

Perceived Risk and Marketing Mix Influencing Generation Y Fashion Clothes Purchasing Decisions via Online Social Media

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Abstract: - Electronic technological advancements have led to an increase in online purchasing. Customers typically perceive risks while doing transactions electronically, especially when money is involved. Therefore, this research aims to investigate the perceived risk factors and marketing mix factors influencing Generation Y fashion clothing purchasing decisions made through online social media. The target sample was the Generation Y group of people aged 20 to 40 (born between 1980 to 2000) who had purchased trendy clothes over social media in the previous 6 months. A total of 400 questionnaires were obtained by delivering both online and offline. The gathered data were analyzed by descriptive statistics and multiple regression analysis. The findings revealed that psychological risk, social risk, and financial risk influenced Gen Y fashion clothing purchasing decisions through online social media. In the marketing mix, according to the findings, place, privacy, and product are the three most important elements influencing Gen Y fashion clothing purchasing decisions through online social media, with a statistical significance of .05. Several managerial implications are addressed, as well as potential research opportunities.

Key-Words: - Perceived risk, Marketing mix, Purchasing decision, Fashion clothes, Generation Y, Online social media.

Received: May 5, 2023. Revised: September 14, 2023. Accepted: October 16, 2023. Available online: November 24, 2023.

1 Introduction

Online shopping has become a part of people's daily lives due to the convenience, price reductions, and promotions available to consumers. In 2019, global e-commerce sales reached USD 26.7 trillion, [1]. E-commerce in Thailand increased by 81% in 2020,

with a total value of 29.4 billion baht (USD 842.4 million). As a result, merchants and manufacturers launched online shops on a variety of platforms to gain access to consumers' increasing spending power; more crucially, starting a business online no longer required a physical storefront, [2]. Social

media marketing (SMM), thus, is frequently used to personalize audience experiences, increase sales, and sustain and develop relationships with customers, [3]. Because of their most social media active users worldwide, social media platforms such as Facebook, Instagram, Twitter, or Line@, have emerged as Thailand's most popular platform and channel for selling things, [4]. Food delivery, toys, furniture, and clothing are the fastest-growing online sales businesses, [5]. The increased number of online vendors has resulted in more competitive online shopping. As a result, merchants and digital marketers must constantly investigate and improve the consumer experience, as well as adapt their marketing strategies, [6], [7], to meet customer expectations and successfully respond to the demands of consumers of various age groups through online commerce platforms.

Online shopping provides significant benefits to consumers in terms of convenience, flexibility of product selection, and swift payment via Internet banking. However, there is a risk of being duped when shopping online, such as money fraud and identity theft. Consumers must consider this danger when deciding to shop online to avoid falling victim to scammers that masquerade themselves as online retailers, [8], [9], [10]. According to Sift, a global network of merchant digital fraud protection services, cybercrime will climb by 69% in 2020, resulting in more than USD 1 trillion in losses, [11]. In Thailand, the Technology Crime Suppression Division (TCSO) reported losses from online fraud totaling more than 1 billion baht (USD 28.6 million) in 2018, and this figure was expected to rise as online purchasing grows, [12]. As a result of these concerns, research on consumer online purchasing conviction, [13], and perceived risk influencing consumer online shopping has gained significant attention in recent years, such as the studies of, [14], [15]. However, [16], have noted that earlier research findings lacked conceptual logic.

For this study, the authors were interested in studying Generation Y, also known as the Millennial Generation, who were born between 1981 and 2000, [17]. In 2016, Gen Y made up 28.54 percent of Thailand's population, [18]. In terms of economics, Gen Y has vast purchasing power and will steer the global economy for the next 20 years, [19]. When compared to other cohorts, Gen Y has the greatest total average internet usage, [20]. This cohort possesses expertise in online communication and information technology, [21]. This group was socialization, fashion-conscious, brand-loyal, and driven by the presence of confidence with a retailer, [22]. It has also been observed that they prefer to

purchase fashion, health, beauty, and information technology products through online platforms, [23]. Academics, researchers, corporate executives, and public politicians are all interested in studying Gen Y to better understand their fast-changing behavior, [19], which is heavily influenced by information and opinions obtained through social media or Electronic-Word-of-Mouth (E-WOM), [13].

Taking into account these critical challenges in Gen Y economics and the increase in their online purchasing, the purpose of this research is to investigate and examine the impact of risk perception components and marketing mix aspects on this population's decision to purchase fashion products via online social media. The research findings will serve as guidance for merchants on what to do to ensure the survival and growth of their businesses. It can also provide a strategy for lowering risk perception and developing marketing mix strategies to satisfy the needs of Gen Y consumers. Furthermore, it will assist academics and researchers in comprehending the conceptual logic of risk perception and marketing mix factors that influence Gen Y decision-making.

2 Problem Formation

2.1 Purchasing Decisions

Purchasing decisions refer to the decision of consumers to make purchases, which is the consumer's choice to buy or not to buy a product. Consumer purchasing behavior is influenced by cultural factors, social factors, personal factors, and psychological factors, [24]. Specifically, the purchase decision is to select something specific from the available options. It is the process by which customers make decisions. It is made up of internal factors such as consumer motivation, perception, learning, personality, and attitudes that indicate the need and awareness of having a diverse range of products and consumer-involved activities in relation to the information obtained. Finally, the evaluation of those alternatives is based on the information provided by the manufacturer. In online shopping, consumers' purchasing decisions are influenced by technology adoption. People opt to accept and use new technology when they understand and recognize that it will provide benefits, compatibility, ease of use, privacy protection, and confidence to them, [25].

2.2 Perceived Risk Factors

Perceived risk is commonly defined as a consumer's sense of uncertainty and adverse consequences that

may arise as a result of an unexpected purchasing outcome, [26]. In the twenty-first century, scholars began to pay attention to the potential risk of internet buying. Users can access internet buying via various applications and services to satisfy their demands, [27]. In the context of e-commerce, risk perception refers to the consumer's belief that their use of the internet is unsafe, or that online commerce may have negative consequences, [28]. When shopping online, the perceived risk is substantially larger than when shopping in-store, [29]. According to the above definition of perceived risk, consumer perception of risk is an inner feeling that cannot be directly witnessed; the dimensions of risk can only be predicted by certain factors. Academics have paid growing attention to risk perception studies, which have highlighted various dimensions of risk, [30]. Hence this study addresses risk as a multi-dimensional construct, drawing on the concepts and studies of, [31], [32], [33], [34], [35], which include six dimensions of perceived risk.

- a) Financial risk, also known as economic risk, is the possibility of monetary losses during online purchasing. In other words, financial risk refers to the potential of losing money as a result of purchasing any goods or services as well as extra charges (e.g., a possibility that the product may need to be repaired, and delivery risk).
- b) Performance risk is the potential loss incurred when a product/service does not perform as expected or can be used for a limited time.
- c) Security risk is the possible fear of external instruction resulting in the assessment of personal financial information and even the withdrawal of money from accounts.
- d) Social risk is the chance that a consumer's shopping behavior will be rejected by other society members or the possible loss of status in one's social group as a result of purchasing a product or service, which is referred to as social risk.
- e) Psychological risk refers to customers' purchasing attitudes that frequently cause them to become anxious or stressed. This anxiety leads to a loss of self-esteem (ego loss) when their purchasing experience does not meet their expectations.
- f) Time risk is the sum of lost time and effort spent researching and purchasing a product or service that ends up being disappointing.

Research findings indicate that customers' risk perceptions are critical and influence online purchasing decisions. For instance, research conducted by, [31], revealed that when buying clothes online, respondents were most concerned about security risk, followed by performance risk,

payment risk, delivery risk, time risk, financial risk, and social risk. According to, [36], consumers' perceived risks during the online purchase process could be ranked as financial risk, performance risk, and service risk. The study, [30], discovered significant differences in user and non-user perceptions of risk, such as financial risks, psychological risks, and safety concerns. While, [15], indicated that financial risk, social risk, performance risk, psychological risk, physical risk, convenience risk, and overall risk were relevant in online buying regardless of how high or low the involvement with the products or services involved. Finally, [37], discovered that perceived risks had an inverse and negative relationship with online purchasing behavior.

2.3 Online Marketing Mix Factors Concept (6Ps)

The marketing mix is a collection of tactical marketing tools that a firm may control and utilize to identify market demands and serve the target market. It is divided into four elements consisting of product, price, place, and promotion, [38], [39]. The authors in, [40] pointed out that the new digital channels and media revolution in society and marketing bring both enormous opportunities as well as challenges for businesses. It has become apparent that the consumer decision process in online purchasing is becoming increasingly information-intensive; that is, people use more information and multiple information sources to make decisions, [41]. When performing online shopping, a consumer must trade-off between privacy and convenience; they must determine how much personal information they would allow third parties to access and gather, [42]. In response, [43], [44], have incorporated personalisation and privacy aspects into the online marketing mix (6Ps). Personalization is defined as individualized services and the collection of customer data to create strategies to attract customers and encourage repeat purchases. Whereas privacy pertains to customer confidentiality, which includes not publishing customer information without their permission.

The studies show the significance and impact of the marketing mix on customers' online shopping decisions. For example, [45], investigated how marketing mix characteristics influence the decision to purchase fashion products via social media. It was observed that the distribution channels had the highest mean score, followed by payment security, product, promotion, price, and product placement. The study, [46], on the other hand, reported that security was the most essential factor in fashion

clothing online purchasing decisions. Per, [47], the distribution channel is the most influential marketing mix factor in the pre-purchase decision-making process. Privacy, on the other hand, was proven to be the most influential marketing mix aspect both during the buying and post-purchasing process. Finally, the study of, [48], showed a positive relationship between all six dimensions of the marketing mix and purchasing decisions. In particular, price, personalized service, and privacy had a statistically significant influence on online herbal product purchasing decisions.

Research Hypotheses

Based on all concepts and theories, the following assumptions and conceptual framework (Figure 1) were developed for this study.

- H₁: Perceived risk factors (financial, performance, security, social, psychological, time) influence Gen Y's fashion clothes purchasing decisions through social media.
- H₂: Marketing mix factors (product, price, place, promotion, personalized service, privacy) influence Gen Y's fashion clothes purchasing decisions through social media.

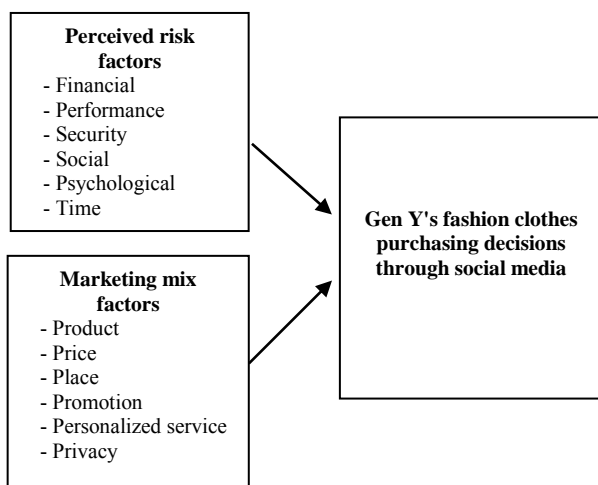


Fig. 1: Conceptual framework

3 Problem Solution

The population group used in this research is people born between 1980 and 2000 (or aged 20 to 40 years), according to a survey conducted by the Thai Office of the National Economic and Social Department Council, [19]. The sample consists of Gen Y people who have purchased fashion clothes via social media in the last six months. The unknown precise population formula was applied to calculate sample size at a confidence level of 95% and an error ratio of 0.05, [49]. The sample size

should have been 385 people according to this method, however, the authors rounded up to 400 samples. For convenient sampling, the questionnaires were then delivered both online and offline.

A questionnaire was developed to collect data. The questionnaire's reliability and validity were evaluated; the IOC (Item Objective Congruence) score was greater than 0.67. A pilot test with 30 samples was then carried out. Cronbach's alpha coefficients for marketing mix (0.88), perceived risk (0.90), and purchase decision (0.96) were all greater than 0.70, indicating that questionnaire items were reliable, [50]. The sample would be examined with screening questions to generate a valid sample with the appropriate attributes. The primary question was his or her birth year, with a supplementary question asking whether he or she had acquired clothes on online social media in the previous 6 months.

To get a valid sample with the desired characteristics, the researchers screened the sample with a primary question regarding the year of birth and a question asking whether or not he or she had bought fashion clothes through online social media in the past 6 months. To avoid data analysis errors, the researchers examined and screened the received questionnaires to check whether there were any questionnaires with a large amount of missing data, or questionnaires with outliers or extreme values. After that, the completed questionnaires were examined using descriptive statistics such as frequency, percentage, mean, and standard deviation. Multiple regression analysis using the Enter method was used to infer causal relationships between the independent and dependent variables as well as for prediction and forecasting. In particular, to examine the hypotheses using inferential statistics.

4 Conclusion

In this current study, there were 400 respondents of which 58.25% of respondents were male, 31.75% were between the ages of 21 to 25, 69.75% had completed bachelor's degrees, 47.5% worked in private organizations, and 39.75% earned less than 10,000 Baht per month. 58.5% of respondents brought fashion clothing through social media once a month, with 50.5% spending less than 500 Baht on average. The following are the research findings relating to how risk perception and marketing mix factors influence Gen Y fashion clothing purchase decisions made via online social media:

1. Measuring perceived risk, marketing mix, and purchasing decision.

Table 1 presents the average mean scores obtained for Gen Y buying fashion clothes through online social media. The findings revealed that the respondents placed a high value on the overall risk perception factors. Among the six perceived risks, personal risk factors: social risk, and psychological risk associated with fashion clothes are ranked as the first two predominant risk dimensions. Dimensions such as performance risk, financial risk, security risk, and time risk are also significant risks in the purchase of fashion clothing via Gen Y's online social media.

Marketing mix factors are also essential criteria that respondents place a high value on place, which involves convenience, the ability to buy anywhere and at any time, and ease of use, which is ranked first among the six marketing mix dimensions. Product, promotion, personalized service, privacy, and price are listed on the respective order.

Table 1. Mean and standard deviation (S.D.) of the importance level of perceived risk, marketing mix, and purchasing decisions.

	Mean	S.D.	Interpretation	Ranking
<i>Perceived Risk</i>				
Financial risk	3.82	0.69	High	4
Performance risk	3.82	0.67	High	3
Security risk	3.79	0.69	High	5
Social risk	3.86	0.68	High	1
Psychological risk	3.83	0.66	High	2
Time risk	3.70	0.75	High	6
Overall	3.80	0.69	High	
<i>Marketing Mix</i>				
Product	3.82	0.69	High	2
Price	3.57	0.72	High	6
Place	4.04	0.77	High	1
Promotion	3.80	0.77	High	3
Personalized service	3.70	0.71	High	4
Privacy	3.66	0.74	High	5
Overall	3.77	0.73	High	
<i>The decision to buy fashion clothes</i>				
Depends on the quality and utility of the products	4.12	0.80	High	1
Depends on the value of the products	4.07	0.78	High	2
Depends on the perceived risk level	3.90	0.90	High	3
Overall	4.03	0.83	High	

The respondents place a high level of importance on the overall purchasing decision criteria. When each aspect was examined individually, it was determined that the choice to purchase fashion clothes relies on the quality and usability of the product had the highest average mean score followed by the value of the product and perceived risk level, respectively.

2. Multiple Regression Analysis

Table 2. Multiple regression analysis of perceived risk factors and customer purchasing decisions.

Perceived Risks Factors	b	SE	β	t	p-value
Constant	166	0.23		7.37	0.00*
Financial risk (X_1)	0.15	0.07	0.14	2.43	0.02*
Performance risk (X_2)	0.02	0.07	0.02	0.24	0.81
Security risk (X_3)	0.02	0.07	0.22	0.31	0.76
Social risk (X_4)	0.16	0.07	0.15	2.17	0.03*
Psychology risk (X_5)	0.34	0.07	0.31	5.07	0.00*
Time risk (X_6)	-0.05	0.06	0.05	-0.90	0.37
R = 0.499, R ² = 0.249, Adjust R ² = 0.238, F = 21.743, Sig. = 0.000*					

*Statistically significant at the 0.05 level

From Table 2, the multiple regression analysis confirms the relationship between perceived risk factors and Gen Y's decision to purchase fashion clothes. The findings indicate that psychological risk (X_5 , $\beta = 0.34$) is the most influential dimension influencing Gen Y fashion clothing purchasing decisions through online social media followed by social risk (X_4 , $\beta = 0.16$), and financial risk (X_1 , $\beta = 0.15$). The following formula could be used to forecast Gen Y purchasing decisions:

$$Y = 166 + 0.15X_1 + 0.16X_4 + 0.34X_5$$

When the Adjust R² value of 0.238 was taken into consideration, the variables could be predicted by 23.8%, showing that H_1 was supported.

Table 3. Multiple regression analysis of marketing mix factors and customer purchasing decisions.

Marketing Mix Factors	b	SE	β	t	p-value
Constant	2.33	0.21		11.07	0.00*
Product (Z_1)	0.15	0.07	0.14	2.04	0.04*
Price (Z_2)	0.07	0.07	0.07	0.92	0.36
Place (Z_3)	0.20	0.06	0.22	3.40	0.00*
Promotion (Z_4)	0.04	0.09	0.04	0.48	0.63
Personalized service (Z_5)	0.09	0.09	0.09	0.98	0.33
Privacy (Z_6)	0.21	0.06	0.22	3.26	0.00*
R = 0.411, $R^2 = 0.169$, Adjust $R^2 = 0.157$, F = 13.351, Sig. = 0.000*					

* Statistically significant at the 0.05 level

From Table 3, the multiple regression analysis confirms the relationship between marketing mix factors and Gen Y's decision to purchase fashion clothes. The findings indicate that place (Z_3 , $\beta = 0.22$), privacy (Z_6 , $\beta = 0.22$), and product (Z_1 , $\beta = 0.14$) are the three most important factors influencing Gen Y fashion clothing purchasing decisions through online social media. The following formula could be used to predict Gen Y purchasing decisions:

$$Y = 2.33 + 0.15Z_1 + 0.20Z_3 + 0.21Z_6$$

When the Adjust R^2 value of 0.157 was taken into consideration, the variables could be predicted by 15.7%, showing that H_2 was supported.

5 Discussion

The findings revealed that when it comes to purchasing fashion clothing through online social media, Gen Y places high importance on marketing mix and risk perception aspects. Marketing mix variables namely product, place, and privacy factors as well as risk perception namely financial, social, and psychological concerns, all have statistically significant impact on Gen Y's decision to purchase fashion clothes via online social media.

These current research results are consistent with the previous studies, but it is interesting to note that certain findings are different. This study supports the findings of, [51], that perceived psychological risk influences consumers' decisions to buy clothes online, especially when consumers are concerned about after-sales service if the product is not delivered, or the ordered clothes cannot be worn. Thus, merchants should be aware of the

psychological risks that customers face by employing customer interaction tactics such as product reviews and comments to support them throughout the pre-purchase process until they make a decision. According to, [30], [52], a positive online shopping experience is related to consumer-perceived risk. Non-online users, in particular, have a substantially greater psychological risk perception than users. In other words, a positive experience or satisfied customers will have more trust in online fashion retail merchants, increasing the likelihood of repurchasing, [53].

Another significant criterion for Gen Y online social media fashion clothing purchases is perceived social risk. The findings: personal risks (psychological risk and social risk) differ from, [31], [35]. These differences might be explained by cohort and culture. According to, [54], the social status image of Gen Y is crucial because they tend to show their lifestyle preferences through an interest in fashionable clothing and unique dressing. Further, among the major dimensions of cultural values, individualism/collectivism culture and uncertainty avoidance, [55], are the most important cross-cultural perceived risks identified by researchers looking for possible cultural explanations for differences in risk perception between countries, [35]. Thailand was identified as a country that prefers to avoid uncertainty; they are less risk-taking because they are driven by a fear of failure or loss. In addition, Thailand's collectivist culture, emphasizes group values and the necessity of belonging to specific social groups. People in collectivist cultures are susceptible to social influences and the consequences of negative outcomes because they want to be accepted by the group and society around them, [56]. This empirical study confirms, [15]'s, results that financial risks influence online purchases regardless of whether the product is highly relevant or not to the consumer. When doing online purchasing, products are not delivered before making a purchase; as a result, customers are concerned about losing money if the goods are not delivered. The most common payment methods offered by social media merchants are money transfers and cash-on-delivery (COD). According to, [14], the COD mechanisms can effectively mitigate the impact of perceived product risks, resulting in substantial financial risk reduction.

In the online marketing mix, the place is involved with a presentation on the interface screen of the device. This empirical study supports the findings of, [47], that place influences customers' online shopping decisions. As a result of its rapid

growth, online social media has become one of the most convenient trade channels accessible. There are no restrictions in terms of time or location. Consumers can search for products and place orders at any time, from any location, using a variety of communication devices. When making an online order, consumers must provide and document personal information such as their name, address, telephone number, e-mail address, and credit card number as well as conversations between the buyer and vendor. As a result, privacy is an important marketing mix component that influences Gen Y's social media fashion clothing purchases. This current study supports the findings of, [46], which found that privacy influenced the decision to buy fashion clothes from e-commerce websites. In other words, online buyers who have a high degree of privacy concern will perceive an important risk of information disclosure which will eventually impact their purchasing decisions, [57]. In addition, this research is consistent with, [58], that product factors affect the decision to buy fashion clothes through Facebook and Instagram. When shopping online buyers do not have direct contact with the product, as a result, product presentation and branding are becoming more crucial in consumers' online purchasing decisions. The brand acts as a stimulus and evokes the emotions of consumers who are then more likely to decide to purchase products online, [59].

To alleviate risk perception for Gen Y social media fashion clothing purchases, online merchants should realize that this cohort was born in the digital age. They are technologically competent and have a high risk tolerance. They enjoy sharing, engaging with, discovering, and utilizing content on social networking sites, [13]. E-WOM, or text and articles published on social media platforms, plays a crucial role in Gen Y communication. Word-of-mouth such as comments, and product reviews provided by customers on the internet is a significant kind of E-WOM communication, [60], which is critical in the information search process on product types and pricing to conduct comparisons before making a selection, [61]. Consumers may get information about the quality of products or services that significantly influence their purchase behavior of consumers, [62]. Therefore, a retail brand reputation must be developed to enhance purchase intention and customer loyalty, [53].

6 Limitations and Suggestions

This research established certain criteria for the sample population's age range and the timing of

prior online purchases. As a consequence, researchers had to spend more time screening and collecting data than usual. Furthermore, because this study only included information from Gen Y, future research should include information from other generations to evaluate any differences in buying behavior, such as the impact of risk perception factors and marketing mix factors on online purchases. Future researchers should also study the effect of information and opinions transmitted via social media (E-WOM), as well as the power of creative content, on the online purchasing behavior of Gen Y shoppers and/or other generation groups. Finally, to obtain more comprehensive study findings, researchers should examine and collect information about the marketing mix and risk management tactics of online sellers and entrepreneurs.

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Contribution of Individual Authors to the Creation of a Scientific Article (Ghostwriting Policy)

- Tanompong Panich initiated the conceptualization of the research, designed the research methodology, and acquired funding for the research project that resulted in this present work. He also carried out and planned research data collection.
- Arunee Lertkornkitja planned and coordinated research activities, wrote the initial draft as well as reviewed and edited the published work.
- Nuttharin Pariwongkhuntorn worked with the data collection team to coordinate their efforts.
- Satithorn Phonkaew conducted the formal analysis.

Sources of Funding for Research Presented in a Scientific Article or Scientific Article Itself

The financial resources for this study were granted by the Rajamangala University of Technology Thanyaburi.

Conflict of Interest

The authors have no conflicts of interest to declare.

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