

The Consumer Awareness of TEMU and Perception Toward TEMU Online Advertising: A Case Study in Bangkok Metropolitan

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Abstract

This study aims to understand Thai consumers' awareness on the cross-border e-commerce platform of TEMU and the difference of perception online advertising of TEMU e-commerce platform. The research objectives are 1) to study the level of Thai consumer awareness of TEMU, 2) to study Thai customer's perception towards TEMU online advertising, and, 3) to study the difference of awareness and perception of TEMU online advertising among different demographic attributes (Gender, Age, Education level and Income level).surveys of consumers in the Bangkok Metropolitan area who have experience purchasing from e-commerce platforms. The survey was conducted using Google Forms and a total of 392 valid samples were obtained. Descriptive analysis (percentage, frequency, mean and standard deviation) and inferential statistics were used in this study, and analyzed the use of Independent Sample t-test and ANOVA. The results indicate no significant differences in consumer awareness and perception online advertising based on gender. However, significant differences exist across age, education level, and income groups. consumers with higher education levels show more positive perception toward online advertising, and variations are also observed among different income groups.

Keywords : TEMU, Consumer Awareness, Perception, Gen Z

Introduction

The e-commerce industry is experiencing rapid growth. According to the Digital 2023 Global Overview Report (Kemp, 2023), it is estimated that there will be 5.44 billion mobile phone users worldwide, which is equivalent to 68.0% of the world's total population, while the number of people using online shopping will reach 2.71 billion US dollars. The

e-commerce industry has greatly changed the traditional retail model. Southeast Asia's e-commerce industry continues to grow, driven by digital adoption and increased consumer spending.

TEMU faces fierce competition in the Thai e-commerce market. Its main competitors include Shopee and Lazada, which have long dominated the market and attracted local and international sellers. According to Lupang (2025) news, Thai e-commerce transactions in 2024 has reached 1 trillion baht, accounting for 25 percent of the country's total retail sales. It is expected that by 2030, the market size will further double to 2 trillion baht. TEMU is owned and operated by Pinduoduo Holdings, a Cayman Islands-registered transnational business conglomerate (PDD), and its online marketplace is managed by Pinduoduo, a Chinese company (PDD), a well-known e-commerce platform in the Chinese industry. TEMU began to expand in Southeast Asia, with Thailand becoming the third country in the region to officially launch TEMU's services in July 2024. Compared with mature e-commerce platforms such as Shopee and Lazada, TEMU is still relatively unfamiliar among Thai consumers. Consumers' awareness towards online shopping are complex and are influenced by factors such as perceived trust, promotional offers, and overall shopping experience (Tin et al., 2024). In the era of traditional commerce, participants have the opportunity to interact face-to-face, which could reduce the level of distrust. In contrast, the dynamics of e-commerce present a very different scenario (Aljifri et al., 2003). In this environment where there is a lack of contact trust, online advertising becomes one of the most important means for consumers to get information about a brand and establish a first impression. TEMU's competitive pricing strategy attracted consumers who were sensitive to price fluctuations, by offering products at lower prices than competitors (Rahman, 2024).

Perception is a subjective cognitive mechanism that forms consumers' expectations of a particular product or service and influences their purchasing decisions. Research shows that customer perception is a core concept in marketing, which involves consumers' awareness of brands, service quality, and product experience (Andrlic et al., 2019). Consequently, it is imperative to comprehend the concept of customer perception. Research has shown that consumer perceptions of social media advertisements significantly influence the value of the advertisement, brand awareness and brand association (Efendioglu & Durmaz, 2022). Online advertising has become a key tool for communication between brands and consumers (Figueiredo et al., 2025).

This study enables TEMU to gain insights into the brand awareness and the level of perception across various forms of online media. Such findings allow TEMU to confidently formulate business strategies for future growth. In the case where the brand awareness and online media perception are found to be high, TEMU can strategically shift its focus from mere awareness to concrete consumer actions—such as website visits, product purchases, and ultimately, the conversion of target audiences into actual customers. Conversely, if both brand awareness and the perception of TEMU's online advertisements remain at a low level, this would indicate a failure in establishing effective brand presence and media visibility. In such a scenario, it is necessary for TEMU to revise its communication strategies to ensure greater relevance and engagement with its target audience. Brand awareness and recognition serve as the initial gateway to business success. They are critical for transforming general awareness into actual purchasing behavior, which, in turn, generates revenue for the business.

Objective

1. To study the level of Thai consumers' awareness of TEMU
2. To study Thai customers perception towards TEMU online advertising
3. To study the difference of awareness and perception of TEMU online advertising among different demographic attributes (Gender, Age, Education level and Income level).

Literature Review

Consumer Awareness

Consumer awareness is defined as the understanding and knowledge that consumers have about their rights, products and services available in the market (Bello et al., 2021). Another important aspect of customer awareness is that it can directly affect customers' views on brands Foroudi et al. (2014). Increased customer awareness can increase trust, making it easier for consumers to continue to patronize a brand. Romaniuk (2017), defined customer awareness as the ability of customers to recognize and remember the name, image or logo associated with a brand. It is a key indicator of marketing effectiveness and a trigger for building a strong brand. customers must obtain information about products before buying them. Therefore, acquiring knowledge and understanding of e-commerce is essential for customer engagement and a prerequisite for participation and adoption of e-commerce.

Schwartz (1966) has studied consumer psychology in depth and outlined the five stages of awareness in Breakthrough Advertising: Unaware, Need Aware, Solution Aware, Product Aware, and Fully Aware. Awareness plays a key role in shaping consumer behavior, preferences, and choices, as well as influencing all stages of the customer journey. It influences consumers' perceptions of products, brands, and services, ultimately guiding their decision-making process. For consumers, they are more likely to consider and purchase products from brands they recognize and trust, thus, highlighting the importance of brand awareness in consumer decision-making.

Perception

Perception, or the perceived image of a person, is an organism that characterizes the consumer's expectations of any good or service Ramesh and Rao, (2018). Statt (1997) defined perception as the process of identifying and interpreting stimuli from the environment through human senses (sight, hearing, taste, smell, and touch). perception affects individual behavior and decision-making, especially in consumer contexts. Rosa et al. (2024), defined customer perception as the overall impression formed by consumers through cognitive and emotional reactions after exposure to a brand, product or service. Customer perception is not only an evaluation of a product or service, but also a process of how consumers apply concepts such as innovation and value to purchase decisions. Customer perception involves consumers awareness of service value, which includes not only the functions of the product itself, but also consumers' overall feelings about the brand and service experience.

Online Advertising

By using internet platforms, advertisers send electronic commercial information to consumers, which is called online advertising. online advertising encompasses all advertising content disseminated through internet media, including search, email, and social media ads, and with its main characteristics being interactivity and traceability. when formulating online advertising strategies, advertisers often prioritize "brand awareness, interest generation, and action conversion" as the three core objectives, emphasizing the full process from perception to action. As advertising platforms become more complex, information overload is gradually becoming a key obstacle affecting visual effectiveness Ha (2008). Nowacki and Fandrejewska (2024) found that most respondents were dissatisfied with advertisements,

particularly due to excessive repetition and the sheer number of ads, which undermined their motivation to purchase.

Individual Differences

In the context of e-commerce platforms, consumers' views and awareness toward the platform are not uniform, each person's awareness, emotion, and behavior are unique, and this difference is affected by genetic factors, growth environment, and socio-cultural background, The Individual Differences Theory was first proposed by psychologist Gordon Allport (1937). The core idea is that everyone has unique awareness, emotion and behavior, and these differences are usually affected by genetics, environment and socio cultural background (Neiss et al., 2009). Jaffar and Latiff (2024) further pointed out that this difference is not only reflected in personality and psychological traits but also includes the influence of sociocultural and demographic factors.

Background Information on TEMU

TEMU is an international e-commerce platform launched by Chinese e-commerce giant Pinduoduo in September 2022. Initially focusing on the US market, TEMU later expanded its business to multiple countries, including the United States, Australia, New Zealand, and several countries in Europe and Latin America. TEMU's slogan is "Group purchase, price reduction", and its main purpose is to gain a competitive advantage through group purchase transactions and competitive prices. This model is inspired by its parent company Pinduoduo. Entering the Thai market is crucial for TEMU because Thailand is not only one of the fastest growing economies in Southeast Asia, but also has a highly mature e-commerce market. Thai consumers are price sensitive and particularly are attracted to promotions and group buying models, which is highly consistent with TEMU's business model. TEMU offers low-priced and diverse consumer goods. TEMU adopts a centralized platform model, where the company oversees product selection, pricing and promotion, while working with suppliers for inventory and fulfillment. TEMU uses a variety of advertisements to spread its message across Thailand's major social media platforms. TEMU has placed a large number of advertisements on Facebook, TikTok and Instagram, and has created an exclusive channel on YouTube, and in-search engine marketing. TEMU's main target customer groups in general are commonly the low-and- middle income groups, Generation Z, and millennial consumers (Ologunebi et al., 2024). Customer awareness and perception online advertising are the basis for TEMU's success in the Thai market. Customer

awareness determines whether consumers know about the TEMU brand (Du & Yin, 2024), while perception refers to whether they choose to shop on the TEMU platform (Phoo, 2019).

Research Methodology

Hypotheses

Hypotheses 1 Gender

H0: Male and female have no difference in TEMU consumers awareness and perception online Advertising. $\mu_1 = \mu_2$

H1: Male and female have differences in TEMU consumers awareness and perception online advertising. $\mu_1 \neq \mu_2$

Hypotheses 2 Age

H0: Consumers in difference age groups are not different in TEMU consumers awareness and perception online advertising. $\mu_1 = \mu_2 = \mu_3 = \mu_4$

H1: Consumers in difference age groups are different in TEMU consumers awareness and perception online advertising. $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$

Hypotheses 3 Education level

H0: Consumers in difference education levels are not different in TEMU consumers awareness and perception online advertising. $\mu_1 = \mu_2 = \mu_3 = \mu_4$

H1: Consumers in difference education levels are different in TEMU consumers awareness and perception online advertising. $\mu_1 \neq \mu_2 \neq \mu_3 \neq \mu_4$

Hypotheses 4 Income level

H0: Consumers in difference income levels are not different in TEMU consumers awareness and perception online advertising. $\mu_1 = \mu_2 = \mu_3 = \mu_4$

H1: Consumers in difference income levels are different in TEMU consumers awareness and perception online advertising. $\mu_1 \neq \mu_2 \neq \mu_3$

Population and sampling method

This study deployed a quantitative research method as the research approach. Questionnaire survey collected data from Bangkok e-commerce users. The population were Thai consumers in Bangkok metropolitan who had access to the internet and had online shopping experience. The sample size was determined to be 385 people based on the Cochran formula (1977).

$$n = \frac{p(1-p)z^2}{e^2}$$

Where:

n = Sample size

p = Population proportion (0.5)

e = Acceptable sampling error (0.05)

Z = Z-value for 95% confidence level (1.96)

By substituting the values into the formula:

$$n = \frac{(1.96^2)(0.5)(0.5)}{0.05^2} = 385$$

Non-probability sampling methods, including purposive sampling and snowball sampling, will be used in this study (Etikan et al., 2016). Purposive sampling involves selecting users buying and products in Bangkok metropolitan, Thailand. Snowball sampling will be employed by asking initial respondents to share the survey with their peers who also use the platform, internet and have experience in buying product online. The 30 questionnaires were tested and the Cronbach's alpha value was .910, which indicated that the statements in the questionnaire were reliable. The questionnaire for this study was in digital form. Descriptive statistics used in this study included frequency, percentage, mean, and standard deviation. For inferential statistics, independent sample t-test and one-way analysis of variance were used to analyze the data.

Data Analysis

Descriptive statistical analysis

This study also presents the mean and standard deviation of each variable, including consumer awareness of TEMU, and the perception of online advertising of TEMU. Further, this study provides a descriptive and inferential statistical analyses to identify differences in consumer awareness and perception of TEMU online advertising across different demographic attributes (gender, age, education level, and income level). CA is Consumer awareness of TEMU, POA is Perception of online advertising TEMU.

Table 1 Description Statistics (N = 392)

Demographics	Items	Frequency	Percent
Gender	Male	175	44.64
	Female	217	55.35
Age	Under 18	2	.51
	18-28	154	39.28
	29-39	160	40.81
	30-49	61	15.56
	50-59	10	2.55
	Above 59	5	1.27
Education level	High school or below	4	1.02
	Diploma	5	1.27
	Bachelor's degree	326	83.16
	Master's degree / above	57	14.54
Income level	Less than ฿15,000/ month	12	3.06
	฿15,001-25,000/ month	142	36.22
	฿25,001-35,000 / month	176	44.89
	฿35,001-45,000 / month	39	9.94
	more than ฿45000 / month	23	5.86

Table 1 reveals that 55.4% of the respondents were female. The largest age groups were 29-39 year olds (40.8%) and 18-28 year olds (39.3%). The vast majority of respondents, 83.2%, held a bachelor's degree. Regarding income, 44.9% earned between 25,001 and 35,000 Baht per month, followed by 36.2% earning 15,001 to 25,000 Baht per month.

Mean and Standard Deviations of Each Variable

Table 2 Descriptive Statistics CA of Credibility (N = 392)

NO	Items	Mean	S.D.	Interpretation
1	I know TEMU	4.37	.74	strongly agree
2	Differentiate TEMU from others	4.05	.61	agree
3	recognize TEMU logo	4.25	.77	strongly agree
4	Identify TEMU from image	4.28	.81	strongly agree

Table 2 Descriptive Statistics CA of Credibility (N = 392) (Continued)

NO	Items	Mean	S.D.	Interpretation
5	TEMU is cheaper than others	4.15	.83	agree
6	Know product types on TEMU	4.17	.86	agree
7	Aware TEMU from China	4.31	.69	strongly agree
8	Identify Spin Wheel promotion	4.14	.87	agree
9	Advertises on social media (TikTok, Facebook, Instagram)	4.14	.75	agree
10	Free shipping service	4.10	.88	agree
11	Customer service and return policy	4.11	.91	agree
12	Offers product discounts	4.23	.83	strongly agree
13	Subject to customs duties	4.06	.95	agree
Average mean		4.18	.52	agree

Table 2 Respondents showed high awareness of TEMU (average mean = 4.18). Most of them know TEMU is a Chinese platform and can recognize its logo and visual image. High awareness on knowing TEMU offers frequent discounts and product types. Respondents are aware of TEMU's presence on social media and its promotional activities (Spin Wheel).

Table 3 Descriptive Statistics POA of Credibility (N = 392)

NO	Items	Mean	S.D.	Interpretation
1	Seen ads on Google websites	4.40	.88	strongly agree
2	Frequently see ads on websites	3.92	.58	agree
3	Seen ads on TikTok	4.15	.90	agree
4	Seen ads on Instagram	4.11	.83	agree
5	Seen ads on Facebook	4.25	.79	strongly agree
6	Seen pop-up ads while browsing	4.15	.87	agree
7	Seen spin wheel promotion	4.23	.97	strongly agree
Average mean		4.15	.63	Agree

Table 3 indicates that Respondents showed a high perception of TEMU’s online advertising (M = 4.15). Most know showed high Perception to TEMU ads, especially on Google (M = 4.40) and Facebook (M = 4.25). Strong Perception of Spin Wheel promotion (M = 4.23).

Hypothesis Test : Independent Sample T-test

Table 4 Results for Gender Differences in CA and POA (N = 392)

Variable	Gender	Mean	t	df	p
CA	male	4.21	.803	390	.423
	female	4.16			
POA	male	4.18	.878	390	.380
	female	4.12			

p < .05

Table 4 demonstrates that gender does not significantly influence either consumer awareness of TEMU (p = .423) or their perception of its online advertising (p = .380). In simpler terms, males and females show similar levels of familiarity with TEMU and hold comparable views on its online advertisements.

One-way ANOVA Analysis

One-way ANOVA was used to analyze the difference of age, education level and income level on consumer awareness and perception online advertising of TEMU.

Table 5 One-way ANOVA Results of Age CA and POA

Variable	Source	SS	df	MS	F-value	p-value	η^2
CA	Between Groups	17.388	5	3.478	14.896	.001*	.161
	Within Groups	90.113	386	.233			
	Total	107.501	391				
POA	Between Groups	32.069	5	6.414	19.923	.001*	.21
	Within Groups	124.261	386	.322			
	Total	156.329	391				

* p < .05

Table 5 shows that One-way ANOVA was conducted to examine the effect of age on Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU scores. In terms of CA, the difference between age groups was significant $F(5, 386) = 14.896, p < .05, \eta^2 = .161$, and approximately 16.1 percent of the awareness variance can be explained by the age factor, which is a large effect size. In terms of POA, the ANOVA test was also significant $F(5, 386) = 19.92, p < .05, \eta^2 = .21$, which suggests that age accounts for 21 percent of the variance in participants' perceptions of TEMU online advertising, which also constitutes a large effect size.

Table 6 One-way ANOVA Results of Education Level on CA and POA

Variable	Source	SS	df	MS	F-value	p-value	η^2
CA	Between Groups	7.689	3	2.563	9.963	.001*	.07
	Within Groups	99.812	388	.257			
	Total	107.501	391				
POA	Between Groups	11.945	3	3.982	10.700	.001*	.08
	Within Groups	144.384	388	.372			
	Total	156.329	391				

* $p < .05$.

Table 6 demonstrates that One-way ANOVA was conducted to examine the effect of education level on Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU .In terms of CA, there were significant differences in education level between the groups, $F(3, 388) = 9.963, p < .05, \eta^2 = .07$, indicating that education level can account to about 7.0% of the cognitive variance, which is a medium effect size. In terms of POA , education level also has a significant impact on the respondents' scores, $F(3, 388) = 10.700, p < .05, \eta^2 = .08$, which is about 8.0% of the differences in advertising perception that can be explained by education level, which is also a medium effect size.

Table 7 One-way ANOVA Results of Income Level on CA and POA

Variable	Source	SS	df	MS	F-value	p-value	η^2
CA	Between Groups	16.045	4	4.011	16.973	.001*	.15
	Within Groups	91.457	387	.236			
	Total	107.501	391				
POA	Between Groups	34.337	4	8.584	27.232	.001*	.22
	Within Groups	121.992	387	.315			
	Total	156.329	391				

* $p < .05$.

Table 7 reveals that One-way ANOVA was conducted to examine the effect of income level on Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU.

Consumer Awareness (CA) of TEMU, the difference between different income groups are significant, $F(4,387) = 16.973$, $p < .05$, $\eta^2 = .15$, indicating that about 15% of the consumer awareness variation can be explained by income level, which has a large effect size. In Perception Online Advertising (POA) of TEMU, the between-group differences were also significant, $F(4,387)=27.232$, $p<.001$, $\eta^2=.22$, indicating that income level explains about 22% of the differences in advertising perception, which has also a large effect size.

Table 8 Summary of Hypothesis Testing

Variable	CA	POA
Gender	No significant difference	No significant difference
Age	Significant differences	Significant differences
Education level	Significant difference	Significant differences
Income level	Significant differences	Significant difference

As shown in Table 8, The differences in Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU on different demographic variables are not completely consistent.

Gender did not show significant differences in both dimensions.

Age showed significant differences in both Consumer Awareness (CA) of TEMU and

Perception Online Advertising (POA) of TEMU.

Education level showed significant differences in both Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU.

Income level showed significant differences in both Consumer Awareness (CA) of TEMU and Perception Online Advertising (POA) of TEMU.

Conclusion and Discussion

Conclusion

This study deployed a quantitative research method as the research approach, purposive sampling and snowball sampling techniques to collect data via online questionnaire distributed through Google Forms. A total of 392 valid responses were obtained. Based on the hypothesis testing, the H₀ hypothesis for gender (Hypothesis 1) was accepted, indicating no significant difference between male and female consumers in terms of TEMU consumer awareness and perception of online advertising, the H₀ hypotheses for age (Hypothesis 2), education level (Hypothesis 3), and income level (Hypothesis 4) were rejected, demonstrating significant differences in consumer awareness and perception across different age groups, education levels, and income brackets.

Discussion

In terms of gender, the study revealed that no significant differences were found between male and female respondents in consumer awareness of TEMU or perception online advertising of TEMU. According to Kumar and Sukhija (2022), "A Study on Customers' Awareness towards Online Shopping" and Schimmel et al. (2003), "Gender Differences and E-commerce Behavior and Perceptions", they found that male and female consumers showed similar results in terms of awareness and perception online advertising of TEMU. In terms of consumer awareness of TEMU, the results show that age, education level and income level have significant differences in consumer awareness and online advertising perception of TEMU consumers. This is consistent with the results of Kavitha (2015), in "A Study on Consumer Awareness and Determinants of Online Shopping." The study found that age, education level and income level have a significant and positive impact on customer awareness. This study is consistent with the survey results of the TEMU platform, which also shows that age, education level and income level factors have significant differences in consumer awareness. In terms of online advertising perception, the results

show that there are significant differences in age, education level and income level. This result is consistent with the conclusions of Ahlluwalia and Singh (2020), in the study “Consumers’ Demographics as Predictors of Their Perception of Online Advertising: Are They Still Relevant in the E-Landscape?”. The study pointed out that there were significant differences in online advertising perception by age, education level and income level.

Recommendations for Future Research and Recommendations for Management

Recommendations for Future Research

This study is limited by its focus on the Bangkok Metropolitan area and its overrepresentation of middle- and high-income groups, with only 3% of respondents from low-income segments. Future research should broaden the geographic coverage to include urban, suburban, and rural areas to ensure a more representative sample across income levels. Moreover, the current study examined consumer awareness and perception but did not investigate whether participants had actual experience using TEMU or their purchase intentions. Therefore, future studies are encouraged to include purchase intention as a variable to assess whether awareness and perception translate into actual behavior. Additionally, the use of online QR-code-based questionnaires may have excluded low-income individuals who lack access to smartphones or digital literacy. To address this, future research should adopt inclusive data collection methods such as paper-based surveys or in-person interviews to better capture the perspectives of digitally underserved populations.

Recommendations for Management

This study finds that Thai consumers show high levels of awareness of TEMU and perception of its online advertising, with key demographic factors significantly influencing these outcomes. To convert potential consumers into actual buyers, it is recommended that TEMU implement low-risk trial mechanisms, such as first-use-later-payment, first-order cashback, and referral-based discounts. A membership points system should also be introduced, offering increasing benefits based on purchase levels, such as exclusive customer service and faster delivery. Cash-on-delivery options can help build trust by allowing product inspection before payment. Additionally, guiding users clearly from ad interaction (e.g., Spin Wheel ads) to registration and discount application can improve conversion. In terms of product strategy, TEMU should continue offering low-priced items while ensuring acceptable quality, with a wide range of branded and unbranded products to meet the needs of both low- and middle-income consumers.

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