesis: compatibility (CMP) will influence the adaptation of m-commerce positively by mediating impact of PU.

As beta for compatibility is .665 and the p-value is .000 which is significance and the hypothesis is accepted so there is significant impact of compatibility on intention towards adoption of m-commerce by mediating effect of perceived usefulness.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Results
	B	Std. Error	Beta			
(Constant)	2.588	.098		26.446	.000	
					.000	

MxCMP → ITAMC	.099	.007	.665	14.878		Significant
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a. Dependent Variable: avgITAMC

4th hypothesis: social influence will have positive impact on intention M-trade (ITAMC).

As beta for social influence is .580 and the p-value is .000 which is significance and the hypothesis is accepted so there is significant impact of social influence on intention towards adoption of mcommerce.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Results
	B	Std. Error	Beta			
(Constant)	1.546	.206		7.517	.000	Significant
1					.000	
avgSI → ITAMC	.559	.047	.580	11.903		

a. Dependent Variable: avgITAMC

5th hypothesis;

Perceived usefulness (PU) will have positive influence on intention toward selection of m-trade (ITAMC).

As beta for social influence is .545 and the p-value is .000 which is significance and the hypothesis is accepted so there is significant impact of perceived usefulness on intention towards adoption of m-commerce.

Coefficients^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Results
	B	Std. Error	Beta			
(Constant)	2.003	.184		10.90	.000	
1				3	.000	
avgPU → ITAMC	.538	.050	.545	10.86		Significant
				1		

a. Dependent Variable: avgITAMC

CONCLUSION:

The researcher applied the proposed conceptual framework and hypotheses which identifying the determinants that effect the intention towards adoption of m-commerce in this study in Pakistan based on literatures, TAM model. Model define the perceived usefulness & perceived ease of use. The empirical results and performed analysis which support this proposed model & TAM model have the better predictor of the consumer intention towards adoption of mobile-commerce in the Pakistani market.

The hypotheses were examining the relationship between determinants of consumer's intention with TAM towards adoption of mobile-commerce: perceived ubiquity, social influence, compatibility, perceived usefulness and intention towards adoption of m-commerce. The hypothesis was that perceived ubiquity has strongest effect on intention towards adoption of mobile commerce under the mediating role of perceived usefulness. People intention towards adoption of m-commerce increase due to perceived ubiquity of technology which this relation control by perceived usefulness, it enhance the performance of adoption of m-commerce. And this premise accepted under the results of correlation & regression analysis and have significantly positive relationship between these instruments. The theory was that social influence has positive effect on intention towards adoption of mobile commerce under the mediating role of perceived usefulness. The intention towards adoption of m-commerce rise of individuals due to socially influencing by friends, family, environment, internal and external forces etc. with the mediation influence of perceived usefulness and also control that relation. Hypothesis accepted under the results of regression and correlation tests. The compatibility has confident influence on intention towards adoption of mobile commerce under the mediating part of perceived usefulness. The adoption of m-commerce will increase due to the high compatibility of system between technology and customers in the target population. Hypothesis accepted on the finding of correlation and regression analysis. The social influence have positive impact on intention towards adoption of m-commerce. Social influence have direct impact on adoption of mobile-business.

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