

CAUSAL MODEL OF FACTORS INFLUENCING SHOPPING BEHAVIOR OF GENERATION-Y

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ARTICLE INFO	ABSTRACT
Article history:	Purpose: The objective of this research was to study the variables that affect the variables that affect the
Received: January, 15 th 2024	online snopping benavior of Generation-1.
Accepted: March, 15 th 2024	Methods: This research was conducted using quantitative methods utilizing a questionnaire as the primary tool to collect data from 300 samples of Gen-Y group
Keywords:	descriptive statistics and structural equation model analysis.
Subjective Norms; Intention to Purchase; Shopping Behavior; Gen-Y; Online Shopping.	Results and Discussions: The results showed that the maximum mean factors were online shopping behavior (mean=5.54, SD.= .681), intention to purchase (mean=5.52, SD.= .704), and subjective norms (mean=5.19, SD.=.924), respectively. The results of casual model analysis found that intention to purchase, and subjective norms affected the online shopping behavior of Y Gen consumers with statistical significance. However, the controllability factor was not statistically significant.
PREREOUSTEREDY	Research Implications: Therefore, consumers' perceptions of using technology through social media purchases are seemingly increasing. Accordingly, entrepreneurs in the e-market should use big data to analyze consumer behavior, communicate with consumers, and publicize information efficiently. Consumer groups want to try new things and challenges, and like using a convenient internet to save time, searching products, purchase, and make transactions on one platform via social media.
OPEN DATA OPEN MATERIALS	Conclusions: The retail industry has fully entered the digital age, which is evident by the vast number of consumers who use various online platforms. Further, this trend is continuously increasing due to the constant development of modern technology to facilitate consumers and increase the efficiency of commerce. At present, changing consumer behaviors affect various activities and consumption behaviors, especially in terms of consumers spending less time purchasing products in stores and spending more time buying goods and services online using various technological means. Also, this fact tends to significantly increase e-commerce.
	Originality/Value: It could also be used to reach new target customers to provide more convenience or search for new products that could be acquired easily, even if originating from different continents to help facilitate, save time, and create tremendous business opportunities.
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MODELO CAUSAL DE FATORES QUE INFLUENCIAM O COMPORTAMENTO DE COMPRAS DA GERAÇÃO-Y

RESUMO

Objetivo: o objetivo desta pesquisa foi estudar as variáveis que afetam o comportamento de compras on-line da Geração Y.

Métodos: esta pesquisa foi realizada com métodos quantitativos, utilizando um questionário como ferramenta principal para coletar dados de 300 amostras do grupo Geração Y que usam serviços de compras on-line. As estatísticas usadas na análise de dados incluíram estatísticas descritivas e análise do modelo de equação estrutural. **Resultados e Discussões:** Os resultados mostraram que os fatores médios máximos foram o comportamento de compras on-line (média=5,54, DP = 0,681), a intenção de compra (média=5,52, DP = 0,704) e as normas subjetivas (média=5,19, DP = 0,924), respectivamente. Os resultados da análise do modelo casual constataram que a intenção de compra e as normas subjetivas afetaram o comportamento de compras on-line dos consumidores da geração Y com significância estatística. Entretanto, o fator de controlabilidade não foi estatisticamente significativo.

Implicações para a Pesquisa: Portanto, as percepções dos consumidores sobre o uso da tecnologia por meio de compras nas mídias sociais estão aparentemente aumentando. Dessa forma, os empreendedores do mercado eletrônico devem usar big data para analisar o comportamento do consumidor, comunicar-se com ele e divulgar informações de forma eficiente. Os grupos de consumidores querem experimentar coisas novas e desafios, e gostam de usar uma Internet conveniente para economizar tempo, pesquisar produtos, comprar e fazer transações em uma plataforma por meio da mídia social.

Conclusões: O setor de varejo entrou totalmente na era digital, o que é evidente pelo grande número de consumidores que usam várias plataformas on-line. Além disso, essa tendência está aumentando continuamente devido ao desenvolvimento constante da tecnologia moderna para facilitar os consumidores e aumentar a eficiência do comércio. Atualmente, as mudanças no comportamento dos consumidores afetam várias atividades e comportamentos de consumo, especialmente em termos de consumidores que passam menos tempo comprando produtos em lojas e mais tempo comprando bens e serviços on-line usando vários meios tecnológicos. Além disso, esse fato tende a aumentar significativamente o comércio eletrônico.

Originalidade/Valor: também pode ser usado para alcançar novos clientes-alvo para oferecer mais conveniência ou buscar novos produtos que possam ser adquiridos facilmente, mesmo que sejam originários de continentes diferentes, para ajudar a facilitar, economizar tempo e criar grandes oportunidades de negócios.

Palavras-chave: Normas Subjetivas, Intenção de Compra, Comportamento de compra, Geração Y, Compras On-line.

MODELO CAUSAL DE LOS FACTORES QUE INFLUYEN EN EL COMPORTAMIENTO DE COMPRA DE LA GENERACIÓN-Y

RESUMEN

Objetivo: El objetivo de esta investigación era estudiar las variables que afectan al comportamiento de compra online de la Generación Y.

Métodos: Esta investigación se llevó a cabo con métodos cuantitativos, utilizando un cuestionario como herramienta principal para recoger datos de 300 muestras del grupo de la Generación Y que utilizan servicios de compra en línea. Las estadísticas utilizadas para analizar los datos incluyeron estadísticas descriptivas y análisis de modelos de ecuaciones estructurales.

Resultados y Discusión: Los resultados mostraron que los factores de media máxima eran el comportamiento de compra en línea (media=5,54, DT = 0,681), la intención de compra (media=5,52, DT = 0,704) y las normas subjetivas (media=5,19, DT = 0,924), respectivamente. Los resultados del análisis del modelo casual revelaron que la intención de compra y las normas subjetivas afectaban al comportamiento de compra online de los consumidores de la Generación Y con significación estadística. Sin embargo, el factor controlabilidad no resultó estadísticamente significativo.

Implicaciones para la Investigación: Por lo tanto, la percepción de los consumidores sobre el uso de la tecnología a través de las redes sociales para comprar parece ir en aumento. Por ello, los empresarios de mercados electrónicos deben utilizar big data para analizar el comportamiento de los consumidores, comunicarse con ellos y difundir información de forma eficaz. Los grupos de consumidores quieren experimentar cosas nuevas y retos, y les gusta utilizar un Internet cómodo para ahorrar tiempo, buscar productos, comprar y realizar transacciones en una plataforma a través de los medios sociales.

Conclusiones: El sector minorista ha entrado de lleno en la era digital, lo que resulta evidente por el gran número de consumidores que utilizan diversas plataformas en línea. Además, esta tendencia no deja de aumentar debido al constante desarrollo de la tecnología moderna para facilitar a los consumidores y aumentar la eficacia del comercio. En la actualidad, los cambios en el comportamiento de los consumidores afectan a diversas actividades

y conductas de consumo, especialmente en lo que se refiere a que los consumidores pasan menos tiempo comprando productos en las tiendas y más tiempo comprando bienes y servicios en línea utilizando diversos medios tecnológicos. Además, este hecho tiende a incrementar significativamente el comercio electrónico. **Originalidad/Valor:** también puede utilizarse para llegar a nuevos clientes objetivo a los que ofrecer más comodidad o buscar nuevos productos que puedan adquirirse fácilmente, aunque procedan de distintos continentes, para facilitar las cosas, ahorrar tiempo y crear grandes oportunidades de negocio.

Palabras clave: Normas Subjetivas, Intención de Compra, Comportamiento de Compra, Generación Y, Compras Online.

1 INTRODUCTION

Currently, there are internet users around the world. As of 2019, there are roughly 4,536,248,808 internet users with a growth rate from 2000-2019 equal to 1,157%. In fact, Asia has the highest number of internet users regionally with about 2.3 billion users [1] (Figure 1). The use of the internet plays a role in the daily lives of all people in search of information, news, education, entertainment, buying and selling goods, making advertising media, etc. This is also true for people in Thailand based on a survey of internet usage behavior among Thai people in various dimensions to see how Thai people adapt or change their internet usage behavior each year. Such information is useful for strategic planning in the area of infrastructure or formulating government policies as well as for the private sector to be able to adjust business plans to meet the changing needs of consumers [2]. Thailand had around 47.5 million internet users in 2018, with 44.0 million people using the Line platform. Based on 2019 figures, there were an estimated 55.0 million users online who spent 949,965.41 million baht (in 2018) [3].

Figure 1



Internet users in the world by geographic regions mid-year 2019

Source: Miniwatts Marketing Group, 2019

Thailand is considered one of the principal online shopping markets in the world, and this is reflected by the volume of mobile phone ownership and internet access and is expected to expand continuously. From the Chief Operating Officer of the Shopee E-Commerce Platform in Southeast Asia, it was revealed that the online shopping business in Thailand is likely to grow since Thailand is still in the infancy of online shopping. From the collected company data, it was found that the number of shoppers in Thailand in 2018 was 12.1 million, which is predicted to increase to 13.9 million by 2021, equaling more than 20% of the country's population [2]. Based on the value of e-commerce, which is getting higher every year, it reflects a significant change in shopping attitudes. Moreover, a world-class organization like UNCTAD is also responsive to this by introducing sustainable development goals to promote e-commerce as a tool to drive the country's economy. The survey results showed that the value of ecommerce in Thailand's growth was continuously between 8-10% per year. The value in 2017 was 2.76 trillion baht, increasing from 2016 by 7.91%. In 2018, it was expected to be worth approximately 3.15 trillion baht in 2019, a growth of 14% from the previous year. As ecommerce is growing continuously, the goal to bring the Digital Economy to 25% of the country's GDP is not so distant [2].

Thailand has driven the Digital Economy Policy to drive the modern economy to comply with the policies, strategies, and projects utilized by both public and private organizations. Statistics are needed to examine consumer behavior, especially in the digital age, where big data is important to run a business. This study aims to study the variables affecting Y-Generation online shopping behavior. However, the change in consumers' purchase intention might be caused by the perceived risk of buying from the Internet. The evaluation result of knowledge and understanding about the attitude and behavior of the consumers revealed that they canceled the Internet transaction because of the perceived risk of buying from the Internet or receiving a negative impact. Verhoef and Langerak [4] clarified that consumers had a perceived risk because 1) buying from the Internet was complex, 2) the step of buying electronic products was complicated, and 3) the consumers were worried about receiving the product. The positive attitude toward online shopping was derived from the trust in the seller, which affected the purchase intention and online shopping. When consumers had a positive attitude toward online shopping, they had the purchase intention, which would affect their future purchasing behavior. A positive attitude; such as satisfaction toward the product, leads to a future repurchase [5].

From this history, it was interesting to apply a Technology Acceptance Model (TAM) in this study so that consumers can become aware of the benefits of technology. The use of technology brings benefits, and new technology is continually being developed to improve work efficiency, including the perception of consumers who use technology behavior as to whether it is difficult or easy to use. Marketers can use behavior information that reflects using information systems in online shopping in many ways. These ways include the dimensions to be used in determining the directions for development, promotion, and support to accurately respond to the needs of people/consumers, including future online business, and allowing them to plan appropriate marketing strategies.

Objectives:

- 1. to develop a structural equation model of the variables that influence the online shopping behavior of Y-Generation consumers;
- 2. to study the direct influence, Indirect influence, and the combined influence of the variables on the online shopping behavior of Y-Generation consumers.

2 LITERATURE REVIEW

2.1 INTENTION TO PURCHASE

In terms of perceived usefulness, Davis [6] presented that the Technology Acceptance Model (TAM) consists of perceived usefulness and perceived ease of use. TAM applications have spread to many organizations such as e-commerce, telemedicine, e-learning, and digital library systems [7]. Perceived usefulness means that people acknowledge that the information systems used have provided benefits if the use of newly-developed information systems will improve work efficiency. Further, such perceived behavior of consumers is identified as the difficulty or ease for consumers to behave, reflecting past experiences [8] both positively and negatively, which is credible from acceptance. Perceived Credibility arises from honesty, sincerity, and sincere attention. Further, it is considered one of the most important parts that will result in having more users and word-of-mouth promotion. In this regard, the intention of customers to buy products online Confidence is important with perceptions of benefits, influencing online shopping habits and behaviors [9]. This is consistent with Xie et al. [10], who examined consumer responses to hotel reservations online [11, 12].

Fishbein and Ajzen [13] proposed the theory of reasoning action (TRA), a model for predicting the behavior of purchase intent, which is a result of conforming to the reference group. If that person has the intention to do anything already, there is a high possibility that they will do that. However, perceived benefits influence online shopping habits by intention to purchase products as a medium. [14] This is consistent with Huda et al. [15] who has studied attitude analysis, complying with the reference group and controlling the behavior of buying intentions In which attitudes are beliefs in actions or beliefs about behavior that are amenable to that reference group. The belief is received from society, so the controlling of behavior is the driving force that leads to buying intentions and affects future buying behavior 16].

Therefore, the researcher has summarized the literature review, as shown in Table 1.

Table 1

Literature review	Likelihood of Purchase	Recommendation	Repurchase
Daneshvary and Schwer [17]	\checkmark		\checkmark
Kim & Kim [18]	\checkmark	✓	✓
Tamimi & Sebastianelli [19]	✓		
Bodapati [20]		✓	✓
Hong et al. [21]	\checkmark	\checkmark	
Alhassany & Faisal [22]	✓	✓	

Literature Review of Intention to Purchase

Source: Researchers, 2023

From the literature review, the variables of purchased Intention are the observed variables used for the research, which are:

- 1. likelihood of Purchase refers to the action that consumers are likely to buy a product or service, resulting from the intention to purchase;
 - recommendation refers to consumers who are referred by people close to them, such as relatives, friends, or colleagues who buy a product, and they have a good view of the product or service, causing the consumer to be satisfied, and giving them the purchase intention;
 - 3. re-purchase means the consumer's behavior is to buy a specific product or service repeatedly [17, 18, 19, 23].

2.2 SUBJECTIVE NORMS

One important factor that influences consumer behavior to purchase products and services is word-of-mouth. Most marketers, therefore, use methods of advertising products or services through individuals, for the said product or service to quickly reach the target [24]. Stephen Read et al. [25] noted that social pressures are arising from groups of people who influence people to behave intentionally. Whether or not the consumer or target group buys the said product or service depends on the individual. Influencing decision-making attitudes and changes in consumer behavior by using words to convince the audience to conform to the mood and feelings of the speaker [6]. Until the position or view of the listener finally changes according to the needs of the speaker [7]. Subjective Norm is proposed in the concept of the Theory of Planned Behavior by Ajzen [8] and developed from the theory of Reasoned Action by Fishbein and Ajzen [13]. The Theory of Planned Behavior explains that before the intention of doing anything, there may be a deference to the reference group before action, which influences the attitude towards behavior that will affect the intention to continue. Which, those who follow are based on reference groups that are important to them, especially one person conforming the reference group will affect the intention to do something, it does not relate to right, wrong, ethical or unethical decision-making.

Today's consumers often search for information on products and services they are interested in from other consumers by using social media, such as web boards and comment boxes. The comments between consumers are the element that most prospective consumers tend to focus on, as they represent the true features and characteristics of the product from people who have bought the product. Including some groups of consumers who tend to buy products and use services as recommended by others, especially a credible person or the person who has knowledge and expertise in a certain area. The research study of Utami [26], which studied consumer behavior, studied emotional factors, personality, and the perspective on choosing the attitude of conforming to the reference group. It found that conforming to the reference group had a positive influence on the behavior of consumers [27] It was found that the role of conformity with the reference groups in the Theory of Planned Behavior (TPB) influenced the intention to buy products. [28]

From the literature review of the Subjective Norms variable, the previous studies studied the observable variables used for research, such as:

- 1. Social Pressure to Perform (Not to), which means that an individual is more likely to act, but it depends on the surrounding society and reference people that are important to them, seeing that it is something that should be done or should not be done [14, 16, 29, 30];
 - 2. strength of each normative belief, which means that if the reference group is focused on or strong towards a particular person, they tend to have the intention to act on that behavior consistently [16, 29, 30, 31];
 - 3. motivation to comply with the referent, which means the motivation that a person can feel in any action to match the expectations of the reference group that influences them [14, 16, 29, 31];

Therefore, the researcher has summarized the review of the research, as shown in Table 2.

Table 2

Literature review	Social Pressure to Perform or Not to	Strength of each normative belief	Motivation to comply with the referent
Cheah et al. [29]	\checkmark	\checkmark	✓
Lim et al. [14]	\checkmark		✓
Cronan & Al- Rafee [16]	\checkmark	\checkmark	✓
Reyes et al. [30]	✓	✓	
Sun et al. [31]		✓	\checkmark

A literature review of Subjective norms

Source: Researchers, 2019

2.3 ONLINE SHOPPING BEHAVIOR

Behavioral attitude refers to an individual's positive or negative assessment of an individual's actions or overall feelings, either negative or negative, or anti-support for such actions. According to the theory, the attitude towards behavior affects the indirect behavior of consumers [13]. Ajzen [8] stated that attitude is a personal component that determines a person's willingness to behave in a certain way. There are 3 components of attitude, including Cognitive Component, Affective Component, and Behavior Component. In addition, one behavior is determined behavioral intention. Through predicting intention, behavior can be predicted more accurately. The intention to exercise various behaviors is the result of two components: attitude toward behavior and subjective norm. In general, a person will have the intention to display one

behavior only after assessing that the behavior has a positive effect. Moreover, such a person has the opinion that the behavior should be presented. When the attitude and conformity of the reference group are consistent, the intention to do so will occur. However, online businesses need to expand retail channels via the internet, so it is important to understand consumers' attitudes, intentions, and behaviors in terms of online shopping experiences, such as why consumers use or are reluctant to use the internet to make purchases. Consumer attitudes seem to be influential for decisions [18]. Each aspect does not influence the intention and/or buying behavior. On the other hand, intention and/or buying behavior are the result of a variety of consumer attitudes regarding a variety of issues in relationships that occur when buying products online based on a review of the relevant literature of the Online Shopping Behavior Variant. From the concept of Richard and Chebat [32], the study of consumer online shopping behavior is divided into 5 areas, which are 1) Online Cognitions 2) Emotion Online Emotions 3) Online Entertainment 4) Flow, and 5) Online Attitudes [14, 15, 32, 33, 34].

Therefore, the researcher concluded the literature review as shown in Table 3.

Table 3

Literature review	Online Cognitions	Online Emotions	Online Entertainment	Flow	Online Attitudes
Lim et al. [14]	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Huda et al. [15]	✓	✓			\checkmark
Yoon [34]	\checkmark	\checkmark	\checkmark	\checkmark	
Nikhashemi [35]				✓	

A literature review of Online shopping Behaviors

Source: Researchers, 2019

The literature review leads to the formulation of the hypothesis (Figure 2) as follows:

Hypothesis 1 (H1): Subjective Norms have a direct influence on the Intention to Purchase.

Hypothesis 2 (H2): Subjective Norms have a direct influence on Online Shopping Behavior.

Hypothesis 3 (H3): Intention to purchase has a direct influence on Online Shopping Behavior.

Figure 2

Conceptual framework Subjective Norms H1 H1 H1 H1 H3 Online Shopping Behavior Source: Researchers, 2023

3 RESEARCH METHODOLOGY

This research collected two types of data, which were primary data and secondary data. Primary data is information directly collected from the data source derived from respondents' answers. Still, the obtained information was organized, compiled, interpreted, and processed before being used, and it was able to be used more efficiently. Secondary data is data that has been collected, summarized, and disseminated in various formats such as textbooks, and academic documents, including articles and directly related research with similar content, news, and media. Electronic media was used to filter the concepts, theories, and knowledge until the guidelines surrounding the research concepts were obtained. Hence, the researcher used the Quantitative research method by using a questionnaire tool as the instrument for collecting information from Generation Y consumers in Thailand, where people buy products online.

3.1 QUESTIONNAIRE DESIGN

This study conducted quantitative research by using questionnaires as a tool and collecting data from 300 people who have used online shopping services via convenience sampling. The population used in this research or Unit of Analysis of this research is Gen-Y customers who purchased products online. The development of research tools is done using the questionnaire as a tool for data collection. After that, the data was analyzed and a questionnaire was created with a 7-rating scale [36].

From the review of relevant concepts, theories, and research to determine the Perceived usefulness affecting Y-Generation online shopping behavior and develop questions for this

research as shown in Table 4. The developed exam has been tested for Context Validity by 5 experts to check for consistency in the exam. The questionnaire was then used to find the Index of Item Objective Congruence (IOC) [37]. The data were then collected to test for Reliability by collecting 30 samples and analyzing with Cronbach's Alpha coefficient (α -coefficient). It was found that the Cronbach's Alpha value was 0.869, which is greater than 0.70 and above, and thus considered to have high confidence [38]. Thus, the tools are used to collect data with real samples, followed by analyzing the data from the questionnaire collection for further evaluation. The analysis of the basic statistics of this sample yielded an acceptable error level (α) at 0.05 in the statistical test. In data analysis using descriptive statistics, hypothesis testing has statistical significance t-test ≥ 1.96 [39].

Table 4

Latent and Manifest Variables	Development
Subjective Norms (SN)	14, 28, 29, 30, 31
1) Social Pressure to Perform or Not to (SN1)	
2) Strength of each normative belief (SN2)	
3) Motivation to comply with the referent (SN3)	
Intention to Purchased (IP)	17, 18, 19, 23
1) Likelihood of Purchase (IP1)	
2) Recommendation (IP2)	
3) Repurchase (IP3)	
Online Shopping Behavior (OSB)	14, 15, 33, 34
1) Online Cognitions (OSB1)	
2) Online Emotions (OSB2)	
3) Online Entertainment (OSB3)	
4) Flow Online Attitudes (OSB4)	
5) Online Attitudes (OSB5)	

Creating the	measures	and a	questions
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Source: Researchers, 2023

3.2 DATA COLLECTION

Quantitative research, in the form of a Population Survey or unit analysis, was used to collect the data on the behavior of online fashion shopping in Thailand, and it used Simple Random Sampling by creating a sampling frame to re-sample each population. Each group was similar; however, within a group, there were differences or diversity, and these were chosen from the desired target group. Data collection was by using a questionnaire; it was conducted to find the answers to concepts. The questionnaires were collected, and the data was analyzed to determine the size of the sample. By specifying the ratio of 20 samples to 1 variable, this equaled 15 variables x 20 = 300 cases [40]. The analysis of the Structural Equation Model (SEM) required

a larger sample size than the other methods to provide an accurate estimation and be able to be a good fit for the population. The data were distributed as standard curves [41].

3.3 DATA ANALYSIS

After the researcher received the questionnaires and the data validity was checked, the data code was specified. Then, the coding and checking of the necessary information took place to meet the analysis requirements. The research determined the 95 percent confidence level or the acceptable tolerance level (α) at .05 for the statistical testing, or error acceptance for five percent by using descriptive statistics, which were Mean, Standard Deviation, and Pearson's Correlation Coefficient) between the variables. Used to see the relationship between the variables as it must not be too high, and the KMO statistic (Kaiser-Meyer-Olkin) was used to measure the suitability of the data as to whether it corresponded to the empirical data or not. Additionally, Bartlett's Test of Sphericity statistic was applied to test the hypothesis as to whether there was a variable relationship or not. The KMO value was very high (approaching one), showing that the factor analysis technique was appropriate for the data available. If the KMO value is <.5, it shows that the factor analysis technique should not be used as it is not suitable for the existing data and statistics, but Bartlett's Test of Sphericity should be used to test the hypothesis with statistical significance. It showed that the factors did not correlate. [41]. Consideration of Standard Regression Weights had statistical significance or CR (Critical Ratio) or t-test \geq 1.96 [39, 41]. The Structural Equation Analysis Model is a technique for analyzing multiple variables, which combines factor analysis and Multiple Regression. The relationship between the variables can be examined at one time [41] by using the Maximum Likelihood (ML) method. The results of the consistency check and the empirical data were used, or the Goodness of Fit Measures using accepted standards.

Table 5

Descriptive Statistics

Variables	Mean	S.D.
Subjective Norms	5.19	.924
1. My society or a close person thinks that shopping online is a good thing to do.	4.80	1.141
2. Buying products online is convenient for me.	5.27	1.093
3. When talking about purchasing products online, I want to follow what my beloved one wants me to do.	5.40	1.121
Intention to Purchased	5.52	.704
1. In the future, I am willing to buy my favorite products online.	5.41	.811
2. Online shoppers talk about their advantages and advise others to try online shopping.	5.60	.801
3. I will buy for my favorite products again products online when new products arrive.	5.43	.813
Online Shopping Behavior	5.54	.681
1. You can receive new product information instantly online or internet anywhere	5.56	.912
2. You can follow the online purchase of your favorite brand.	5.50	.781
3. Buying products online makes you feel entertained anywhere, anytime.	5.47	.857
4. You are not bored when buying products online because the product classification is linked continuously.	5.31	.941
5. Online shopping saves time and travel costs and saves energy.	5.71	.847
Source: Researchers, 2023		•

Table 6

Pearson's correlation

	SN1	SN2	SN3	IP1	IP2	IP3	OBS1	OBS2	OBS3	OBS4	OBS5
SN1	1	.550**	.555**	.431**	.340**	.381**	.314**	.406**	.447**	.364**	.282**
SN2		1	.649**	.529**	.506**	.528**	.503**	.408**	.529**	.524**	.424**
SN3			1	.566**	.550**	.511**	.449**	.497**	.551**	.502**	.375**
IP1				1	.762**	.690**	.654**	.601**	.589**	.494**	.475**
IP2					1	.696**	.703**	.633**	.543**	.413**	.436**
IP3						1	.604**	.556**	.501**	.522**	.540**
OBS1							1	.660**	.650**	.513**	.449**
OBS2								1	.637**	.384**	.511**
OBS3									1	.625**	.532**
OBS4										1	.547**
OBS5											1

**. Correlation is significant at the level of 0.01 (2-tailed).

Source: Researchers, 2023

Correlation coefficient analysis (Table 6) found that the correlations between observed variables were between .282 - .762 and statistically significant; correlations less than .7, they were considered too high (Hair et al., 2010). Also, when considering Bartlett's Test of Sphericity (Table 7), the analysis results were 2057.905 (p = .000). They showed that the

correlation matrix differed from the identity matrix with statistical significance at the level of .01, consistent with the analysis results, and the Kaiser-Meyer-Olkin was close to 1 (KMO = .909). Manifest Variables were suitable to be used to check the consistency of the research model and empirical data and showed that there were no correlations [41].

Table 7

KMO and Bartlett's Test

Kaiser-Meyer-Olki	Caiser-Meyer-Olkin Measure of Sampling Adequacy.				
Bartlett's Test of	2057.905				
Sphericity	df	55			
	Sig.	.000			

Source: Researchers, 2023

3.4 STRUCTURAL EQUATION MODEL ANALYSIS RESULTS

The analysis used Structural Equation Modeling (SEM), allowing the researchers to greatly benefit from the SEM technique, which was used to examine the relationships between the various variables and analyze direct-indirect influences concurrently. Including analyzing the relationship between the latent variables and the indicators or empirical variables to check the harmony and the hypothesis testing of the relationship between latent variables and manifest variables. The results were analyzed by using the Structural Equation Model to determine the variable and latent variables that analyzed the reflective gauges. The consistency test between the Goodness of Fit Measures Model was taken, and it was found to be harmonious with the Model Fit, having the following result: Chi-square (χ^2)= 58.663, df=32, CMIN/DF (χ^2 /df)=1.833, GFI=.971, CFI=.988, AGFI=.939, and RMSEA= .049 (Figure 3). It can be summarized that the form of the structural equation of the variables influencing online shopping behavior of the Y-GENERATION group was consistent with the empirical data [40, 41].

Table 8

Statistics Goodness of fit

Relevant Statistics	Criteria	Test Value
Relative Chi-square	$\chi^2/df < 3.00$	1.833
Goodness of Fit Index	GFI >.90	.971
Comparative Fit Index	CFI >.95	.988
Adjusted Goodness of Fit Index	AGFI >.90	.939
Root Mean Square Error of Approximation	RMSEA <.08	.049

Source: [40, 41, 42]

From Table 9, Online Shopping Behavior had a standard regression weight between .656 to .819, and squared multiple correlation (\mathbb{R}^2) was between .564 to .670. The Subjective Norms had a standard regression weight between .673 to .805. The squared multiple correlation (\mathbb{R}^2) was between .453 to .648. The Intention to purchase had a standard regression weight between .787 to .865, and the squared multiple correlation (\mathbb{R}^2) was between .620 to .748, all factors were statistically significant. Also, the standard regression weight had a high value. Therefore, the observable variables or empirical variables had appropriate harmony as a factor for measuring the latent variable.

Table 9

Variables Relation			Standard Regression Weights	S.E.	R ²	C.R.	р
Intention to Purchased	<	Subjective Norms	.772	.048	.596	11.757	***
Online Shopping Behavior	<	Subjective Norms	.448	.064	.698	5.665	***
Online Shopping Behavior	<	Intention to Purchased	.440	.089		5.529	***
OBS1	<	Online Shopping Behavior	.656	.061	.564	13.666	***
OBS2	<	Online Shopping Behavior	.802	.053	.642	16.180	***
OBS3	<	Online Shopping Behavior	.819		.670		
OBS4	<	Online Shopping Behavior	.746	.066	.557	15.020	***
OBS5	<	Online Shopping Behavior	.656	.060	.431	13.205	***
SN1	<	Subjective Norms	.673	.069	.453	12.552	***
SN2	<	Subjective Norms	.803		.645		
SN3	<	Subjective Norms	.805	.068	.648	14.994	***
IP1	<	Intention to Purchased	.865	.063	.748	17.457	***
IP2	<	Intention to Purchased	.862	.061	.743	17.520	***
IP3	<	Intention to Purchased	.787		.620		

Analysis on the relationship of the variables

Remark: Statistical significance *** p < .001.

From the analysis results, the following equations were formed:

$$OSB = .45Sujective Norms + .44Intention to purchased, R2 = .70$$
 (1)

From the equation (1), it is found that Online Shopping Behavior factors have positive effect from Intention according to the equation (1), Online Shopping Behavior is positively impacted by the Intention to Purchased factor and positively affected by the Subjective Norms factor. The variation of the Online Shopping Behavior can be explained by 70 percent ($R^2 = .70$); the rest is from other factors.

3.5 RESULTS OF TESTING OF THE HYPOTHESES

Hypothesis testing provides the same analysis as Structural Equation Modeling by considering the C.R. (t-value) and the p-value used for the hypothesis testing as well as analysis to find the influence of each pair of variables, both direct and indirect and the influences. The analysis was done by using a statistical program. The results from the test were the standard regression coefficient (coef.) of all correlations of the research hypotheses had C.R. values higher than 1.96 for all hypotheses with statistical significance. Therefore, it can be concluded that the analysis results support all the assumptions, and the results of the analysis of the factors of the researcher are shown in Table 10.

Hypothesis 1: Subjective Norms have a direct impact on the intention to purchase. The hypothesis test result showed that the regression coefficient was .772. It was true with the statistical significance.

Hypothesis 2: Subjective Norms affect Online Shopping Behavior. It was found that the standard regression coefficient was .448, so the hypothesis is rejected without having statistical significance.

Hypothesis 3: Intention to Purchase affects Online Shopping Behavior. It was found that the standard regression coefficient equaled .440, which is acceptable according to the statistical significance.

Figure 3

Final model



Chi-square (χ^2) = 58.663, df = 32, CMIN/DF (χ^2 /df) = 1.833, GFI=.971, CFI=.988, AGFI=.939, and RMSEA= .049 *** p < .001 Source: Researchers, 2023

Table 10

Hypothesis test results

Hypothesis	coef.	t-	TE	D	IE	Results
		test		Ε		
H1: Intention to Purchased <subjective< td=""><td>.772*</td><td>11.7</td><td>.77</td><td>.77</td><td>.00</td><td>Supporte</td></subjective<>	.772*	11.7	.77	.77	.00	Supporte
Norms	**	57	2	2	0	d
H2: Online Shopping Behavior <subjective< td=""><td>.448*</td><td>5.66</td><td>.78</td><td>.44</td><td>.33</td><td>Supporte</td></subjective<>	.448*	5.66	.78	.44	.33	Supporte
Norms	**	5	7	8	9	d
H3: Online Shopping Behavior <intention< td=""><td>$.440^{*}$</td><td>5.52</td><td>.44</td><td>.44</td><td>.00</td><td>Supporte</td></intention<>	$.440^{*}$	5.52	.44	.44	.00	Supporte
to Purchased	**	9	0	0	0	d

Remark: TE: Total effects; DE: Direct effects; IE: Indirect effects; Coefficient: coef., *** p < .001 Source: Researchers, 2023

3.6 DISCUSSION AND IMPLEMENTATION

The study of the causal model of factors influencing the shopping behavior of Generation Y found that the highest mean factors were online Shopping behavior, intention to purchase, and subjective norms, respectively. The results of the structural equation model analysis found that intention to purchase, and subjective norms affected the online shopping behavior of the Gen-Y group who bought products online with statistical significance. However, the controllability factor showed no statistical significance. This is consistent with the perceived usefulness study that influences online shopping habits. The influence will be greater when it is affected by the interstitial factor, which is the intention of consumers to buy more products [14]. Similarly, perceived credibility exists based on honesty and sincerity, resulting in having more users. From having the intention of purchasing products online by customers, reliability is important with perceptions of benefits, influencing online shopping habits and behaviors [9]. This is consistent with Xie et al. [10], who examined consumer responses to hotel reservations online and found that consumers were more aware of the information and good management system of the hotel.

The study of consumer behavior through studying the emotional factors, personality, and the aspect of buying, as well as consumer attitude, and the compliance with reference group, found that all the factors have a positive influence on consumer behavior [26], and are consistent with Al-Swidi et al. [27] proposed that the role of conformity with reference groups is the behavior of that person (Theory of Planned Behavior (TPB), which influences the willingness to buy products [28], including driving behaviors that lead to purchase intent and affect future purchases [15]. Hahn and Kim [42] found that the perception of product information on the internet gives consumers confidence and determination to find product

information via online retailers. Consumers are aware of the benefits and enjoyment when choosing to buy products, affecting the buying attitude and behavior on the website, and repurchase again. Alhassany and Faisal [22] studied the factors that influence the decision to use Internet banking; it was found that consumers are aware of the benefits of online banking, and it is easy to use. Hence, what is necessary and vital for every online business is marketing Groups' Influence of reference groups on consumption behavior with values, similar norms, or lifestyles. These people tend to be interrelated, and their behavior affects each other, reference groups, including consumer communication with reference people, creating word of mouth communication, which is informal communication. It has a great influence on information on purchases. It is also communication that can be communicated far, and fast. It promotes a high reaction rate, having both positive and negative aspects of the product within the person's reference factor causing communication beyond the intention of the purchase and behavior that is repeatedly buying the same product.

4 CONCLUSIONS

The retail industry has fully entered the digital age, which is evident by the vast number of consumers who use various online platforms. Further, this trend is continuously increasing due to the constant development of modern technology to facilitate consumers and increase the efficiency of commerce. At present, changing consumer behaviors affect various activities and consumption behaviors, especially in terms of consumers spending less time purchasing products in stores and spending more time buying goods and services online using various technological means. Also, this fact has a tendency to significantly increase ecommerce. Therefore, it plays a role in promoting the national economy through cross-border commerce, including the creation of higher value for online sales of goods and services worldwide. Hence, driving the modern economy and digital economy policy are important weapons used to make administrative policy decisions related to promoting, promoting, and e-commerce for effectiveness.

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