



## Examining the Mediating Impact of Attitude Towards Mobile App Use on the Relationship between TAM Factors and Consumers' Purchase Intentions

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### ARTICLE INFO

#### Article History:

Received: April 28, 2023

Revised: June 10, 2023

Accepted: June 11, 2023

Available Online: June 11, 2023

#### Keywords:

Covid 19

Technological knowledge

Theory of Planned Behaviour

Consumer Shopping Theory

Perceived Usefulness

Perceived Ease of Use

TAM Model

#### Funding:

This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

### ABSTRACT

This study aims to check the relationship between TAM factors and purchase intention, having the mediating role of technological information. Research is being conducted to determine how Covid 19 affects consumer purchase intentions. Investigation shows that around the world, there has been an agenda to inspect TAM factors and how they impacted purchasing behaviours because of Covid. Individuals move towards web-based shopping as they effectively embrace early adopter conduct and move towards innovation. They need to look at whether they will be severe towards the creation of internet shopping in post-pandemic time. Data was collected through structured questionnaires and analysed through Smart PIs. Consumer shopping behaviour, the theory of planned behaviour, supports our research questions. There is a positive mediation relationship between TAM factors and CPI during Covid 19, but before COVID-19, mediation fails. The prime focus of this study is to investigate behavioural change of customers due to the pandemic, which is helpful for strategy makers to formulate new strategies according to new norms of society.

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## 1. Introduction

The worldwide monetary downturn, which is the most later and incredibly extreme, known as the "Covid downturn" and frequently alluded to as the "extraordinary lockdown", which antagonistically influenced the worldwide economy in February 2020, has prompted securities exchange crash worldwide and eventually came about in the most unexpected financial plunge that has been seen since the period of "extraordinary wretchedness". This pandemic circumstance has influenced both created just as creating economies perseveringly and logicians have proclaimed the effect of this "profound downturn" to be far more awful when contrasted with financial decay brought about by the "extraordinary downturn" in 2009 (International Monetary Fund, 2020). In 2019 worldwide monetary stoppage, which saw securities exchanges stagnation just as restricted buyer exercises around the world, joined with the current pandemic emergencies, where more than 33% of the globe's populace had been put on lockdown, has brought about extraordinary financial ramifications for economies the whole way around the world.

Drawing on the writing zeroing in on shopper conduct especially client investment, this examination recommends that client elements (for example, looking, contrasting, assessing) may affect client experience. In doing that capacity, it offers comprehension to the retailers and bosses into the value made by the usage of clever headways in the retail environment and the ideas for the customer shopping experience. Two fundamental investigation questions were made to help bosses understand customer components and contribution with a retail environment influenced by quick progressions. The chief inquiry posed was: Does obligation to learn and behavioral points, for instance, social effect, seen regard, etc. influence customer backing and

components? Second, does a client element affect client involvement with a retail climate impacted by the utilization of keen innovations? If there is a considerable impact, retail administrators need to comprehend the significant job that client elements have on client experience (Auray, Eyquem, & Gomme, 2019).

Understanding how shoppers rethink needs, reclassify esteem, switch marks, and reallocate assets during downturn periods is basic to creating gainful information (Deleersnyder, Dekimpe, Sarvary, & Parker, 2004). The Consumption decisions during recuperation in the midst of the recession phase are still under investigation, paying little mind to the pertinence and expanding enthusiasm of specialists to comprehend this wonder (Koos, Vihalemm, & Keller, 2017). The forecast of utilization designs during the post-downturn period has likewise been neglected in earlier investigations despite its importance in technique definition over the long haul (Auray et al., 2019).

People may recognize the advancement while remaining work from home and improvement from inside the outside house is at a low level, so people may accept those strategies and working styles or progressions that may exhibit basic and steady as buyers change in the home catch for a drawn out for explicit time. They will likely get more cutting-edge propels that energize work, study and use more profitably. Finally, the public approach will similarly compel new use affinities, especially in open spots like

The reason for this examination is to investigate the kinds of responses like having built a technology knowledge individuals have been appearing during the pandemic from COVID-19, which could help strategy creators everywhere in the world to make sense of and adjust to the circumstance as indicated by their own needs and concerns as opposed to applying a solitary arrangement all around (Sheth, 2020).

Individuals may confront the most exceedingly terrible time because of the pandemic, major starvation they may understand, so individuals' mentality towards sparing may get consideration so thus study will examine the sparing conduct of customers during the pandemic time and in the middle of pandemic so to manufactured contentions for my examination work (Cherian, Bhuvan, Meagher, & Heng, 2020). we have to check that how TAM factors i.e PEOU and PU, how they are affecting the attitude toward mobile app use as mediating role by having to show the dependency on consumer purchase intention. After considering these social responses, the examination concocts procedures to help settle these worries which will in the long run assist everybody in tolerating the circumstance and tackle it shrewdly (Boutsouki, 2019).

Due to Covid 19 and its developing and durable impacts on the buyer brain research and conduct, an extraordinary set back had been done (Boutsouki, 2019). We have to check consumers' purchase intention before the Covid 19 and in comparison to during Covid 19.

## **2. Literature Review**

The first section presents the discussion on each important element highlighted in the research problem. The purpose is to familiarize the multiple definition, backgrounds, role and concepts of these elements, including TAM factors, Consumer purchase intention, and attitude towards mobile app use. In the next section, the relationship between these concepts has been discussed separately, followed by appropriate literature support. In this section, the specific role of these variables is also highlighted. In the next section, the research framework has been developed with the help of strong theoretical support of literature. The description of variables has also been presented in this section. In the final section, the research hypotheses have been drawn from the research model to answer the central research problem. This chapter provides the basis for the next chapter.

### **2.1. TAM factors (PEOU and PE) Affects the Consumer Purchase Intention**

Business execution has antagonistic impacts through the downturn, anyway, there are a few contrasts concerning emergency impacts among various firms (Deleersnyder et al., 2004; Srinivasan, Lilien, & Sridhar, 2011). Now and again, organizations can confront serious difficulties relating to income because of more troublesome monetary terms implemented by providers and banks (Ahmed, Kristal, & Pagell, 2014). They can likewise experience the ill effects of cutting back (Koos, 2017). The market scene is changed due to financial recovery and distinctive business techniques are requested without further ado. So as to address difficulties and openings

identifying with differing desires and developing requests of customers in times of downturn just as post-downturn, organizations may advance a plan for new market conditions that all the while thinks about re-examination of promoting techniques, arranging market detecting, increasing upper hand based on esteem creation, revolutionary development concerning item system, re-establishing esteem chain connections and reconsidering advertising correspondences (Calvo-Porrá, Stanton, & Lévy-Mangin, 2016; Rollins, Nickell, & Ennis, 2014).

## **2.2. Bounded Rationality Influencing Consumer Purchase Intention**

De Mooij (2019) asserted that purchaser conduct isn't basic rather it is the convoluted capacity of a few referred to just as obscure components that may principally fuse monetary factors yet in addition incorporate social, sociological and mental factors. A large portion of the occasions, buyers reflect "satisfying" conduct as opposed to "augmenting" which implies that buyers are eager to make do with an adequate "worthy" choice among a wealth of potential buy choices (Voropanova, 2015). All the more significantly, it is uncommon for customers to be mindful of all possible buy alternatives. Consequently, a more prominent chance is of best buy choice from every known other option (rather than choosing the ideal choice among every expected other option). In like manner, the judiciousness of the chief is limited by this decision set. Alterations in utilization designs under convoluted and evolving settings (for example, monetary downturns brought about by pandemics), utilizing a multidimensional and integrative methodology that partners mental viewpoints of shoppers with presumptions relating to utility boost just as balanced choices get fundamental (Sheth, 2020).

Observational proof basic this supposition infers that people will gather the uses, particularly where each class alludes to a discrete mental record (Thaler, 1999).

Normally, invigorating clients to buy more items has been the most significant objective for organizations, while online suggestion frameworks assume a huge function during the data search of a client. Shah et al. (2012) characterized aim as a circumstance.

- H<sub>1</sub>: PU has a significant and positive impact on CPI (during Covid)
- H<sub>2</sub>: PU has a significant and positive impact on attitudes towards mobile app use (during Covid)
- H<sub>3</sub>: Attitude towards mobile app use has a significant and positive impact on consumer Purchase intention (during Covid)
- H<sub>4</sub>: Perceived usefulness has a significant and positive impact on consumer purchase Intention (Before Covid)
- H<sub>5</sub>: Perceived usefulness has a significant and positive impact on attitudes towards mobile app use (Before Covid)
- H<sub>6</sub>: Attitude towards mobile app use has a significant and positive impact on consumer purchase intention (Before Covid)

## **2.3. Technological Acceptance Model**

A couple of theoretical models applied to client insistence and utilized directly concerning arising data moves. In any case, TAM—a model that helps with understanding client mentalities towards advantageous headway practice (Rivera, Gregory, & Cobos, 2015)— stays the utmost extensively perceived point of view (Venkatesh, 2000). Transformed from the hypothesis of thought about development, the essential separation here is that attitudinal determinants, understood unreservedly for each lead, are supplanted with a great deal of two factors: saw usability and saw convenience (McFarland & Hamilton, 2006). Cap recommends that each factor collectedly addresses the focal variables that sway way towards minimal application usage (Kim, Lee, & Preis, 2020). The model constantly tracks down that unmistakable accommodation and sees handiness contribute towards the accomplishment of versatile applications (Pentina, Koh, & Le, 2012). As the principal piece of a more extensive developmental arrangement, Cap has four gigantic portrayals of changes: earlier (factors expecting clear help and saw solace), factors proposed from different speculations, setting-centered fragments and coming about features.

The brilliant primary lights on various considerations, for example, information sharing segments, piece factors, solitary unforeseen development, seen peril and task advancement fit—all of which grant unmistakable clarifications for specific perspectives and practices. A lot of this evaluation presents factors from different speculations, which act in a way to both see comfort and handiness, featuring moving TAM (Kim et al., 2020; Rivera et al., 2015).

- H<sub>7</sub>: Attitude towards mobile app use mediate the relationship between perceived usefulness and consumer purchase intention (during Covid)
- H<sub>8</sub>: Perceived ease of use has a significant and positive impact on consumer purchase intention (during Covid)
- H<sub>9</sub>: Perceived ease of use has a significant and positive impact on attitude towards mobile App use (during Covid)
- H<sub>10</sub>: Attitude towards mobile app use mediate the relationship between perceived ease of use and consumer purchase intention (during Covid)

#### **2.4. Relationship between PEOU and Attitude towards Mobile App Use**

Perspectives are psychological responses to activity and indicate how hard individuals will attempt and how much exertion they want to apply (Baek, 2013). Hence, less exertion to utilize versatile applications brings about a more noteworthy tendency to utilize the innovation since it is apparently simpler and more service-oriented (Laforet & Li, 2005). Saw usability alludes (in this sense) to how much an individual accepts that innovation is not difficult to utilize (Venkatesh, 2000). It has been fought that individuals use new advances because of both saw superfluous benefits (e.g., handiness and convenience) and characteristic benefits (e.g., energy and luxurious benefits) (Kim et al., 2020). For example, an increase of TAM in the conventional banking and information system setting has shown that sensibility has a colossal productive result on demeanor towards flexible application use (Kim et al., 2020). One support is that evident receptiveness compares with and hoists how much an application is dependable (Morosan & DeFranco, 2016).

#### **2.5. Technological Knowledge Attitude Adopted by Consumers in Purchasing**

Emergencies influence singular customers through direct, just as aberrant passionate/psychological tricks (Koos, 2017; Koos et al., 2017). These Crises may have immediate and unmistakable impacts over financial assets that are accessible to people to settle on daily utilization choices. Additionally, emergencies may seriously affect the everyday life of purchasers, their viewpoints, emotions and concerns concerning future and utilization conduct and perspectives despite the fact that no hardship or huge material imperatives are included. Hence, as clarified by (Koos et al., 2017), emergencies can conceivably debilitate underestimated intrinsic convictions about the structure and security of ordinary life.

Impressive proof can be found in existing writing identifying with buyers adapting systems. Observational confirmations have uncovered that, during times of downturn, customers show more noteworthy concerns concerning money-related security (Birkenmaier & Fu, 2016), and they will in general, be more cost-cognizant and parsimonious (Steenkamp & Maydeu-Olivares, 2015). Hampson and McGoldrick (2017) underlined that the purpose for shoppers feeling influenced long after the downturn, in fact, closes can be clarified with the assistance of stressors and mental components (Hampson & McGoldrick, 2017) further expounded that self-impression of savvy customers and foreseen blame of buyers have a generous effect over value awareness, notwithstanding hugeness of financial stressors.

- H<sub>11</sub>: Attitude towards mobile app use mediate the relationship between perceived usefulness and consumer purchase intention (Before Covid)
- H<sub>12</sub>: Perceived ease of use has a significant and positive impact on consumer purchase Intention (Before Covid)
- H<sub>13</sub>: Perceived ease of use has a significant and positive impact on attitude towards mobile App use (Before Covid)

H<sub>14</sub>: Attitude towards mobile app use mediate the relationship between perceived ease of use and consumer purchase intention (before Covid)

### 2.6. Relationship between TAM Factors and Consumer Purchase Intention

Ordinarily, most inclinations will return back to standard. Several preferences will kick the can considering the way that the client under the lockdown condition has found an elective that is more helpful, moderate, and available. Models solidify steady organizations like Netflix and Disney. They are no doubt going to change clients from taking off to films. Due to Covid, buyers may feel that it's less hard to work at home, learn at home and shop at home. To spread it out basically, what was an option in contrast to the current fondness eventually changes into the center, and the current inclination transforms into the outskirts. As we probably are careful, there is a thorough law of buyer lead. When a current tendency or a need is surrendered, it generally returns as an interruption. Models join seeking after, fishing, planting, warming bread, and cooking. It will be intriguing to perceive what existing tendencies surrendered by tolerating the new ways will return as redirections. Accordingly, will shopping become more of an outside advancement, diversion, or redirection (Canilang et al., 2020)?

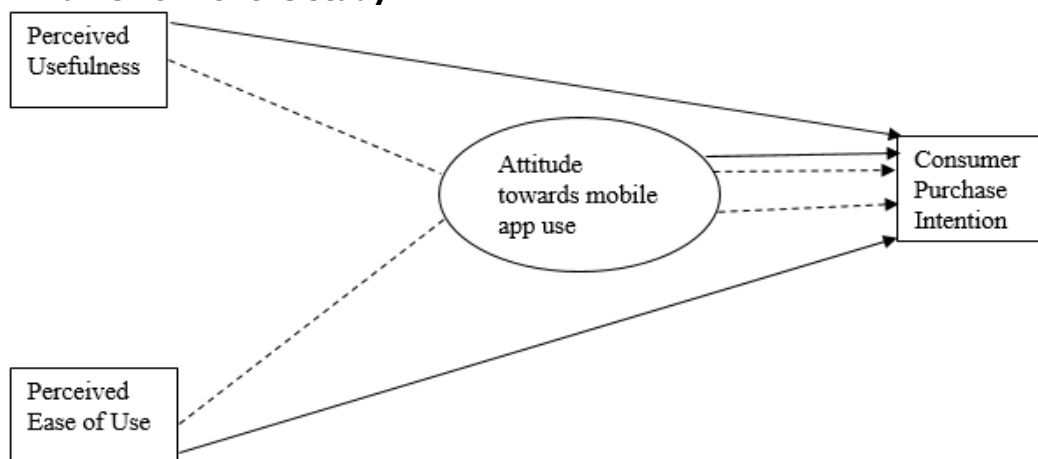
### 2.7. Impacts of Coronavirus over TAM Factors (perceived usefulness)

The abrupt flare-up of COVID-19 has influenced the whole world. To slow the spread of the infectious sickness, governments have upheld tough social removing (for example, "cover set up" and "stay-at-home") limitations that have generally stopped down organizations and laid specialists in occupations and enterprises esteemed unimportant and seriously decreased interest for different organizations. The impacts on the economy are promptly seen through a wild securities exchange, flood in joblessness protection claims, and covering of many retail facades the nation over. What is less notable, nonetheless, is whether these impacts are being felt distinctively over the populace, particularly among monetarily hindered gatherings, for example, African-Americans and Latin. On account of restricted investment funds and riches, these gatherings are particularly helpless against negative financial stuns, for example, cutbacks from COVID-19 (Canilang et al., 2020).

### 2.8. Framework

Consumer shopping Behavior states customer conduct speculations, how to anticipate the buyer buying conduct by moves made by shopper disconnected or online shopper before buying any merchandise or using any administrations. The process includes an arrangement of occasions like looking through web index, drawn in with web-based media like Facebook, Instagram or an assortment of different activities. That lead maintains the direct is supported by Consumer lead hypotheses that expect how purchasers make purchasing decisions and show sponsors how best to acquire by customary practices. Despite the way that inspirational purchases are a basic part of buyer's buying practices, target dynamic cycles overpower purchaser lead and impact publicizing theory. Such endless investigators used this speculation to explain the association of buying behavior of customers by this theory (Canilang et al., 2020).

Figure 1: Framework of the study



Our setting aside cash is influenced a great deal in the Covid 19 such countless individuals endure hunger, scant asset use as a result of no or less saving so individuals currently work to put away or set aside cash for future so this relationship might be extensive because of the microeconomic hypothesis expresses that the direct of individuals and firms in making decisions with respect to the assignment of sparse resources and the joint efforts among these individuals and firms so this would explain association between the variables (Canilang et al., 2020).

Shopper purchasing behaviors is characterized as a combination of mentality, practices, inclinations and dynamic regarding acquisition of merchandise or so the hypothesis of arranged conduct mirrors how disposition, subject standards, and saw behavioral control, together shape a person's behavioral expectations and practices so a legitimate outlook is made prior to going to advertise because in lockdown , a particular time is relegated to open the shops just to buy thing acknowledge food varieties and medication shops are open for the greater part a day So individuals make rundown of things to get it on schedule and for how much amount we store and in which amount we use it and cost is likewise a major need since cash is less for lion's share customers so purchase fundamental things just .This was an extraordinary buyer change by and large in Covid 19 and is still present nowadays (Kotler & Armstrong, 2010).

### **3. Research Methodology**

The current research work, quantitative research methodology has been adopted to achieve its objectives. In next step, the methodology is further divided into following steps:

#### **3.1. Research Design**

The quantitative approach is used in the current study (Colorafi & Evans, 2016) that is based on filling the questionnaires by the individual customers across the urban cities of Pakistan. This is considered to be the most suitable methodology as it helps to build an in-depth understanding of the under study phenomenon, specifically consumer behavior in the pandemic conditions

#### **3.2. Data Collection Method**

##### **3.2.1. Primary Data**

Primary data is information acquired directly by the analyst on the variables of interest for the specific purpose of the study (Sekaran & Bougie, 2016). Primary data is the utmost persuading technique in quantitative method. According to (Collis & Hussey, 2013), "primary data are data generated from an original source, such as your own experiments, survey, interview or focus group (p-59)". Primary data can be accessed through multiple online, published and printed sources. Likewise, in his article, (Rahi, 2017), stated that primary data generally represents "publications, Reports, Theses, Emails, Conference reports, Company reports or some government publications" (p.4). This would have enabled to collect more accurate and reliable data.

##### **3.2.2. Questionnaire Design**

According to, (Pinsonneault & Kraemer, 1993), in Research, the Questionnaire have been designed and used to meet the three main objectives when (1), the data used in Research is based on quantitative method (2) there must be some pre-defined tools/instruments are used in the Research 3) and in the Research where population sample have been studied and findings have been analyzed to complete research work. Whereas, (Cresswell, 2009), stated that "the use of a questionnaire provided not only demographic characteristics but also enabled the researcher to capture contextual data on a larger scale".

##### **3.2.3. Response Rate of Questionnaire**

The questionnaires have been distributed personally, among employees, consumers, and students to the educated people directly associated with shopping behavior. Furthermore 50 questionnaires were used as sample for pilot testing. I had collected my data through online mode mean sharing the links almost 200 respondents give me the reposes while left 200 responses I filled by meeting him/her personally and request them to fill the questionnaires. 400 questionnaires were distributed and I get 350 accurate and reliable responses.

##### **3.2.4. Research Population and Sample**

The present study's sample comprises 300 individuals (Trochim, Cabrera, Milstein, Gallagher, & Leischow, 2006). The respondents were purposefully selected from different cities

of Pakistan. The customers who are buying different products in this time were selected. Initially the customers were contacted to ask their willingness for filling the questionnaires.

### 3.3. Sampling Technique

According to Cooper and Schindler (2006), there are numerous reason for using sampling which includes mainly (1), to obtain better and appropriated data collection required for respective Research (2), to acquire accuracy in results produced (3), and to maximized cost efficiency/effectiveness. The convenience sampling (a sub-type of non-probability sampling technique) was selected to determine the sample in the current study.

#### 3.2.1. Data Analysis

In data analysis, the information collected is statistically analyzed to see if the hypotheses that were generated have been supported (Sekaran & Bougie, 2016). For this purpose, statistical analysis tool has been used to perform multiple functions on data, collected through survey questionnaires. The basic purpose of data analysis is to examine the results and draw on conclusion. Software like SPSS, v-22 and Smart PLS-3 have been used to perform advanced statistical operations/analysis on data. According to IBM Inc. SPSS, is globally recognized statistical software used to drive accurate results by applying multiple functions on data like hypothesis testing, predictive analysis, trend analysis, data forecasting, validate assumptions and performing others multiple operations as well. Whereas, there were numerous reasons to use Smart PLS software. For instance, it is easily understandable, facilitates comprehension of methods, prepare manuscripts using PLS-SEM, offers learning concepts of statistical terms etc. To perform information investigation for the current examination, the scores for assumption and insight things were acquired on a seven-point Likert scale was utilized with close finished inquiries going from 1 (emphatically dissent) to 7 (unequivocally concur). The utilization of Likert scale worked with the revelation of the expected relationship among the needy, autonomous and arbiter variables. To get to the precise information from respondent, basic and reasonable words were utilized to plan the overview survey. The instrument utilized in this examination was tried for legitimacy and dependability to guarantee a great measure. To test the model for legitimacy united and discriminant legitimacy has been set up in Smart-PLS323. Underlying models have been created to find out the effect of maintainability in project executives (SPM) on project achievement (PS).

#### 3.3.2. Respondents' Demographic Profiling - Gender Wise

In the current research, the respondent demographic profiling includes gender, age, education and sector. At first potential respondents have been categorized and segregated with respect to their gender. The detailed explanation of the respondent's demographic dynamics has been illustrated in the given table.

**Table 1: Respondents' Demographic Profiling -Gender wise**

	Frequency	Percent	Valid Percent	Cumulative Percent
F	149	149	49.7	49.7
M	151	151	50.3	50.3
Total	300	300	100.0	100.0

#### 3.3.3. Respondents Demographic Profiling – Age Wise

The second element used for descriptive statistics is the age of the respondents who were participated in data collection campaign. For instance, the respondents have been asked to provide their age details, which are also in a summarized format in the given table.

**Table 2: Respondents' Demographic Profiling - Age wise**

	Frequency	Percent	Valid Percent	Cumulative Percent
20-29	157	48.6	48.6	48.6
30-39	99	30.7	30.7	79.3
40-49	42	12.9	12.9	92.2
50-59	20	6.1	6.1	98.3
60-65	5	1.5	1.5	100.0
Total	323	100.0	100.0	

### 3.3.4. Respondents Demographic Profiling – Income wise

The second element used for descriptive statistics is the income level of the respondents who were participated in data collection campaign. For instance, the respondents have been asked to provide their age details, which have also been reflected in the given table in summarized format

**Table 3: Respondents Demographic Profiling – income wise**

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than 25000	108	36.0	36.0	36.0
25000-50000	95	31.7	31.7	67.7
50000-75000	24	8.0	8.0	75.7
75000-100000	24	8.0	8.0	83.7
More than 100000	49	16.3	16.3	100.0
Total	300	100.0	100.0	

### 3.3.5. Reliability Analysis

These include indicator and internal consistency reliabilities, loadings of outer model, endogenous variables variances, convergent validity, discriminant validity, path coefficients, and structural paths significances. Wong, Parent, and Kawchuk (2013) criteria for these eight things have been followed in relation to threshold and minimum required values.

**Table 4: Reliability Analysis before Covid**

	Cranach's Alpha	Composite Reliability
CPI_	0.838	0.887
PE	0.929	0.949
PEOU_	0.868	0.910
TK_	0.884	0.910

For the current study, following reliability analysis have been presented (1) outer loading of items (2) Composite reliability (3) Cranach's Alpha. Item loadings reflect the correlation between an item and its corresponding latent variable. Cronbach's alpha is a measure used to assess the reliability, or internal consistency, of a set of scale or test items. Cronbach's alpha is thus a function of the number of items in a test, the average covariance between pairs of items, and the variance of the total score.

**Table 5: Reliability Analysis during Covid**

	CRONBACH ALPHA	COMPOSITE RELIABILITY
CPI_	0.671	0.793
PE	0.857	0.903
PEOU_	0.684	0.809
TK_	0.794	0.848

### 3.4. Validity (Convergent & Discriminant)

In 1987, Hamersley's defined the term 'validity' as "an account is valid or true if it represents accurately those features of the phenomena, that it is intended to describe, explain or theorize" (Hamersley & Noroney, 1987) (p-69). This definition is widely acknowledged and much quoted in the literature. Later, in 2003, Collis & Hussey, defined validity as "extent to which the research findings accurately represent what is really happening in the situation" (Collis & Hussey, 2003)(p-357). So, in the current study, convergent validity and discriminant validity have been applied to validate the research work.

#### 3.4.1. Convergent validity

"Convergent validity is how much different endeavors to quantify a similar idea are in understanding". The thought is that at least two proportions of something very similar should cover exceptionally in the event that they are substantial proportions of the idea" (Bagozzi, Yi, & Phillips, 1991). Joined legitimacy is set up when the ideas that ought to be identified with one another are indeed related. Focalized legitimacy through factor examination is set up when squares of things estimating a similar develop emphatically concur (I-e meet) in their portrayal of the basic build they were made to quantify.



**Table 6: Convergent validity Analysis before Covid**

SERIAL NO	Average Variance Extracted (AVE)
CPI	0.615
PE	0.824
PEOU	0.718
TK	0.591

**Table 7: Convergent validity analysis during Covid**

SERIAL NO	Average Variance Extracted (AVE)
CPI_	0.450
PE	0.700
PEOU_	0.518
Tk	0.445

### 3.3.2. Discriminant Validity

The Discriminant validity approach has also been utilized in this study for measurement of validity. If two or more concepts are unique, then valid measures of each should not correlate too highly" (Bagozzi et al., 1991). Therefore, to support and validate the current research work, following three methods have been applied to measure and access the discriminant validity.

- Fornell-Larcker Criterion
- Cross Loadings Analysis
- Heterotrait-Monotrait Ratio (HTMT)

#### 3.3.2.1 Fornell-Lacker's criterion

Fornell-Lacker's criterion is one of the most important discriminant validity measurement method. According to the concept of Fornell-Lacker's criterion, the discriminant validity for the given research work is established. The detailed has been presented in tabulated form. The table 4.11 showed that the AVE values of each variable falls within the acceptable limit and a positive discriminant validity has been established among the variables.

**Table 8: (DURING COVID) Fornell-Larcker Criterion**

SERIAL NO	CPI	PE	PEOU	TK
CPI	0.671			
PE	0.406	0.837		
PEOU	0.374	0.281	0.720	
TK	0.451	0.518	0.564	0.667

**Table 9: (before Covid) Fornell-Larcker Criterion**

Serial no	CPI	PE	PEOU	TK
CPI	0.784			
PE	0.569	0.908		
PEOU	0.705	0.652	0.848	
TK	0.647	0.765	0.798	0.769

### 3.4. Structural Equation Model

Structure equation model (SEM) gives the methods which show the estimated way by the help of hypothetical model. Essentially, SEM model includes with the guessed connection between the free and ward factors in the projected examination model. The primary model predicts that how well the hypothetical model conceives the estimated pathways. For the current investigation, SEM Model is evaluated with the impact size (F2), coefficient of assurance (R2), and the prescient pertinence measure (Q2). For the current investigation, the consequences of the examination showed that the R2statistic for CPI was .523; this shows that 52.3% change in CPI can be ascribed to apparent convenience, saw handiness and disposition towards portable application use. The investigation uncovered R2 measurement of .740 for mentality toward portable application use, showing that 74% change in disposition toward versatile application use can be accounted to apparent usability and saw value, R2statistics for every one of the basis variable in the model are appeared in the accompanying figure. This is about the before Covid 19.

**Table 10: before Covid**

	Path Coefficients	mean	STDEV	T VALUE	P value
PE -> CPI_	0.127	0.125	0.110	1.154	0.249
PE -> TK_	0.422	0.420	0.076	5.549	0.000
PEOU_ -> CPI_	0.504	0.500	0.115	4.399	0.000
PEOU_ -> TK_	0.525	0.527	0.068	7.688	0.000
TK_ -> CPI_	0.148	0.154	0.129	1.146	0.252

**Table 11: during Covid**

	Path Coefficients	mean	STDEV	T VALUE	P value
PE -> CPI_	0.239	0.236	0.068	3.498	0.000
PE -> TK_	0.388	0.388	0.073	5.355	0.000
PEOU_ -> CPI_	0.178	0.171	0.092	1.934	0.053
PEOU_ -> TK_	0.456	0.455	0.069	6.618	0.000
TK_ -> CPI_	0.228	0.233	0.073	3.144	0.252

### 3.5 Hypotheses Testing

Further to the assessment of  $R^2$ ,  $F^2$ , and  $Q^2$  values, Hypotheses are assessed (Before Covid).

#### 3.5.1 Perceived usefulness has a significant and positive impact on consumer purchase intention

$H_1$  evaluates whether PU has a significant impact on CPI. The results showed that PU has a no significant impact on CPI ( $\beta = .125$ ,  $t = 1.154$ ,  $p < .001$ ). This shows that a higher level of SPM would lead to PS. Hence, the hypotheses,  $H_1$  was not supported

#### 3.5.2 Perceived usefulness has a significant and positive impact on attitude towards mobile app use

$H_2$  evaluates whether PU has a significant impact on TK. The results showed that PU positively and significantly impacted TK ( $\beta = .422$ ,  $t = 5.549$ ,  $p < .001$ ). This shows that a higher level of perceived usefulness would lead to an increased attitude toward mobile app use. Hence, the hypotheses,  $H_2$  were supported.

#### 3.5.3 Attitude towards mobile app use has a significant and positive impact on consumer purchase intention

$H_3$  evaluates whether attitude toward mobile app use significantly impacts consumer purchase intention. The results showed that attitude toward mobile app use has a negative and no significant impact on CPI ( $\beta = .148$ ,  $t = 1.146$ ,  $p = .025$ ). Hence, the hypotheses,  $H_3$  were not supported.

#### 3.5.4 Attitude towards mobile app use mediate the relationship between perceived usefulness and consumer purchase intention

PU and PEOU has no significant effect on the CPI, ( $\beta = .154$ ,  $t = 1.146$ ,  $p < .001$ ).

#### 3.5.5 Perceived ease of use has a significant and positive impact on consumer purchase intention

$H_5$  evaluates whether PEOU has a significant impact on CPI. The results revealed that PEOU significantly impacts CPI ( $\beta = .584$ ,  $t = 6.332$ ,  $p = .000$ ). This shows that increased Stakeholder Engagement would lead to an improved TB. Hence, the hypotheses,  $H_5$  was supported

#### 3.5.6 Perceived ease of use has a significant and positive impact on attitude towards mobile app use

$H_6$  evaluates whether PEOU has a significant impact on TK. The results revealed that PEOU significantly impacts TK ( $\beta = .228$ ,  $t = 6.618$ ,  $p = .000$ ). Hence, the hypotheses,  $H_6$  were supported.

#### 3.5.7 Attitude towards mobile app use mediate the relationship between perceived ease of use and consumer purchase intention

$H_7$  evaluates whether TK mediate the relationship between PEOU and CPI. The results revealed that PEOU significantly impacts TK ( $t = 1.075$ ,  $p = .282$ ). Hence, the hypotheses,  $H_7$  were not supported.

**Table 12: before Covid hypothesis results**

	Path Coefficients	mean	STDEV	T VALUE	P value
PE -> CPI_	0.127	0.125	0.110	1.154	0.249
PE -> TK_	0.422	0.420	0.076	5.549	0.000
PEOU_ -> CPI_	0.504	0.500	0.115	4.399	0.000
PEOU_ -> TK_	0.525	0.527	0.068	7.688	0.000
TK_ -> CPI_	0.148	0.154	0.129	1.146	0.252
		t-value		p-value	
PEOU_ -> TK_ -> CPI_		1.075		0.282	
PE -> TK_ -> CPI_		1.163		0.245	

### 3.6 During Covid

Further to the assessment of R<sup>2</sup>, F<sup>2</sup>, and Q<sup>2</sup> values, Hypotheses are assessed (Before Covid).

#### 3.6.1 Perceived usefulness has a significant and positive impact on consumer purchase intention

H<sub>1</sub> evaluates whether PU has a significant impact on CPI. The results showed that PU positively and significantly impacts CPI ( $\beta = .326$ ,  $t = 1.857$ ,  $p < .001$ ). This shows that a higher level of SPM would lead to PS. Hence, the hypotheses, H1 was supported

#### 3.6.2 Perceived usefulness has a significant and positive impact on attitude towards mobile app use

H<sub>2</sub> evaluates whether PU has a significant impact on TK. The results showed that PU positively and significantly impacted TK ( $\beta = .388$ ,  $t = 5.535$ ,  $p < .001$ ). This shows that a higher level of perceived usefulness would lead to an increased attitude toward mobile app use. Hence, the hypotheses, H2 were supported.

#### 3.6.3 Attitude towards mobile app use has a significant and positive impact on consumer purchase intention

H<sub>3</sub> evaluates whether attitude toward mobile app use significantly impacts consumer purchase intention. The results showed that attitude toward mobile app use positively and significantly impacts CPI ( $\beta = .228$ ,  $t = 3.314$ ,  $p = .002$ ). This shows that an increased level of TK would lead to CPI. Hence, the hypotheses, H3 were supported.

#### 3.6.4 Attitude towards mobile app use mediate the relationship between perceived usefulness and consumer purchase intention

PU and PEOU significantly affect the CPI, ( $\beta = .154$ ,  $t = 1.146$ ,  $p < .001$ ). This shows that an increased level of TK would lead to CPI. Hence, the hypotheses, H4 were supported.

#### 3.6.5 Perceived ease of use has a significant and positive impact on consumer purchase intention

H<sub>5</sub> evaluates whether PEOU has a significant impact on CPI. The results revealed that PEOU significantly impacts CPI ( $\beta = .282$ ,  $t = 3.027$ ,  $p = .002$ ). Hence, hypothesis H5 was supported.

#### 3.6.6 Perceived ease of use has a significant and positive impact on attitudes towards mobile app use

H<sub>6</sub> evaluates whether PEOU has a significant impact on TK. The results revealed that PEOU significantly impacts TK ( $\beta = .228$ ,  $t = 6.618$ ,  $p = .000$ ). Hence, the hypotheses, H6 were supported.

#### 3.6.7 Attitude towards mobile app use mediate the relationship between perceived ease of use and consumer purchase intention

H<sub>7</sub> evaluates whether TK mediates the relationship between PEOU and CPI. The results revealed that PEOU significantly impacts TK ( $t = 2.731$ ,  $p = .006$ ). Hence, the hypotheses, H7 were supported.

**Table 13: during Covid**

	<b>Path Coefficients</b>	<b>Mean</b>	<b>STDEV</b>	<b>T VALUE</b>	<b>P value</b>
<b>PE -&gt; CPI_</b>	0.239	0.236	0.068	3.498	0.000
<b>PE -&gt; TK_</b>	0.388	0.388	0.073	5.355	0.000
<b>PEOU_ -&gt; CPI_</b>	0.178	0.171	0.092	1.934	0.053
<b>PEOU_ -&gt; TK_</b>	0.456	0.455	0.069	6.618	0.000
<b>TK_ -&gt; CPI_</b>	0.228	0.233	0.073	3.144	0.252
		<b>T value</b>		<b>P value</b>	
<b>PEOU_ -&gt; TK_ -&gt; CPI_</b>		2.731		0.006	
<b>PE -&gt; TK_ -&gt; CPI_</b>		2.689		0.007	

#### 4. Discussion

##### 4.1 Perceived Usefulness and Attitude towards Mobile App Use

The study's outcomes depict that conspicuous solace doesn't decidedly impact the outlook towards reduced application use (H1). This doesn't validate the disclosures in Veríssimo (2016). The inevitable result of this speculation in addition ruins the disclosures in Rivera et al. (2015), whose model individuals included townhouse affiliation clients, who, as indicated by them, will generally have lifetime responsibility. This assessment contrasts from that examination because such committed clients may utilize an application paying little cerebrum to its conspicuous steadiness. Furthermore, expected worth appears to hold more respect in Western social orders, while saw convenience has more basic significance in non-Western circles (Schepers & Wetzels, 2007). Subsequently, the outcomes for H1 and H2 are authentic for Iran as a non-Western country. 6.2. Seen convenience and aura towards versatile application use instead of the exposures in Sánchez-Hernández (2010), this assessment shows that reasonable accommodation noteworthy influences disposition towards versatile application use than clear trustworthiness. The mediating effect of attitude towards mobile app use

Verma, Rahul, Reddy, and Verma (2016) have shown trust, obligation and fulfilment as focus people in relationship progressing. Several assessments have additionally dissected how mentality intercedes relationships in TAM research utilizing various components. For instance, Amoroso and Ackaradejruangsri (2017), who considered the organizing delayed consequences of client demeanour, confirmed its work as a deficient focus on the relationship between saw accommodation and fulfilment. This looks like our finding with various dependent segments. Moreover, Tseng and Lee (2018) showed that way has an interceding sway between the brand picture and buy point. Pure and simple, social similarity between Iran and Thailand as two Asian nations unquestionably clarify the connection between the two assessments. Further, in Rivera et al. (2015), application manner interceded headway experience and presumption to utilize, while in (Hsu & Lin, 2015), demeanour and fulfilment were noted as two key place people. The fundamental variable picks the impact that feeling about saw respect (i.e., extravagant and practical attributes) has on perseverance, and the second is an adjudicator between saw worth and attestation

#### 5. Conclusion

This investigation centers on how TAM variables and social elements decide client buy conduct. The discoveries show that apparent helpfulness doesn't significantly affect attitude towards portable application use, however that apparent usability, social impact and companion impact emphatically influence disposition in such a manner. Goal to buy was likewise influenced emphatically by singular position on application use. As far as intervening impact, the outcomes show that influence is a full arbitrator between three circuitous ways of the model, while sex isn't. Unexpectedly, age directs the connection between saw handiness and disposition towards versatile applications.

Redesigning TAM factors Research has shown that both ease of use and accommodation sway particular impacts towards compact application use. Regardless, our results showed that the singular presence of mind out and out affected customers' situation on applications. As such, we suggest that application designers continue improving usability regarding versatile applicatiplanslan and courses and giving customers clear and easy-to-stick-to rules and instructional activities (Qin, Le, Zhang, & Deng, 2023). Concerning TAM factors and attitudes towards adaptable application use, our disclosures showed that singular age expects a

coordinating part in the association between accommodation and customer mindset. Subsequently, publicists ought to continue with their courses of action for improving evident handiness by zeroing in on young people and arranging applications according to the suspicions for this social event. Fundamentally, the revelations are significant for the two people and females.

There are a few constraints to this investigation. In the first place, generalizability consistently presents an issue for client conduct, considering the current examination is no special case. The future reviews could plan to decide the degree to which the discoveries can be stretched out to incorporate different populaces, settings and time-frames. In light of a legitimate concern for speculation, the future examination could be led to testing this model in other assistance settings in different nations. Second, this examination didn't look at each connection between the full-of-feeling assessment builds—that is, between consumer loyalty, worth, trust and responsibility.

Future exploration could research these connections to all the more likely comprehend the impacts of administration quality in a really difficult client climate. At last, a longitudinal investigation of client conduct according to a specific versatile application could be led to evoking the changing examples of clients' necessities and wants.

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