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**Analyzing the Adoption of Online Shopping Using Extended Technology
Acceptance Model: An Empirical Study on Five Districts of Nepal**

by

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A THESIS

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ABSTRACT

Recently, in Nepal, penetration of the internet has increased making every internet user a potential buyer of growing online shopping trend but the question arises of what motivates the consumer to buy online and how it has been adopted currently. This research aims to analyze the perception of consumers of five districts of Nepal toward online shopping with Extended Technology Acceptance Model (TAM2) as framework for examining various factors that influence shopping online. Responses of 460 participants were recorded for this study. A quantitative research approach was used and the collected data were analyzed by CB-SEM method using SPSS and AMOS. The research result shows that perceived ease of use has positive influence on perceived usefulness; perceived enjoyment and perceived cost have significant positive influence on attitude toward online shopping whereas perceived risk has negative influence on it. Moreover, behaviour intention to shop online is positively influenced by perceived usefulness, subjective norms, and attitude toward online shopping. This research supports that when consumers enjoy online shopping and find products at the right cost then they are motivated to shop online whereas risks associated with online shopping demotivate it. And, people's behaviour to shop online is influenced by social influence, perceived usefulness, and attitude toward online shopping.

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LIST OF ABBREVIATIONS

AMOS	Analysis of a Moment Structure
ANOVA	Analysis of Variance
ATT	Attitude Toward Online Shopping
AVE	Average Variance Extracted
BI	Behavioural Intention
CB	Covariance Based
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CMIN	Chi-Square
COD	Cash on Delivery
COVID-19	Coronavirus Disease 2019
CR	Composite Reliability
DF	Degree of Freedom
GOF	Goodness of Fit
HTMT	Heterotrait - Monotrait
IBM	International Business Machine
IT	Information Technology
MAV	Maximum Allowable Variance
MNC	Multinational Company
NTA	Nepal Telecommunication Authority
PC	Perceived Cost
PE	Perceived Enjoyment
PEOU	Perceived Ease of Use
PR	Perceived Risk
PU	Perceived Usefulness

RSMEA	Root Mean Square Error of Approximation
SD	Standard Deviation
SEM	Structured Equation Modelling
SPSS	Statistical Package for Social Sciences
SRMR	Standardized Root Mean Square Residual
TAM	Technology Acceptance Model
TAM2	Extended Technology Acceptance Model
TRA	Theory of Reasoned Action

CHAPTER ONE: INTRODUCTION

1.1 Background

In today's age of technological advancements, the internet has become an integral part of human's everyday activities which has significantly helped make online shopping the latest trend (Ofori and Appiah-Nimo, 2019). Online shopping has become the latest trend to satisfy own's needs over traditional shopping due to the shifting toward e-commerce caused by an increase in adequate technology (Preeti et al., 2016). Though customers cannot feel the product they are buying online but due to its convenience, online shopping is admired over traditional shopping all over the world because products that are not available in the traditional way can be easily accessed by online shopping and they also give many offers and discounts (Bajdor, 2021).

Online shopping has changed the process of doing business as it brings more competitive prices of a wide range of products with various offers making consumers more demanding and compelling companies come up with unique marketing strategies (Valarezo et al., 2018). Hackers who can steal personal information, 'privacy paradox', security software, quality of products, after-sale service, internet usability, etc. are the reason not to buy online (Fernández-Bonilla et al., 2022). Perception of online shopping changes over time due to the experience consumer acquired over that period (Fang et al., 2016; Bajdor, 2021). Customers use the Internet to research products, prices, and the customer service they receive when purchasing them, in addition to online purchases from specific retailers (Kochar and Kaur, 2018).

As of May 2021, the no. of internet users in Nepal is 27.3 million which is about 90.56 percent of the country's total population according to the Nepal Telecommunications Authority. With easy access and a reduction in the cost of technology-based goods and internet services, there is an upward trend in the popularity of online shopping among Nepalese consumers (Vaidya, 2019). Many Nepalese banks support online payment systems during online shopping helping it to be adopted easily by youths and educated people. In Nepal, the COVID-19 pandemic has also positively helped online shopping as offline stores became difficult to access. Though the online shopping market has started to unfold in Nepal however, due to the lack of any clear legal act, guidelines, and provisions there is very less existence of trust in online shopping from the Nepalese consumer point of view. On the other hand, businessmen and entrepreneurs are having

second thoughts about establishing and operating e-commerce businesses.

Online shopping is no longer a new concept in Nepal as a huge penetration of the internet has provided a large consumer for an online shopping business. Perceived value (e.g. cost, risk, quality, benefits, etc.) of a consumer is the primary factor that helps any online business to be adopted by the consumer (Wu et al., 2014). Demographic profiles, subjective norms, previous shopping experience, behavioural intention, etc. also impact the attitude of consumers toward online shopping. With this changing e-commerce market, online shopping customers have also evolved and their buying behaviour is also subjected to these phenomena. To get an insight into online shopping trends and help to expand the business in the future any online business should first understand the attitude of the consumer toward online shopping (Jain et al., 2014). The success of e-commerce does not only come from the business side but the consumer side as well (Nisar and Prabhakar, 2017). This research focuses on the TAM model which is best suited to study the adoption of online shopping on the basis of the perceived value of consumers.

1.2 Problem and Research Purpose

Due to quick developments in the IT industry, each online users become a potential consumer for the company trying to sell online thus increasing competition. Companies are trying to find out how consumers are adopting the online shopping process and what motivates them to buy online.

There is much research done to study the adoption process of online shopping and consumer buying behaviour regarding online shopping however the buying pattern of every demographic place is different and very few studies have been conducted to study the buying behaviour of consumers in online shopping in Nepal that is not adequate to define how online shopping has been adopted among Nepalese consumers.

The Internet has penetrated almost every corner of Nepal and e-commerce business is booming but the major concern of e-commerce business is increasing consumer purchasing and repurchasing behaviour.

Based on numerous past studies, there is a questionable issue of what encourages consumers to buy online. On the basis of the above problem, this research helps to identify and get insight into the perceived behaviour of consumers toward online shopping in regards to the Nepalese economy as well as explore the cause of attention of consumers

toward online shopping in Nepal. This research will help companies to know what are the major motivation factors of consumers on selected districts and how they can boost their business by addressing those factors.

1.3 Objectives

1.3.1 Main Objective

The main objective of this research is to analyze the perception of consumers of five districts of Nepal toward online shopping and identify various factors that affect its acceptance using the Extended Technology Acceptance Model.

1.3.2 Specific Objectives

- To analyze the impact of demographic factors (gender, age, family income, education, and access to good internet service) on the online shopping behaviour of consumers of five districts of Nepal
- To analyze the influence of various perceived factors (perceived usefulness, perceived ease of use, perceived enjoyment, perceived risk, and perceived cost) on the attitude toward online shopping based on consumers of five districts of Nepal.
- To analyze how subjective norms and previous online shopping experiences influence the behaviour intention in consumers of five districts of Nepal.

1.4 Limitation

The purposive sampling technique, used for collecting sample data for this study, limits the participation of individuals who are away from the researchers' focus. This lacks the sample to be highly representative. Moreover, the focuses were only on the individuals in five districts who have good knowledge of the internet and online shopping. Individuals' perceptions and behaviour who have not participated might be different from the targeted individuals.

CHAPTER TWO: LITERATURE REVIEW

2.1 Online Shopping/E-Commerce

E-commerce means buying, selling, and exchanging goods and services over a computer network or internet through which transactions or terms of sale are performed electronically. The use of the internet has revolutionized the way of buying and selling thus impacting every industry and resulting in an online presence for businesses to gain a competitive advantage over consumers that prefer to shop in a virtual marketplace (Nisar and Prabhakar, 2017). In today's time, online shopping has increased globally as trade and commerce have been transformed due to multichannel diversification (Johnson et al., 2001).

Online Shopping was invented by Michael Aldrich in 1979 which was followed by other companies like Netscape (1994), Pizza Hut(1994), Amazon (1995), eBay(1995), and many other American MNCs (Vaidya, 2019). With the rise in growth and speed of the internet over time online shopping became recognized globally. Companies are able to attract a larger audience due to easy connection with customers in remote places and at a lower price due to the reduction in overheads required for the management of inventory (Manandhar, 2021).

The development of technology in the digital era is very rapid and brings a change in all aspects of human life, one of which is online shopping/e-commerce. In 2021, e-commerce contributed about 19.6% of retail sales globally and is expected to rise to 24.5% by 2025 (Daniela Coppola, 2022). Due to the limitation of offline sales because of the COVID-19 pandemic e-commerce contributed approximately 4.938 trillion dollars globally by 2021 and is expected to reach a 7.391 trillion-dollar market by 2025 (eMarketer, 2022).

With the recent evolution of the internet and various emerging technologies like smartphones, laptops, online payment systems, auto-bots, machine learning, and artificial intelligence the online shopping market is in a phase of constant change. Younger people having higher education levels and a good financial situation in the family tend to use e-commerce often (Lim et al., 2016). Social media has also made shopping an entertaining and easy experience for consumers (Dang et al., 2020). Many small businesses are reaching consumers via social media like Facebook, Instagram, TikTok, etc. rather than websites and mobile apps.

2.2 Consumer Behaviour

“Consumer behaviour is the study of individuals, groups, or organizations and the processes they use to select, secure, and dispose of products, services, experiences, or ideas to satisfy needs and the impacts that these processes have on the consumer and society” (Kuester, 2012).

Although customer behaviour and decision-making are difficult to describe and are unexpected, they may be predicted by paying attention to past consumer experiences and introducing successful items to the market (Syamruddin et al., 2021). It is challenging to acknowledge and understand each customer's wants because everyone has a different need and desire for goods and services (Bashir, 2013).

2.3 Consumer Behaviour in Online Shopping

The E-commerce market is hugely influenced by customer buying behaviours and factors influencing this buying behaviour (Wen et al., 2011). The customer has become more demanding as e-commerce has made the price more competitive due to the wide variety of products, offers, and marketing strategies (Valarezo et al., 2018).

Consumer behaviour in E-commerce is mostly influenced by consumer perceptions like attitudes, lifestyle, personality, purchase decision process, post-purchase, culture, demographics, opinion leaders, motivation, income, enjoyment, skills, etc (Peighambari et al., 2016) and by other factors like website interface, website visibility, convenient time, payment security, privacy, websites credibility, reviews, education level, etc (Wang et al., 2008).

Consumers can easily access shopping in their free time and generally, the younger generation enjoys shopping online, and their excitement increases when given some discounts or gifts (Kamis and Ramlee, 2021).

Nearly 200 senior marketing managers participated in a survey, and results showed that the consumer satisfaction index is incredibly helpful in organizational management, evaluation and analysis (Statista, 2015). Therefore, the online shopping environment plays a vital role in engagement between business and their target customers.

Due to the experience a customer gains through time, the initial perspective that drives them to make their first online purchases may have a distinct effect on their later repurchasing decisions or behaviour (Gefen et al., 2003). Some of the buying behaviour

include the price of the product, ease of use of websites/pages, online reviews, availability of the product in offline stores, delivery time, mode of payment, etc.

2.4 History of Online Shopping in Nepal

In the context of Nepal, the internet was first launched in 1993 and to the general public in 1995 with a dial-up internet connection system (Bhattarai and Maharjan, 2020). Online shopping was first introduced in 1998 by thamel.com and Nepal's first-ever online department was muchahouse.com (later changed to mucha.com) started by Amrit Tuladhar in April 2000 (Vaidya, 2019). Nepalese living abroad used to send gifts to their family and friends via these platforms as Nepal had poor internet services in those days.

Initially, Nepal faced a huge backlog in online shopping due to various barriers at the consumer level like economic barriers (unavailability of credit cards, low tele density, lack of purchasing power, and lack of electrical supply), socio-political barriers (inadequate legal protection for internet purchases) and cognitive barriers (lack of skill, lack of availability of local language website, lack of knowledge about e-commerce, lack of confidence in service providers) as well as barriers in a business level like the underdeveloped financial system, unavailability of ICT and other supporting infrastructures, high degree of risk aversion, lack of Data Encryption Standard laws, etc (Kshetri, 2007).

Gradually internet in Nepal became more accessible, people got the skill to operate computers, and awareness about e-commerce increased among Nepalese consumers thus, other companies like Foodmandu (2010), Sastodeal (2011), UG Bazar (2012), Daraz (2013) and many others joined the race of online shopping in Nepal. Most of the e-commerce platforms in Nepal are of the B2C type i.e. consumers buying goods or services from the business. E-commerce is mostly being adopted in Nepal by youths and educated people. Usually, payments are done via COD or banking system or e-wallets (Khalti, Fonepay, e-Sewa, etc) in online shopping making online shopping more convenient for Nepalese consumers. After the COVID-19 pandemic, online shopping in Nepal has shown an upward trend as the internet became a mandatory household needs and people got aware of online shopping due to restrictions to shop in offline retail stores (Koirala et al., 2021).

Nepal shows a promising online shopping trend as online portals are offering many discounts, offers, and competition through virtual advertising allowing Nepalese consumers to benefit from it. Online shopping is still in its early stage in Nepal as all parts

of Nepal could not benefit from it due to a lack of proper transportation facilities making delivery of goods difficult (Parajuli et al., 2021).

Daraz, though funded by foreign, is the most used online shopping site that has been used by Nepalese consumers for online shopping in recent years as it offers varieties of products like electronics, clothing, health and beauty products, automotive tools, groceries, etc. thus works as a bridge between sellers and potential buyers. Daraz is also working on technology and a plan of action to export Nepalese goods abroad.

Though online shopping has shown an acceleration in growth in Nepal there is still no law to govern e-commerce. The Consumer Protection Act (2018) attempts to protect customers' rights, interests, and concerns regarding the cost, quantity, purity, quality, and other aspects of the goods or services that are bought online. A draft bill on online shopping and e-commerce has been drafted by the Ministry of Industry, Commerce, and Suppliers to govern e-commerce in Nepal which has nine key provisions but it is still in a state of being reviewed and has not yet been passed by parliament.

2.5 Technology Acceptance Theories

Many theories and models have been proposed over the years to study the acceptance as well as utilization of technologies and explain the usage behavior of individuals toward such technologies like Theory of Reasoned Action (TRA), Theory of Planned Behaviour (TPB), Decomposed Theory of Planned Behaviour (DTPB), Technology Acceptance Model (TAM), Extended Technology Acceptance Model (TAM2), Combined TAM and TPB (C-TAM-TPB), Model of PC Utilization (MPCU), Innovation Diffusion Theory (IDT), The Motivational Model (MM) and Social Cognitive Theory (SCT) (Momani et al., 2017).

2.6 Technology Acceptance Model

A review of various literature related to online shopping shows that Technology Acceptance Model (Davis and Bagozzi, 1989) is best used to understand online shopping behaviour (Jain et al., 2014). Technology Acceptance Model, published in Davis doctoral thesis explains how people accept and adopt new technology (Singh et al., 2017). People form attitudes and intentions toward trying to learn to use the new technology before initiating efforts directed at using it.

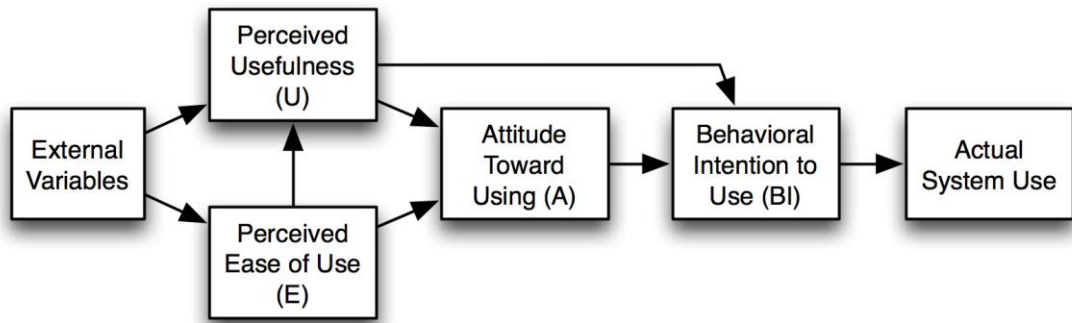


Figure 2.1: Technology Acceptance Model by Fred Davis and Richard Bagozzi

Technology Acceptance Model (TAM) is a theory explaining users' perception of technology and is also used to identify factors contributing to technology acceptance (Tahar et al., 2020). TAM is an extension of TRA which evaluates individual acceptance that is measured by two measures: perceived ease of use and perceived usefulness via three aspects: adoption, validation, and extension (Momani et al., 2017). TAM alone cannot demonstrate the usage intention of the consumer in connection with cognitive behaviour and social influence so it must be utilized with care as it might not examine consumer usage patterns properly (Ofori and Appiah-Nimo, 2019).

TRA's subjective norms are not included in the TAM model and does not describe how consumer behaviour is influenced by expectancies (Ibrahim et al., 2016). So, TAM has many revisions most widely used ones are Extended Technology Acceptance Model (TAM2) and Unified Theory of Acceptance and Use of Technology (UTAUT).

2.7 Extended Technology Acceptance Model

TAM2 is an extension of TAM which uses social influence and cognitive instrumental processes to explain perceived ease of use and perceived usefulness. Cognitive instrumental processes include job relevance, result demonstrability, output quality, and perceived ease of use while social influence includes subjective norms, voluntaries, and image (Venkatesh and Davis, 2000). By adopting TRA and TPB models TAM2 uses subjective norms as additional factors that have correlation with perceived usefulness as well as intention to use (Momani et al., 2017).

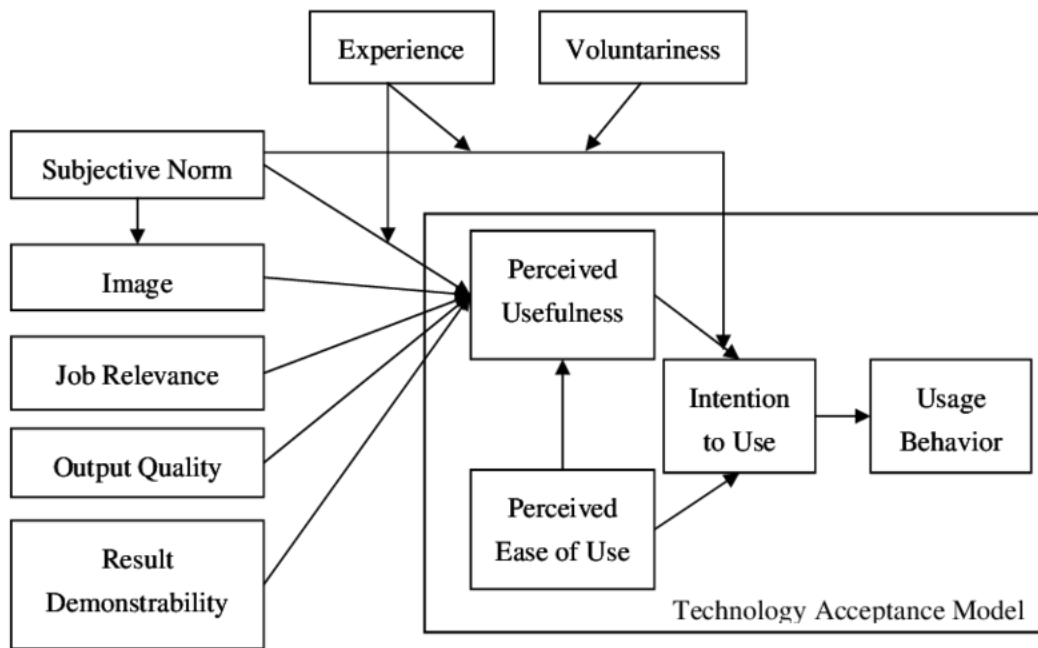


Figure 2.2: Extended Technology Acceptance Model

Social Norms refer to the method through which one adopts another person's beliefs into their belief structure when they feel that an important referent believes one should utilize a system (Warshaw, 1980). TAM2 is used for the prediction of the user acceptance model to design a plan for improving the acceptance level of individuals toward technology which results in a good performance in non-mandatory and non-voluntary environments (Parammaeswari and Sarno, 2020).

TAM2 was developed for addressing TAM limitations which helps to explain in detail factors that influence perceived usefulness including other theoretical constructs where perceived usefulness was found to be significantly influenced by job (Kim and Crowston, 2011).

2.8 Structured Equation Modelling (SEM)

Structural Equation Modelling (SEM) is typically used when there is more than one dependent variable in the model so as for explaining several statistical correlations at once (Bhattarai and Maharjan, 2020). Other multivariate analytical processes like ANOVA, MAV, regression analysis, and factor analysis are inferior to SEM because validation of the model is done in SEM by the means of visualization of complex models and simultaneous combination of factor analysis, path analysis, and multiple regression (Maiyaki, 2012). CB-SEM and PLS-SEM are two of the most popularly used SEM

methods (Dash and Paul, 2021). For a sample size greater than 250 CB-SEM gives accurate and consistent parameters thus statistical power of CB-SEM for a sample size > 250 is better than that of PLS-SEM (Rigdon et al., 2017). CB-SEM helps to test the goodness of fit and hypothesis of the model.

CHAPTER THREE: RESEARCH METHODOLOGY

This chapter addresses the selection of analytical methods to collect and evaluate data to test the model and hypothesis suggested. The detailed methodology used in this research which includes research design, research framework, research strategy, research process, sampling technique, tool creation, data collection techniques, and data analysis process is explained.

3.1 Research Framework

In many research to explain the acceptance of online shopping TAM2 have been used. This research is done with some changes in variables used in TAM2 as there are other variables too that affect the intention to shop online. Perceived Enjoyment and Perceived Risk are taken as third and fourth external variables which affect the intention to shop online (Jain et al., 2014). In this research, Perceived Cost (PC) is also taken as an external variable along with Perceived Usefulness (PU), Perceived Ease of Use (PEU), Perceived Enjoyment (PE), and Perceived Risk (PR). In addition to these, demographic profiles, subjective norms, and previous shopping experiences of consumers are taken as important factors.

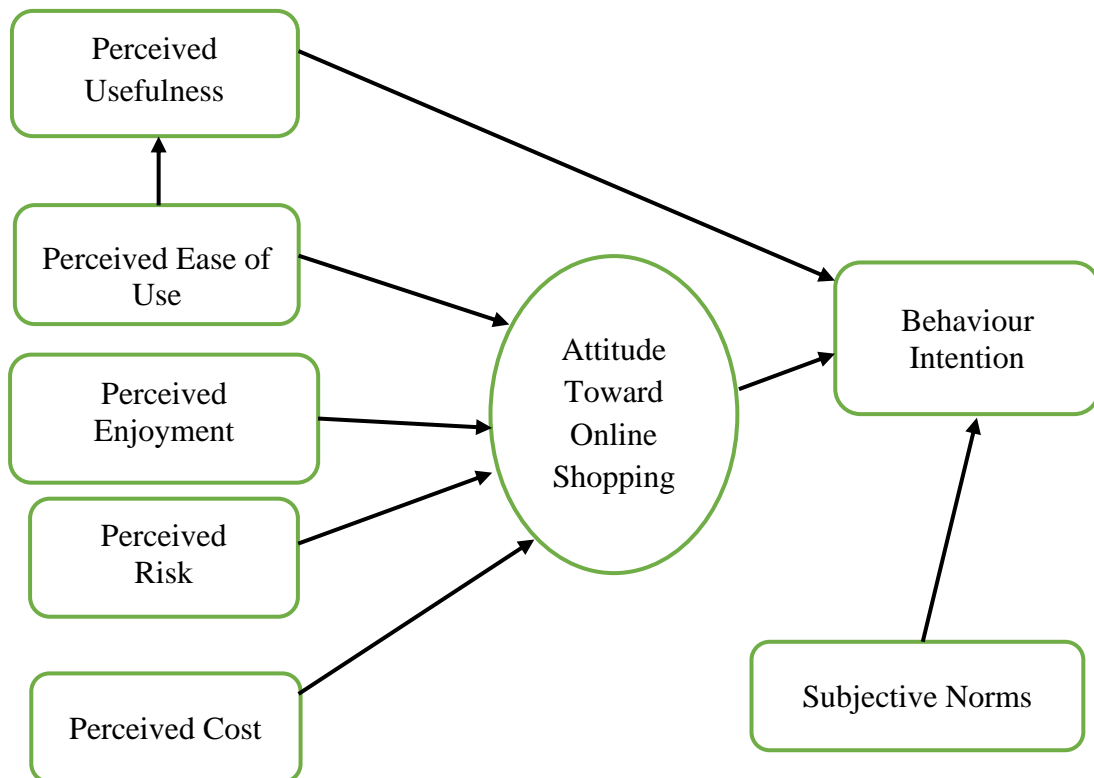


Figure 3.1: Research Model

3.1.1 Perceived Usefulness

Perceived usefulness (PU), as per TAM, is the extent to which an individual thinks that utilizing a specific technology will improve his or her ability to accomplish their work (Jahangir and Begum, 2008). PU is the term used to describe how consumers feel about the results of their interactions with new technology (Davis et al., 1992). The level of confidence that the usage of technology will benefit people is characterized by perceived usefulness (Parammaeswari and Sarno, 2020).

Online businesses rely on their customers' ability to shop online. Customers must believe that online buying will increase their performance and efficiency, as well as have a beneficial impact on the overall purchasing process (Zhou et al., 2007). If the rational and affective components are at odds, the outcome of the continuing choice process is determined by the respective strengths of the two components. Consumers are more likely to purchase a product if its use is viewed as beneficial regardless of their dissatisfaction with its previous use (Bhattacharjee, 2001).

Several past studies have shown that PU has a major impact in adjudicating the adoption process of innovation like online shopping (Tan and Teo, 2000). Thus, the following hypotheses were formulated:

H1: Perceived Usefulness has a significantly positive influence on attitude toward online shopping.

H2: Perceived Usefulness has a significantly positive influence on behaviour intention toward online shopping.

3.1.2 Perceived Ease of Use

Perceived Ease of Use (PEOU) refers to how much an individual thinks that utilizing a certain system would be effortless from a physical or mental standpoint (Davis, 1985). Consumers' perception of any new product or service as superior to alternatives as well as not challenging to learn, comprehend and use refers to PEOU, which measures how innovative a product or service is viewed (Rogers, 1983).

Consumers are more likely to adopt simple, straightforward, and less complex technologies than more complicated ones for online shopping (Selamat et al., 2009). Consumer intend to adopt new technology like online shopping if the use of online

shopping is more than the effort it requires to use it and perceives it as useful (Preeti et al., 2016).

Online shopping is providing consumers with products and services that were not convenient in traditional shopping making it more useful to consumers' perceptions leading to a positive attitude toward online shopping (Uloko and Elijah, 2021). Thus, the following hypotheses were formulated:

H3: Perceived Ease of Use has a significantly positive influence on Perceived Usefulness.

H4: Perceived Ease of Use has a significantly positive influence on attitude toward online shopping.

3.1.3 Perceived Enjoyment

Hedonistic shoppers that engage in experimental purchasing habits look for knowledge as well as online shopping excitement, pleasure, joy, thrill, distraction, fancy, etc. and their hedonic values are mostly connected to the fun, thrill, and enjoyment of action, which are commonly acknowledged as important factors in consumer purchases (Monsuwé et al., 2004; Scarpi et al., 2014).

The term "perceived enjoyment" describes the idea that a person will feel sudden pleasure after using a platform or piece of technology. A user will be inspired to utilize a system or piece of technology if it excites them to use it (Preeti et al., 2016).

When shopping online via social media platform individual find it fun to use, provide entertainment, inspire creativity, ease users' stressed-out lives, provide a relaxing effect, help to avoid feeling bad and their level of satisfaction also increases (Kamis and Ramlee, 2021).

When a consumer is having fun and is happy or satisfied while purchasing online, he or she is more likely to order a similar purchase in near future (Ulaan et al., 2016). Consumers need to enjoy browsing various products online. Instead of satisfaction from completing an online buying job, enjoyment comes from the excitement and playfulness of the interaction which might be from bought product or the process involved in buying (Childers et al., 2001).

Perceived Enjoyment determines an important role as it is a motivating factor in online shopping and a crucial element to predict the adoption of any new and innovative

technology like online shopping by consumers (Mandilas et al., 2013). Thus, the following hypothesis was formulated:

H5: Perceived Enjoyment has a significantly positive influence on attitude toward online shopping.

3.1.4 Perceived Risk

The perceived risk conceptualizes the behaviour of consumers entailing the risk in that decisions consumers make will have effects that they cannot predict with any degree of accuracy, and at least a portion of it is bound to be undesirable and unpleasant (Bauer, 1960). Only subjective risk is considered perceived whereas objective or actual world risk is not considered in perceived risk. The customer's point of view which shows they have to tolerate some losses to achieve certain goals is known as perceived risk (Jain et al., 2014).

One of the main driving factors of online shopping is perceived risk, that exerts a big influence on other elements including attitude toward online shopping, pleasure, trust, enjoyment, and repeat purchases thus acting as big challenges to the company running e-commerce business (Amirtha et al., 2021). A central element in behaviour of the customer, perceived risk is frequently employed to describe the perception of risk by the consumer as well as their risk mitigating strategies involving transactions. So, higher perceived risk means a low probability of buying or repurchasing by customers (Benazić et al., 2015).

Customers worry that their personal information may be compromised while purchasing online, which is a burden for online retail firms. As a result, the company must offer strong security and data privacy protection measures to win customers' trust (Miyazaki and Fernandez, 2001). Thus, the following hypothesis was formulated:

H6: Perceived risk has a significantly negative influence on attitude toward online shopping.

3.1.5 Perceived Cost

The unit cost (direct and indirect cost that are presumed as independent of each other) that a customer believes he/she would pay by engaging in a certain activity is known as the perceived cost of that particular activity. Consumer overheads like delivery cost, internet costs, etc. make the perceived cost different from the real costs involved to enable

a specific consumption (Neuburger, 1971). Perceived cost in online shopping includes e-shopping value, information searching cost, moral hazard cost, and rewards (Benazić et al., 2015).

As to the complexity of e-commerce, customers find risk while shopping online, their overheads are increased and influence their attitude toward online shopping. Perceived Cost has a significant relation to perceived value and it directly influences the intention of consumers toward online shopping and their repurchase intention (Wu et al., 2014). Thus, the following hypothesis was formulated:

H7: Perceived Cost has a significantly positive influence on attitude toward online shopping.

3.1.6 Attitude Toward Online Shopping

An individual's attitude is their internal sensation that expresses whether they like or detest anything, such as a product or service which also depends on how many individual values the action or activity positively or negatively (Albarracín et al., 2001).

A generic phrase used to describe and identify certain conduct is an attitude for example, attraction, liking, and behavioural intention are concepts that may be summed up as attitudes and explain things like customer loyalty, brand insight, and perceptions about products (Fishbein and Ajzen, 1975).

Several research has proposed that attitudes are an individual's positive as well as negative judgments, sentiments, and propensities for action toward a certain thing or concept with time (Mbabazi, 2018). Attitude toward online shopping is influenced by various other factors like perceived usefulness, perceived ease of use, perceived enjoyment, perceived risk, and perceived cost. Nepalese consumers were found to have a positive attitude toward shopping online with an increase in the rate of use of the internet (Parajuli et al., 2021). Thus, the following hypothesis was formulated:

H8: Attitude toward online shopping has a significantly positive influence on behaviour intention.

3.1.7 Subjective Norms

Subjective norms are the notion that a significant group or individual would acclaim and accept a specific action and the perceived social influence from another individual to act

in a specific way and the urge to agree with other people (friends, family, colleagues, etc.) opinions are what constitute subjective norms (Ham et al., 2015).

In the beginning period of any new technology when an individual does not have more knowledge, subjective norms play a vital role in the adoption of such technology (Taylor and Todd, 1995). Subjective norms are found to be having a significantly positive influence on individual intentional behaviour toward online shopping (Moshref Javadi et al., 2012). Thus, the following hypothesis was formulated:

H9: Subjective Norms have a significantly positive influence on behaviour intention.

3.2 Methodology of Research

This research used a quantitative survey study approach to analyze the perceived behaviour and acceptance of online shopping using TAM2 structure with the inclusion of some external variables. The processes involved in the research are shown in Figure 4.

50 survey questionnaire was developed in three parts: the first part containing 5 questions related to demographic data, the second part containing 7 questions related to the previous shopping experience, and the third part of questionnaire containing 38 questions that help to analyze the online shopping acceptance consisting of 8 constructs or latent variables PU, PEOU, PE, PR, PC, ATT, SN and BI of Extended TAM that is collected using 5-step Likert's scale. 5-step Likert consists of 5 categories of answers (5: "Strongly agree", 4: "Agree", 3: "Neutral", 2: "Disagree" and 1: "Strongly disagree"), ordered in the correct order.

The reliability analysis was done using Statistical Package of Social Science (SPSS) software (version 26.0) and after structured equation modeling (SEM) to measure validity, model fit, and hypothesis test was performed in Analysis of a Moment Structures (AMOS) software (version 26.0).

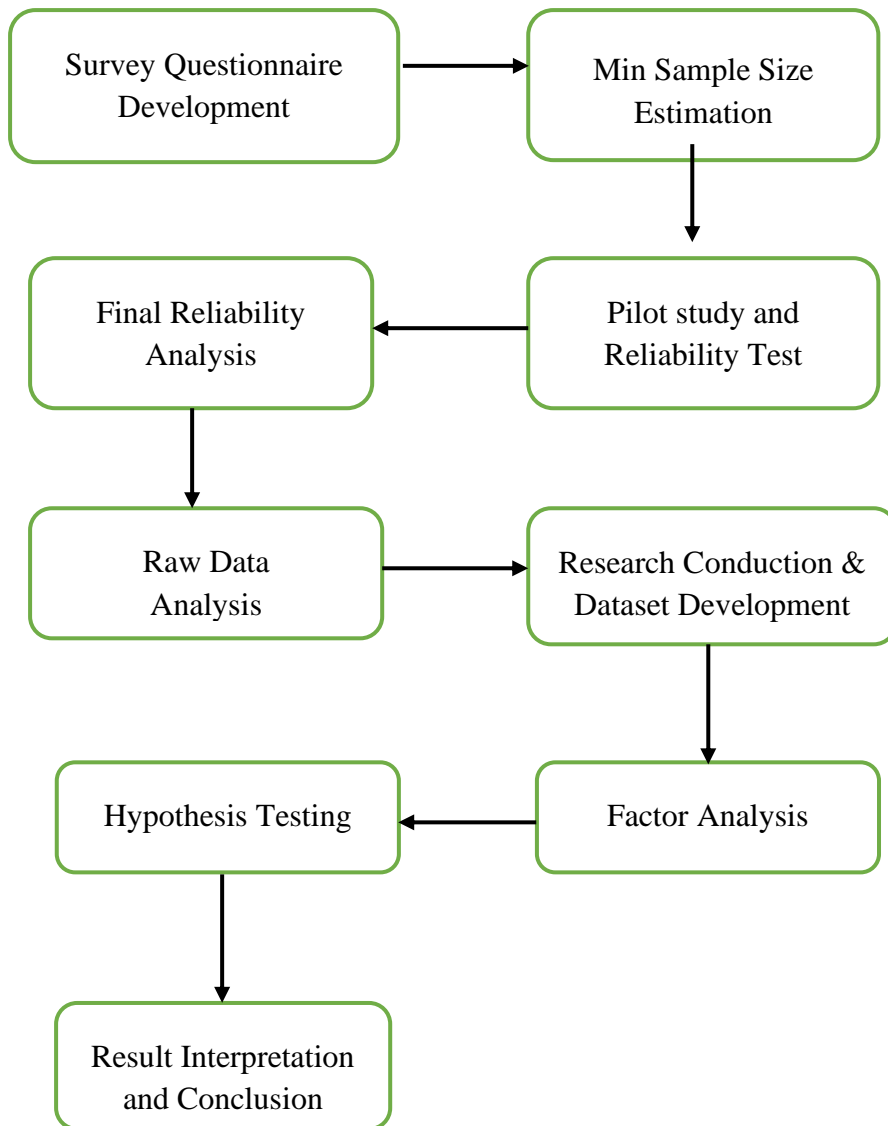


Figure 3.2: Research Methodology

3.3 Study Area and Sample Size

This research has been conducted in five districts of Nepal: Kathmandu, Bhaktapur, Lalitpur, Rupandehi, and Chitwan.

The research involves surveying randomly selected persons through purposive sampling techniques where the survey is done on random personnel from selected districts assuming the overall population of these districts have similar characteristics to the sample. The minimum sample size required for the study is calculated using equation 3.1.

$$N_{min} = \frac{z^2 * p * (1-p) * N}{e^2 * (N-1) + z^2 * p * q} \dots\dots\dots \text{Equation 3.1 (Cochran, 2017)}$$

where,

N_{\min} = minimum sample size

N = Population size

z = z-value

e = accepted level of error

p = 0.5

The confidence level is 95% for which the z-value is 1.96 and the accepted level of error is 5%. The population size is the total population of selected five districts i.e., 4,837,484 according to the Central Bureau of Statistics 2021. The minimum sample size is found to be 385.

For this study, a questionnaire was developed in Google Forms and distributed among various individuals using electronic mediums like messaging platforms, social media, and e-mail living in selected districts, and their responses were recorded in integrated Google Sheets.

CHAPTER FOUR: RESULTS AND DISCUSSION

This chapter consists of consumers' adoption of online shopping using descriptive data and analyzing various factors that affect the adoption of online shopping using Extended TAM. IBM SPSS Statistics v26.0 and IBM SPSS AMOS Graphics v26 were used for analyzing the data and carrying out Structural Equation Modelling (SEM). The data for the Likert Scale for all the indicators were coded as (“Strongly agree”:5, “Agree”: 4, “Neutral”: 3, “Disagree”: 2, and “Strongly disagree”: 1) except for PE_4 which was negatively-keyed items so reverse coding was done.

4.1 Feasibility Analysis

A pilot study among 50 individuals was conducted through google forms where the response of 39 individuals was recorded and analyzed to obtain the reliability test of the questionnaire.

4.1.1 Demographic Data for the pilot study

The demographic data of the pilot study conducted are shown in the table 4.1:

Table 4.1: Demographic data of the pilot study

Characteristics	Answer	Frequency	Percentage (%)
Age group	Under 18	4	10.3%
	18-24	8	20.5%
	25-34	18	46.2%
	35-45	6	15.4%
	Above 45	3	7.7%
Gender	Male	27	69.2%
	Female	12	30.8%
Annual family income	Below 4 Lakhs	6	15.4%
	4-7 lakhs	4	10.3%
	7-10 lakhs	9	23.1%
	10-15 lakhs	10	25.6%

	Above 15 lakhs	10	25.6%
Education level	SLC/SEE	1	2.6%
	+2/Diploma	11	28.2%
	Bachelor	16	41%
	Masters	9	23.1%
	PhD.	1	2.6%
	Others	1	2.6%
Access to good internet	Yes	33	84.6%
	No	3	7.7%
	Maybe	3	7.7%
Shopped online before	Yes	36	92.3%
	No	3	7.7%

4.1.2 Previous Online Shopping Experience Data for the pilot study

Out of 39 respondents, only 36 have done online shopping before so those 36 individuals' responses were taken for other studies. The various characteristics related to previous shopping experiences are shown in table 4.2.

Table 4.2: Previous online shopping experience data for the pilot study

Characteristics	Answer	Frequency	Percentage (%)
Time done online shopping	Around 6 months	6	16.7%
	6 to 12 months	5	13.9%
	1-2 years	9	25%
	Above 2 years	16	44.4%
Platform used to shop online	Website	11	30.6%
	Mobile App	18	50%
	Social Media	7	19.4%

Products usually bought online	Electronics	14	38.9%
	Clothing	11	30.6%
	Grocery	3	8.63%
	Beauty Products	4	11.1%
	Others	4	11.1%
Online shopping frequency	Few times a week	4	11.1%
	Few times a month	7	19.4%
	Once at least a month	8	22.2%
	Only for special occasion	12	33.3%
	Few times a year	5	13.9%
Mostly used online store	Daraz	23	63.9%
	Sastodeal	4	11.1%
	Others	9	25%
Felt cheated before	Yes	7	19.4%
	No	20	55.6%
	Do not Know	9	25%

4.1.3 Reliability Test for pilot study data

Cronbach alpha test was done using SPSS to find the Cronbach alpha of all the variables having a 5-point Likert's scale questionnaire. Cronbach's alpha value ranges from 0 to 1, near to 1 better and cronbach alpha evaluates the internal consistency of data (Brown, 2002). The Cronbach alpha value acceptable range are >0.9 excellent, 0.8-0.89 good, 0.7-0.79 acceptable, 0.6-0.69 questionable, 0.5-0.59 poor and <0.49 unacceptable (George and Mallery, 2010). Overall Cronbach's Alpha: 0.884 which is good. The result of the reliability test is shown in table 4.3.

Table 4.3: Cronbach alpha of variables before removing outlier questions

Variables	Cronbach's Alpha	Remarks
Perceived Usefulness	0.750	Acceptable
Perceived Ease of Use	0.692	Questionable
Perceived Enjoyment	0.784	Acceptable
Perceived Risk	0.725	Acceptable
Perceived Cost	0.705	Acceptable
Attitude toward Online Shopping	0.724	Acceptable
Subjective Norms	0.747	Acceptable
Behaviour Intention	0.888	Good

Table 4.4: Item total statistics data

Indicators	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
BI_1	76.69	151.190	0.518	0.879
BI_2	77.03	148.999	0.588	0.877
BI_3	76.94	149.311	0.615	0.877
PU_1	76.89	153.930	0.396	0.881
PU_2	77.08	151.507	0.578	0.878
PU_3	76.75	152.536	0.516	0.879
PU_4	77.17	151.114	0.505	0.879
PU_5	76.58	151.564	0.484	0.879
PEOU_1	76.86	154.523	0.403	0.881
PEOU_3	76.67	148.229	0.588	0.877
PEOU_4	77.25	152.421	0.419	0.880
PEOU_5	77.14	156.237	0.280	0.883

PEOU_6	77.06	157.254	0.244	0.883
PE_1	76.81	150.847	0.511	0.879
PE_2	76.69	146.504	0.676	0.875
PE_3	77.06	152.054	0.561	0.878
PE_4	77.22	151.549	0.518	0.879
PR_1	77.06	159.425	0.126	0.885
PR_2	76.94	153.254	0.487	0.880
PR_3	76.94	153.311	0.335	0.882
PR_4	76.75	162.421	-0.060	0.889
PR_5	76.39	158.073	0.129	0.886
PR_6	76.11	159.587	0.065	0.888
PR_7	77.00	158.686	0.190	0.884
PR_8	77.00	155.714	0.277	0.883
PC_1	77.06	159.883	0.079	0.886
PC_2	77.00	154.114	0.432	0.880
PC_3	76.72	151.863	0.423	0.880
PC_4	77.50	160.257	0.102	0.885
PC_5	77.36	157.323	0.236	0.884
ATT_1	76.78	155.721	0.486	0.880
ATT_2	76.97	147.913	0.673	0.876
ATT_3	76.97	149.628	0.688	0.876
ATT_4	76.78	152.635	0.519	0.879
SN_1	76.31	148.904	0.429	0.881
SN_2	75.97	150.542	0.370	0.882
SN_3	76.50	157.629	0.164	0.885

After conducting the reliability test on all variables, we find cronbach alpha of all variables. PEOU has Cronbach alpha less than 0.7 which is not acceptable. So, on removing the question PEOU_6 we get a new Cronbach alpha value for PEOU i.e., 0.709 which is acceptable.

While analyzing we find PR_4 has negative inter-item co-relation with other questions so on removing PR_4 we find the Cronbach alpha of PR significantly increased i.e., 0.769.

Thus, after doing reliability test on the pilot study data, two questions (PEOU_6 and PR_4) have been found as outlier and removed for the final study to be conducted.

Table 4.5: Cronbach alpha of variables after removing outlier indicators

Variables	Cronbach's Alpha	Remarks
Perceived Usefulness	0.750	Acceptable
Perceived Ease of Use	0.709	Acceptable
Perceived Enjoyment	0.784	Acceptable
Perceived Risk	0.769	Acceptable
Perceived Cost	0.705	Acceptable
Attitude toward Online Shopping	0.724	Acceptable
Subjective Norms	0.747	Acceptable
Behaviour Intention	0.888	Good

The Overall Cronbach's alpha after removing PEOU_6 and PR_4 is 0.889 which is good and suggests that our questionnaires are reliable. Thus, the questionnaire after removing the two outliers is used for the final study.

4.2 Demographic Information and Previous Shopping Experience

The final study was conducted on data obtained from 460 respondents from five districts of the study area on google forms that were distributed to participants via social media, email, and instant messaging services.

4.2.1 The Demographic Data

The demographic data of respondents used in the final study is shown in Table 4.6.

Table 4.6: - Demographic data for final study

Characteristics	Answer	Frequency	Percentage (%)
Age group	Under 18	26	5.65
	18-24	102	22.17
	25-34	234	50.87
	35-45	78	16.96
	Above 45	20	4.35
Gender	Male	284	61.74
	Female	176	38.26
Annual family income	Below 4 Lakhs	72	15.65
	4-7 lakhs	103	22.39
	7-10 lakhs	154	33.48
	10-15 lakhs	89	19.35
	Above 15 lakhs	42	9.13
Education level	SLC/SEE	22	4.78
	+2/Diploma	60	13.04
	Bachelor	234	50.87
	Masters	131	28.48
	PhD.	7	1.52
	Others	6	1.30
Access to good internet	Yes	430	93.48
	No	10	2.17
	Maybe	20	4.35

4.2.2 Pervious Shopping Experience

As shown in figure 4.1, among all participants 92.83% (427) had previously shopped online whereas 33 (7.17%) had never shopped online. For the remaining analysis, the data of 427 respondents who had previously shopped online was used.



Figure 4.1: Previous Online Shopping Exposure

Figure 4.2 shows that most participants have done online shopping for more than 1 year that shows that consumers of these districts are well aware about online shopping.



Figure 4.2: Online Shopping Duration

As shown in figure 4.3 website, mobile application and social media are used frequently platform for online shopping.

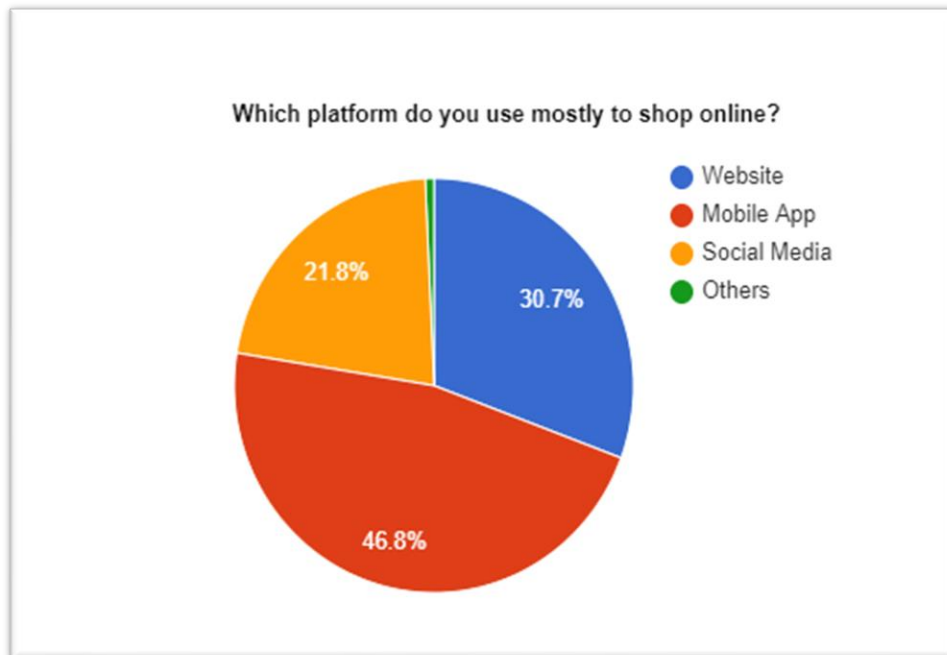


Figure 4.3: Platform Used for Online Shopping



Figure 4.4: Products Bought Online

As shown in figure 4.4, consumers are more interested to buy electronics and clothing than other items. Beauty products is bought mostly by females (95.65%). Almost two third of respondents who shopped grocery were female. Consumers below 25 years age do not prefer buying grocery. Most of the participants (91.28%) those who shop electronics were male and preferred platform to buy electronics are mobile application and website.

Most of the respondents shop online few times a year or only on special occasion which shows that the penetration of online shopping in regards of frequency of online shopping is low and online business should take necessary actions to increase the shopping frequency. Among all respondents, almost two third of participants who shop on monthly basis has annual family income of above 7 lakhs.



Figure 4.5: Online Shopping Frequency

The result suggests that Daraz is the most used platform in selected districts and Sastodeal is mostly preferred for buying beauty products and grocery.

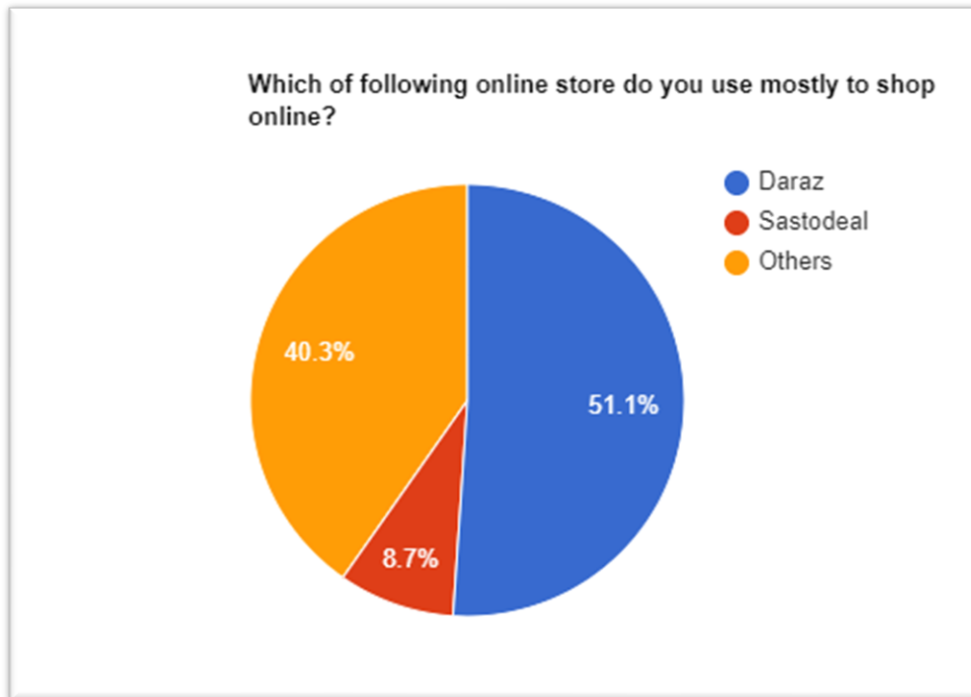


Figure 4.6: Online Store Used

As shown in figure 4.7, around 178 (41.7%) participants felt cheated while shopping online whereas 159 (37.2%) participants did not feel cheated while shopping online. 90 (21.1%) respondents did not know whether they were cheated or not during online shopping.

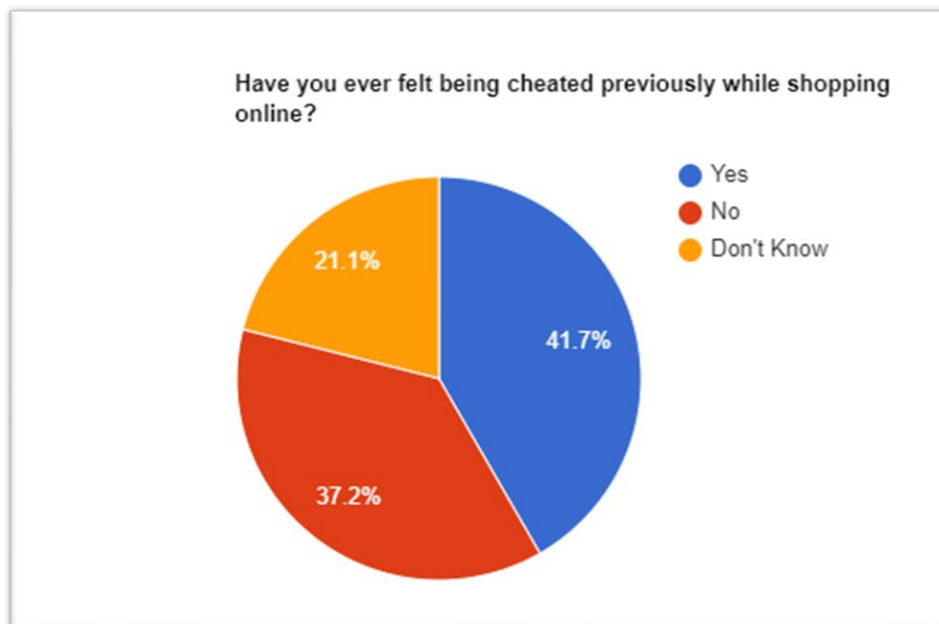


Figure 4.7: Felt Being Cheated Previously

4.3 Descriptive Statistics

Table 4.7 shows the mean, factor loadings, and standard deviation of the indicator and mean of the construct were computed in SPSS. Factor loadings show the correlation coefficient between items and their indicators. It was found that almost all the indicator means, standard deviation and factor loadings are in the tolerable range i.e. mean > 2.6, factor loadings >0.4 (Samuels, 2016; Yin et al., 2016; Nyutu et al., 2021).

Table 4.7: Mean, factor loadings, s.d. of indicator and mean of construct

Items	Indicator	Mean	Factor Loadings	Mean of Construct	SD
Perceived Usefulness	PU_1	3.83	0.644	3.77	0.68
	PU_2	3.88	0.681		0.81
	PU_3	3.63	0.662		0.81
	PU_4	3.93	0.575		0.79
	PU_5	3.60	0.65		0.80
Perceived Ease of Use	PEOU_1	3.76	0.706	3.73	0.68
	PEOU_2	3.53	0.742		0.92
	PEOU_3	3.45	0.683		0.88
	PEOU_4	3.99	0.551		0.77
	PEOU_5	3.93	0.526		0.75
Perceived Enjoyment	PE_1	3.75	0.701	3.79	0.75
	PE_2	3.70	0.678		0.88
	PE_3	3.90	0.766		0.78
	PE_4	3.81	0.63		0.85
	PR_1	4.00	0.449		0.60
	PR_2	4.13	0.556		0.64
	PR_3	3.94	0.593		0.78

Perceived Risk	PR_5	3.57	0.694	3.87	0.92
	PR_6	3.62	0.576		0.89
	PR_7	4.09	0.563		0.72
	PR_8	3.76	0.447		0.87
Perceived Cost	PC_1	4.18	0.483	4.14	0.56
	PC_2	3.95	0.787		0.78
	PC_3	3.90	0.598		0.80
	PC_4	4.27	0.508		0.68
	PC_5	4.40	0.486		0.69
Attitude Toward Online Shopping	ATT_1	3.80	0.727	3.81	0.61
	ATT_2	3.88	0.713		0.67
	ATT_3	3.83	0.59		0.72
	ATT_4	3.74	0.701		0.74
Subjective Norms	SN_1	3.21	0.689	3.13	0.92
	SN_2	2.74	0.787		1.00
	SN_3	3.43	0.645		1.01
Behaviour Intention	BI_1	3.82	0.725	3.83	0.65
	BI_2	3.86	0.759		0.80
	BI_3	3.82	0.762		0.79

4.4 Measurement Model

4.4.1 Measurement Model Fitness Test

The reliability and Validity of the model are tested in the measurement model. All the indicators and variables of the research model need to pass the reliability and validity test for the data to be allowed for further analysis of the model. CFA was performed to examine how effectively the indicators measure the unobserved constructs and determine if constructs are different from each other. A measurement model was designed in AMOS

as shown in figure 4.8 with all the constructs covariates with each other for confirmatory factor analysis. The measurement model was analyzed to get a good model fit and the resulting Goodness of Fit (GOF) indices are shown in the table. The GOF indices of the model were interpreted as per new Cut-off criteria by Hu and Bentler (1999).

Table 4.8: Cut-off criteria of goodness of fit indices (GOF) by Hu and Bentler (1999)

GOF Measures	Terrible	Acceptable	Excellent
CMIN/DF	> 5	> 3	> 1
CFI	<0.90	<0.95	>0.95
SRMR	>0.10	>0.08	<0.08
RMSEA	>0.08	>0.06	<0.06
PClose	<0.01	<0.05	>0.05

Table 4.9: GOF indices measures of measurement model

GOF Measures	Threshold	Estimate	Remarks
CMIN	-	1065.654	
DF	-	553	
CMIN/DF	Between 1 and 3	1.927	Excellent
CFI	>0.9	0.902	Acceptable
SRMR	<0.08	0.056	Excellent
RMSESA	<0.06	0.047	Excellent
PClose	>0.05	0.905	Excellent

As the GOF indices values of the measurement are within acceptable range so the research data yielded a good fit meaning that the data collected represents population as a whole.

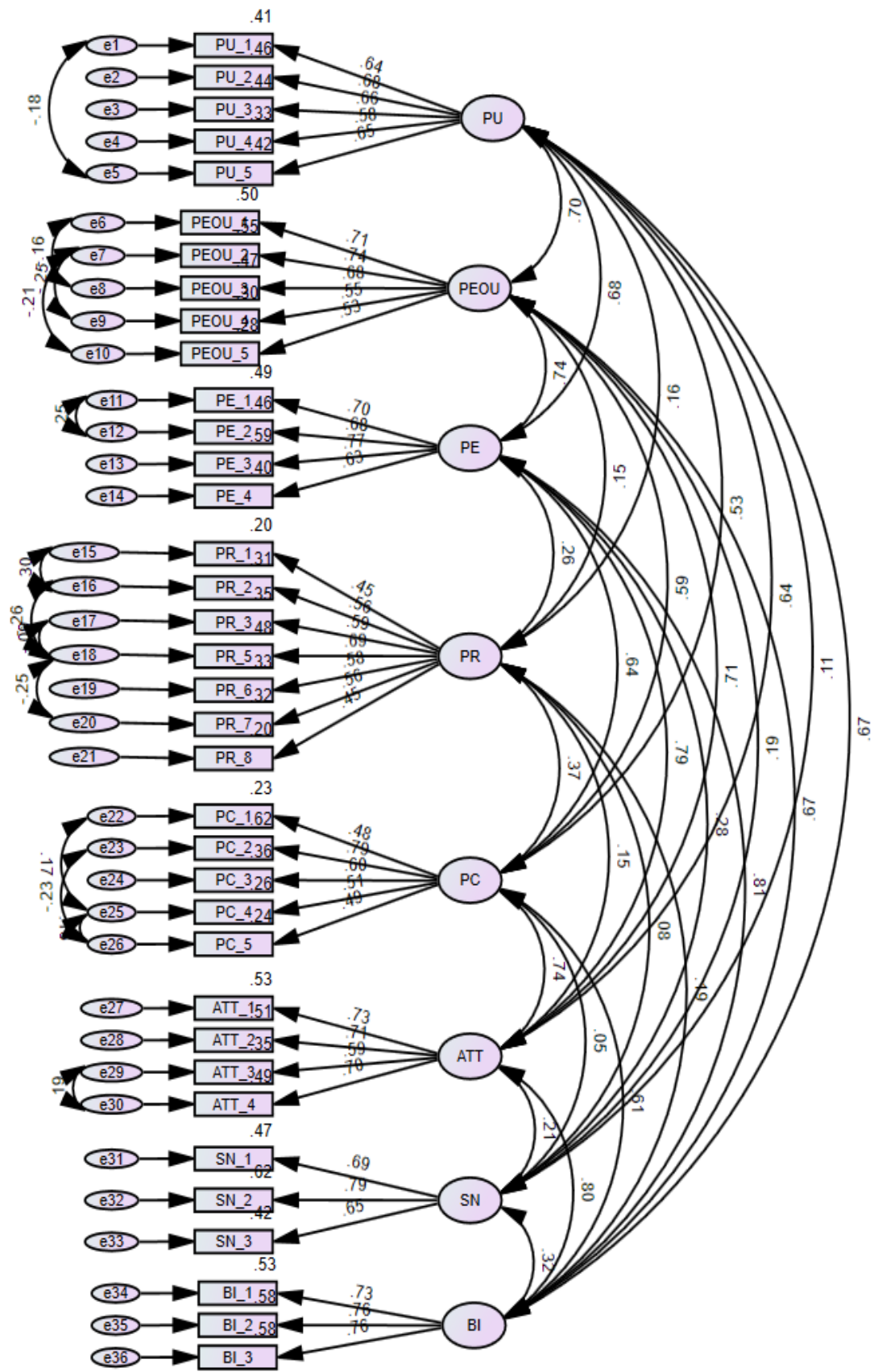


Figure 4.8: Measurement Model Constructed in AMOS

4.4.2 Reliability and Validity

Cronbach's Alpha and Composite Reliability was determined to assess the reliability of the construct. The Cronbach's alpha and composite reliability above 0.70 is termed acceptable (Hair et al., 2010). Overall Cronbach Alpha is 0.901 which is in the excellent range. Cronbach's alpha was computed using SPSS and composite reliability using AMOS. The results of reliability are tabulated in Table 4.10.

Table 4.10: Reliability measures of measurement model

Variables	Cronbach's Alpha	CR	Remarks
PU	0.769	0.779	Acceptable
PEOU	0.746	0.780	Acceptable
PE	0.798	0.789	Acceptable
PR	0.740	0.758	Acceptable
PC	0.723	0.713	Acceptable
ATT	0.786	0.779	Acceptable
SN	0.747	0.751	Acceptable
BI	0.788	0.793	Acceptable

The Average Variance Extracted (AVE) for all the constructs PU, PEOU, PE, PR, PC, ATT, SN and BI are 0.414, 0.419, 0.484, 0.313, 0.341, 0.469, 0.503 and 0.560 respectively. The convergent validity of the construct is acceptable if CR > 0.6, model fit indices are acceptable and Cronbach alpha > 0.70 but AVE < 0.5 (Fornell and Larcker, 1981; Lam, 2012) and reliability could be measured only by CR as AVE is strict often (Malholtra and Dash, 2016). The factor loadings > 0.40 are set as threshold points for all the indicators and their loading with constructs. (Matsunaga, 2010).

Discriminant Validity of construct is measured using Heterotrait-Monotrait (HTMT) Ratio, HTMT < 0.85 shows an establishment of strict discriminant validity between the constructs of the measurement model. HTMT is reliable and better as it demonstrates greater specificity as well as sensitivity rates than other discriminant validity measures like Fornell and Larcker, cross-loading results, etc. (Henseler, 2015). All the values in

HTMT analysis are shown in Table 4.11 are below the threshold region so the model passes the discriminant validity test.

Table 4.11 Heterotrait-Monotrait (HTMT) Ratio

	PU	PEOU	PE	PR	PC	ATT	SN	BI
PU								
PEOU	0.766							
PE	0.682	0.760						
PR	0.191	0.205	0.265					
PC	0.505	0.592	0.591	0.437				
ATT	0.634	0.743	0.778	0.168	0.659			
SN	0.112	0.186	0.290	0.104	0.033	0.244		
BI	0.680	0.698	0.800	0.229	0.565	0.796	0.315	

4.5 Structural Model

4.5.1 Structural Model Fitness Test

The discrepancy or variance between the sample or observed and model-implied data is calculated using goodness of fit (GOF) indices. CMIN/DF, CFI, SRMR, RMSEA and PClose are considered for this research study as goodness of fit indices. AMOS was used to generate the structural model as shown in figure 4.9 and GOF indices were determined. Most of the GOF indices of the structural model were in the excellent zone of Hu and Bentler (1999) cutoff criteria except CFI which is very near to threshold level showing that the hypothetical model and sample data have an acceptable fit. The GOF indices measures are as shown in Table 4.12.

Table 4.12 GOF indices measures of structural model

GOF Measures	Threshold	Estimate	Remarks
CMIN	-	1100.018	
DF	-	565	
CMIN/DF	Between 1 and 3	1.947	Excellent
CFI	>0.9	0.898	Near Threshold
SRMR	<0.08	0.064	Excellent
RMSEA	<0.06	0.047	Excellent
PClose	>0.05	0.870	Excellent

4.5.2 Predictive Relevance

The structural model predictive relevance is calculated by coefficient of determination i.e., R^2 of the endogenous latent variables and found as shown in Table 4.13. The R^2 was 0.637 for PU, which shows that 63.7% variance in PU is accounted for by PEOU. Similarly, the R^2 for ATT was 0.793 indicating that 79.3% variance in ATT is accounted for by PU, PEOU, PE, PC, and PR. And, R^2 of BI was 0.731 meaning PU, ATT, and SN account for 73.1% of the variance in BI. Thus, it is concluded that all the endogenous constructs have a good correlation with their exogenous constructs.

Table 4.13: R^2 of the endogenous variables

Construct	R^2
Perceived Usefulness	0.637
Attitude Towards Online Shopping	0.793
Behavioural Intention	0.731

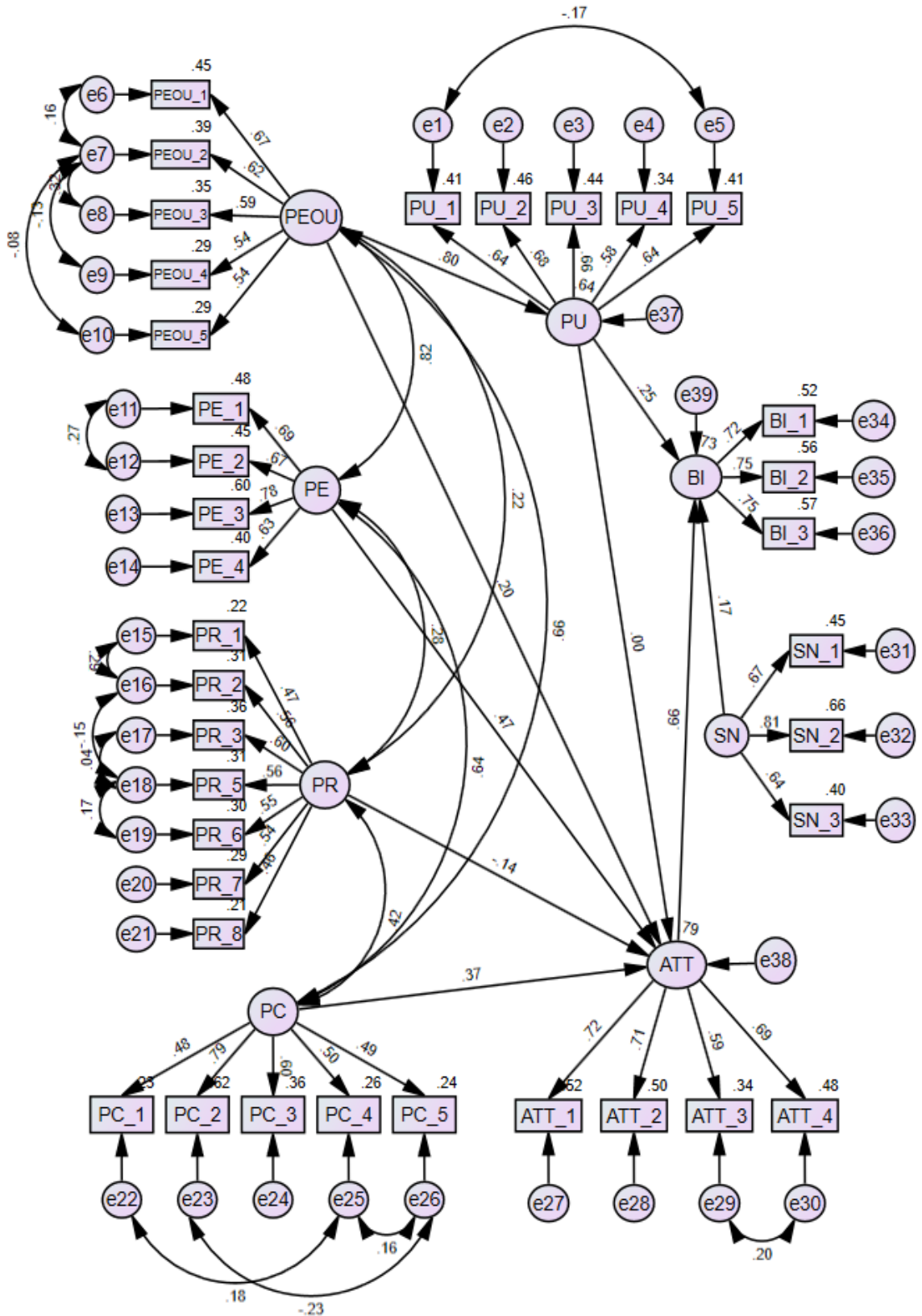


Figure 4.9: SEM Model Constructed in AMOS

4.5.3 Hypothesis Testing

Multiple regression techniques were used for testing the hypotheses using AMOS v26 and testing was done as one-tailed hypothesis testing. The null hypothesis is rejected and alternate or proposed hypothesis is supported when $\beta \neq 0$, $p/2 < 0.05$ and $t \text{ value} > 1.657$ (when β is negative, $t \text{ value} < -1.657$) (Hair Jr. et al., 2017). The standardized path coefficient (β), t-value, p-value, and p/2 value obtained from AMOS along with decision remarks are shown in Table 4.14. Out of 9 Hypotheses, H1 and H4 were not supported, and the rest 7 hypotheses were supported.

Table 4.14: Results of path analysis of structural model

H	Relationship	β	t-value	p	p/2	Remarks
H1	ATT <--- PU	.003	0.027	0.979	0.4895	Not Supported
H2	BI < --- PU	.245	3.528	< 0.001	<0.001	Supported***
H3	PU < --- PEOU	.798	9.77	<0.001	<0.001	Supported***
H4	ATT < --- PEOU	.196	1.208	0.227	0.1135	Not Supported
H5	ATT < --- PE	.465	4.105	<0.001	<0.001	Supported***
H6	ATT < --- PR	-.136	-2.473	0.013	<0.0065	Supported**
H7	ATT < --- PC	.372	4.321	<0.001	<0.001	Supported***
H8	BI < --- ATT	.660	8.419	<0.001	<0.001	Supported***
H9	BI < --- SN	.172	3.771	<0.001	<0.001	Supported***

Note: significant at *p < 0.05; **p < 0.01; ***p < 0.001

As per the finding of the research, perceived usefulness and perceived ease of use were found to have no statistical significance to attitude toward online shopping. However, it is found that perceived ease of use has a significantly positive influence on perceived usefulness, and perceived usefulness too has a significantly positive influence on behavior

intention. Perceived Enjoyment and Perceived Cost were found to positively influence attitudes toward online shopping whereas the perceived risk was found to negatively influence attitudes toward online shopping. Additionally, attitudes toward online shopping and subjective norms have a significant positive influence on behaviour and intention to shop online.

4.6 Demographics and Previous Shopping Experience Influence

For the study of how demographics and previous shopping experience influence the attitude toward online shopping and behaviour intention average of ATT and BI is taken as a measure for each indicator. Relevant factors with a minimum of 20 responses from each group are considered for this study. Table 4.15 shows demographics and previous shopping experience influence on attitude and behaviour intention to shop online.

Table 4.15: Demographics and previous shopping experience influence on attitude and behaviour intention to shop online

Particulars	Grouping	Average of ATT	Average of BI
Age Group	Under 18	4.05	4.08
	18-25	3.82	3.91
	25-34	3.80	3.78
	34-45	3.86	3.90
	Above 45	3.25	3.38
Gender	Male	3.82	3.85
	Female	3.80	3.81
Annual Family Income	Below 4 lakhs	3.72	3.63
	4-7 lakhs	3.77	3.77
	7-10 lakhs	3.83	3.83
	10-15 lakhs	3.88	3.88
	Above 15 lakhs	3.85	3.82

Online Shopping Duration	Around 6 months	3.67	3.60
	6-12 months	3.82	3.76
	1-2 years	3.78	3.83
	Above 2 years	3.85	3.89
Felt Cheated	Yes	3.67	3.72
	No	3.95	3.95
	Maybe	3.84	3.85

The study shows that the participants under 18 years of age have the best attitude and behaviour intention toward online shopping whereas participants above 45 years have the worst. Gender, as well as annual family income, shows no significant difference in attitude and behaviour intention toward online shopping.

Those who have shopped online for around 6 months have slightly lower attitudes and behaviour intentions toward online shopping than those who have shopped for more than 6 months. Additionally, participants who felt cheated previously during online shopping have lower attitudes and behaviour intentions toward online shopping than those who did not feel being cheated and who did not know whether they were being cheated or not.

CHAPTER FIVE: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

The study shows that consumers above 45 years of age have a slightly lower acceptance of online shopping than other age groups whereas on gender and annual family income basis the acceptance is almost similar.

The result from the extended technology acceptance model revealed that perceived cost and perceived enjoyment have a significantly positive influence on attitude toward online shopping, perceived usefulness and perceived ease of use have no significant influence on attitude toward online shopping whereas perceived risk has a significantly negative influence on attitude toward online shopping. This shows that acceptance of online shopping would increase if consumers enjoy online shopping and provided cost benefits in online shopping. Similarly, to increase acceptance of online shopping in Nepal risk associated factors related to online shopping need to be reduced.

Nepalese consumers who have started online shopping for around 6 months have slightly low adoption than those who have shopped for more than 6 months. Consumers who have felt cheated in their previous encounters with online shopping experiences tend to accept online shopping at a lower level than others who did not feel the same way. Nepalese consumers' intention to shop online is influenced by family, friends, and colleagues as well as their attitude toward online shopping and the usefulness of online shopping.

5.2 Recommendations

This research may be broadened further to uncover other external variables affecting TAM in the context of online shopping as well as any other relevant fields. This research is basically conducted in five districts of Nepal and generalizes the finding for the whole of Nepal by the means of the purposive sampling technique. So, to increase the likelihood that the results would be applicable to a wide range of situations, the future researcher should include participants from various areas.

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APPENDIX I: QUESTIONNAIRE FOR SURVEY

Section I: Demographic Information and Previous Shopping Experience

1. What is your age group?
 - a. Under 18
 - b. 18-24
 - c. 25-34
 - d. 34-45
 - e. Above 45
2. What is your gender?
 - a. Male
 - b. Female
 - c. Other
3. What is annual income of your family (in NPR)?
 - a. Below 4 lakhs
 - b. 4-7 lakhs
 - c. 7-10 lakhs
 - d. 10-15 lakhs
 - e. Above 15 lakhs
4. What is your education level?
 - a. SLC/SEE
 - b. +2/Diploma
 - c. Bachelor
 - d. Masters
 - e. PhD.
 - f. Others
5. Do you have access to good internet service?
 - a. Yes
 - b. No
 - c. Maybe
6. Have you shopped online before?
 - a. Yes
 - b. No

7. How long have you been online shopping?
 - a. Around 6 months
 - b. 6 to 12 months
 - c. 1-2 years
 - d. Above 2 years
8. Which platform do you use mostly to shop online?
 - a. Website
 - b. Mobile App
 - c. Social Media
 - d. Others
9. What kinds of product do you usually buy online?
 - a. Electronics
 - b. Clothing
 - c. Grocery
 - d. Beauty Products
 - e. Others
10. What is your online shopping frequency?
 - a. Few times a week
 - b. Few times a month
 - c. Once at least a month
 - d. Only for special occasion
 - e. Few times a year
11. Which of the following online store do you use mostly to buy products?
 - a. Daraz
 - b. Sastodeal
 - c. Others
12. Have you ever felt being cheated previously while shopping online?
 - a. Yes
 - b. No
 - c. Do not Know

Section II: Please select options indicating to which degree you agree or disagree with each of the following statements ranked in order 5: Strongly Agree, 4: Agree, 3: Neutral, 2: Agree, and 1: Strongly Disagree.

Variables	Items	Questions	References
Perceived Usefulness (PU)	PU_1	Getting to where I shop is hassle and online shopping saves me from chaos of traffic.	(Moshref Javadi et al., 2012)
	PU_2	Online shopping saves time required to buy products.	(Aref and Okasha, 2020)
	PU_3	Online shopping increases my productivity and efficiency while searching and browsing products.	(Jain et al., 2014)
	PU_4	Online store is always open so online shopping can be done 24/7.	(Järveläinen, 2006)
	PU_5	The advantages of online shopping outweigh the disadvantages.	
Perceived Ease of Use (PEOU)	PEOU_1	Online ordering layout is easy and convenient.	(Jain et al., 2014)
	PEOU_2	Detailed information of product is available while shopping online.	(Aref and Okasha, 2020)
	PEOU_3	Online products have got users/experts reviews making it easy to decide	(Moshref Javadi et al., 2012)
	PEOU_4	There is no embarrassment if I don't buy online.	
	PEOU_5	I can take as much time as I want to decide in online shopping.	
	PEOU_6	Online shopping is more convenient due to COVID pandemic.	(Ha et al., 2021)
	PE_1	I have fun while purchasing products online.	(Moshref Javadi et al., 2012)

Perceived Enjoyment (PE)	PE_2	I think buying online is enjoyable and pleasure process.	(Jain et al., 2014)
	PE_3	I enjoy using new technology like online shopping.	
	PE_4	I dislike online shopping.	
Perceived Risk (PR)	PR_1	Goods delivered in online shopping may be damaged during transportation due to mishandling.	(Aref and Okasha, 2020)
	PR_2	Quality of products purchased may not be good/guaranteed as needed.	
	PR_3	There is risk of receiving products late in online shopping	(Jain et al., 2014)
	PR_4	There are chances of being cheated in online shopping	
	PR_5	Home Delivery by a stranger may not be safe.	
	PR_6	I feel that my personal information may be misused if I shop online.	(Aref and Okasha, 2020)
	PR_7	I cannot get to feel/test the product physically when I shop online	(Moshref Javadi et al., 2012)
	PR_8	If I shop online, I cannot wait till the product arrives.	
Perceived Cost (PC)	PC_1	Product Price is important to me when I shop online.	(Li and Li, 2011)
	PC_2	Online shopping provides easy price comparison	(Moshref Javadi et al., 2012)
	PC_3	I like to check prices at different online and offline store before buying online.	(Li and Li, 2011)
	PC_4	I like different offers, discount and cash-back online shopping provides.	(Moshref Javadi et al., 2012)
	PC_5	I do not like to be charged for shipping/delivery when I shop online.	

Attitude Toward Online Shopping (ATT)	ATT_1	I think positively about using online shopping to buy products or services	(Aref and Okasha, 2020)
	ATT_2	Online shopping is a positive tool to buy products or services	
	ATT_3	Using online shopping for buying products or services is a wise idea	
	ATT_4	Online shopping is worth to use in buying products.	
Subjective Norms (SN)	SN_1	Most people who are important to me thinks I should use online shopping to buy products or services.	(Mbabazi, 2018)
	SN_2	I feel under social pressure to shop online	
	SN_3	My family member's/friend's opinion matters a lot to me in shopping online.	
Behavioural Intention (BI)	BI_1	I intend to continue using online shopping to buy products or services.	
	BI_2	I plan to use online shopping to buy products or services on a regular basis in the future.	
	BI_3	Assuming I have access to online shopping for buying products or services, I intend to adopt it.	(Venkatesh and Davis, 2000)

APPENDIX II: PLAGIARISM REPORT

Analyzing the Adoption of Online Shopping Using Extended Technology Acceptance Model: An Empirical Study on Five Districts of Nepal

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