

CONSUMER MOTIVATIONS IN REGULATED MARKETS: A QUANTITATIVE ANALYSIS OF PURCHASE INTENTION IN THE TOBACCO INDUSTRY

MOTIVASI KONSUMEN DI PASAR YANG DIATUR: ANALISIS KUANTITATIF MENGENAI NIAT PEMBELIAN DI INDUSTRI TEMBAKAU

Margareta Ninda Arlita¹, Atik Aprianingsih²

Program Magister Administrasi Bisnis, Institut Teknologi Bandung^{1,2}
margareta_arlita@sbm-itb.ac.id¹, atik.apri@sbm-itb.ac.id²

ABSTRACT

Tobacco industry in Indonesia as a heavily regulated markets currently face significant challenges driven by numerous factors. The findings of this study are expected to provide industry practitioners with insights related to their responsible business strategies and help policymakers understand consumer behavior to formulate public policies particularly related to public health as well as the economic sustainability of the tobacco sector. This study examined eight factors that may influence consumer's purchase intention including cultural, social, personal, psychological and marketing stimuli such as product, place, price and promotion. In evaluating the potential use of the above factors to predict purchase intentions, the author conducted a survey with 236 valid samples and analyzed the data using PLS-SEM model. Based on the result, it can be concluded that seven out of eight factors have statistically significant positive influence on purchase intention except for cultural factors. The variable with strongest influence on Purchase Intention is Personal (coefficient 0.183) followed by Place (coefficient 0.181), Social (coefficient 0.175) and Promotion (coefficient 0.157).

Keywords: Purchase Intentions, PLS-SEM, Tobacco Industry, Consumer Behavior, Marketing Strategy, Public Policy

ABSTRAK

Industri tembakau di Indonesia merupakan industri yang berada di bawah peraturan dan pengawasan yang sangat ketat. Saat ini, industri tersebut sedang mengalami tantangan besar yang disebabkan oleh beberapa faktor. Penelitian ini bertujuan untuk memberikan wawasan mendalam kepada praktisi industri untuk keperluan manajemen bisnis yang bertanggung jawab dan untuk membantu pemangku kebijakan agar lebih bijak dalam menyusun aturan terkait kesehatan masyarakat dan juga keberlanjutan ekonomi di sektor industri tembakau. Penelitian ini menguji delapan variabel yang mungkin dapat mempengaruhi niat pembelian konsumen seperti faktor budaya, sosial, pribadi, psikologi, serta rangsangan pemasaran seperti produk, tempat, harga dan promosi. Dalam mengevaluasi kedelapan faktor tersebut untuk memprediksi niat pembelian, peneliti melakukan survei kepada 236 sampel responden kemudian melakukan analisa data menggunakan PLS-SEM model. Berdasarkan hasil penelitian, dapat disimpulkan bahwa tujuh dari delapan faktor secara statistik mempunyai pengaruh yang signifikan terhadap niat pembelian kecuali faktor budaya. Variabel dengan pengaruh terkuat adalah pribadi (koefisien 0.183) diikuti tempat (koefisien 0.181), sosial (koefisien 0.175) dan promosi (koefisien 0.157).

Kata Kunci: Niat pembelian, PLS-SEM, Industri tembakau, Perilaku konsumen, Strategi Marketing, Kebijakan Publik

INTRODUCTION

Tobacco is one of the leading commodities in the agricultural sector in Indonesia. In 2023, Indonesia was the fourth leading tobacco producers in the world after China, India, and Brazil with total 238.81 thousand metrics tons based on Statista reports from FAO (Food and Agriculture Organization). Additionally, according to World Population Review (2025), Indonesia is the fifth largest

tobacco market in the world. In line with the above facts, tobacco has become part of Indonesia's history and culture. Indonesia has one of the highest smoking rates in the world. In 2023, the smoking prevalence in Indonesia is 38% and was estimated to continue increasing and reach approximately 38.6% by 2029 (Statista, 2023).

For decades, tobacco industry has become the crucial sector in Indonesia. It

significantly contributes to the national revenue through tobacco excise taxes. Moreover, Tobacco industry provides employment for millions of people both in tobacco farming and cigarette manufacturing. Tobacco Industries is a double-edged sword for Indonesia. It generates economic benefit as the highest contributor of excise-based state revenues but on the other sides tobacco products like cigarettes often cause societal harm through environmental, health, and economic damages. The important contribution of tobacco excise taxes to total excise revenues creates dilemma for the government. (Kosijungan, 2020).

To reduce the smoking rates and improve public health, Government of Indonesia has been implemented more stricter regulations and high excise taxes on tobacco products. The increasing tax excise has started since 2021 and continued to 2024. Start from January 1, 2025, although the excise tax rates (CHT) on tobacco remain unchanged, the retail selling price (HJE) will rise by varying percentages. According to the new rules set by Finance Minister (PMK No 97/2024), the retail prices of cigarettes cannot be set below the minimum price limits defined in the law based on the category and type of cigarette. In Oct 2024, Government of Indonesia also publish the new GR 28 which has stricter regulation related to cigarette marketing. This new GR obviously will require tobacco companies to change their strategic marketing. All the challenges related to strict Government regulation impacting the profitability of cigarette manufacturers. This policy supports public health, but on the other hand, it raises concerns about economic stability in the tobacco sector.

Despite the strict regulation, cigarette consumption remains

significant, making it an important area to understand more on consumer purchase intentions. In examining these intentions, it is essential to consider the broader framework of consumer behavior. Consumer behavior is strongly influenced by cultural, social, personal, and psychological characteristics (Kotler and Armstrong, 2024). In addition, according to Centers for Disease Control and Prevention (2007), there are 4 factors that influence the tobacco use such as society, community, interpersonal and individual. Learning about the why behind consumer buying behavior is not easy. The answer is often locked deep within the consumer's mind. Consumers themselves often don't know exactly what influences their purchases. Marketing stimuli (such as product, price, place and promotion) and other stimulus (economic, technological, social, cultural) enter the consumer's decision processing and produce certain buyer responses. The decision process from need recognition, information search, and alternative evaluation to the purchase decision and post purchase behavior begin long before the actual purchase decision and continues long after. (Kotler and Armstrong, 2024).

Related to stimulus or other environmental factors affecting smokers' purchase intentions, numerous studies indicated that marketing exposure had been shown to have an impact on smokers' purchase intentions (Choi et al., 2021; Sharma et al., 2022; T. B. Y. Tran et al.). Choi et al mentioned that availability of cigarette price discounts, price tiers and pack/carton could potentially influence cigarette purchasing behaviors among young adult smokers. Sharma et al study provides insight into how sensory experiences and marketing stimuli influence smokers' preferences for harm-reduction products, highlighting

the role of product attributes in shaping consumer decisions. In addition, T. B. Y. Tran et al study results indicate a significant positive impact of tobacco marketing on young smokers' emotions, particularly pleasure and arousal that increased smoking approach behaviors, such as smoking, tobacco purchase intention, seeking tobacco-related information and communicating with others about smoking. While numerous studies have explored factors influencing purchase intentions in various product categories, research in the tobacco sector particularly in Indonesia remains limited. This study aims to examine the direct effects of cultural, social, personal, psychological, and marketing mix factors for consumer's purchase intention toward cigarette products in Indonesia.

Cultural

Culture is the set of basic values, perceptions, wants, and behaviors learned by a member of society from family and other important institutions. Each culture contains smaller subcultures, or groups of people with shared values systems based on common life experiences and situations. Cultural Factors have a broad and deep influence on consumer behavior, especially Purchase Intention (Kotler & Armstrong, 2024) Therefore, the following hypothesis is established to examine the relationship between cultural factors and purchase intention. **H1:** There is a positive influence of cultural factors on purchase intention

Social

According to Kotler & Armstrong (2024), consumer behavior is influenced by social factors such as Groups, Social Networks, Influencer Marketing, Family, Social Roles & Status. The personal recommendations of trusted

friends, family, and associates tend to be more credible than those coming from commercial sources that can strongly influence consumer buying behavior. The influence of marketing could influence a person buying behavior as well. The following hypothesis is developed to understand the relationship between the influence of social factors on purchase intention.

H2: There is a positive influence of social factors on purchase intention.

Personal

As mentioned by Kotler & Armstrong (2024), buyer decisions are influenced by personal characteristics such as buyer's occupation, age and stage, economic situation, lifestyle, personality and self-concept. Many of these factors have direct impact on consumer behavior and it is important for marketers. In addition, consumers typically choose and use brands with personality consistent with their actual self-concept (Kotler, Keller & Chernev, 2022). Related to the concept mentioned above, the following hypothesis is used to understand the relationship between personal factors and purchase intention.

H3: There is a positive influence of personal factors on Purchase Intention.

Psychological

According to Kotler & Armstrong (2024), a person buying choices are influenced by four psychological factors such as motivation, perception, learning, beliefs and attitudes. When marketing and environmental stimuli enter the consumer's consciousness, a set of psychological process combines with certain consumer characteristics to results in decision process and purchase decisions. Based on this theory, the author developed the following hypothesis to deeper the understanding of the relationship between

psychological factors and purchase intention.

H4: There is a positive influence of psychological factors on purchase intention.

Product

A model of buyer behavior by Kotler & Armstrong (2024) mentioned that product is one of the marketing stimuli that enter the consumer’s decision-making process and produce certain buyer responses. Products capture the offering from the company to the target market. It can include physical or digital products, services, solutions or even experiences. The main attributes of products are variety, quality, design, features, brand name, packaging and services. Those attributes collectively influence consumer perception and play critical role in shaping purchase decisions.

H5: There is a positive influence of product attributes on Purchase Intention.

Place

Place includes company activities that make the product available to target consumers. The place attributes include channels, coverage, locations, inventory, transportation and logistics (Kotler & Armstrong, 2024)

H6: There is a positive influence of place (purchase location) attributes on Purchase Intention.

Price

According to Kotler & Armstrong (2024) price is the amount of money customers must pay to obtain the product. Component of the price attributes are list price, discounts, allowances, payment period and credit terms.

H7: There is a negative influence of price sensitivity on Purchase Intention

Promotion

Promotion refers to activities that communicate the benefits of the product and persuade target consumer to buy it. Promotional activities include advertising, personal selling, sales promotion and public relations. (Kotler & Armstrong, 2024)

H8: There is a positive influence of promotion exposure on Purchase Intention.

The conceptual framework of this study is based on the consumer behavior model arranged by Kotler and Amstrong (2024). There are 4 factors that influence consumer behavior, namely cultural, social, personal and psychological. These factors shape how individuals perceive and respond to marketing stimuli including product, place, price and promotion. In regulated market especially Indonesia, these consumer related determinants influence the with marketing elements to influence purchase intention. This framework assumes that while external regulation may limit marketing practices, consumer motivation remains driven by internal factors or other marketing stimuli. Understanding the interplay between consumer characteristics and marketing stimuli is very important for predicting purchase intention.

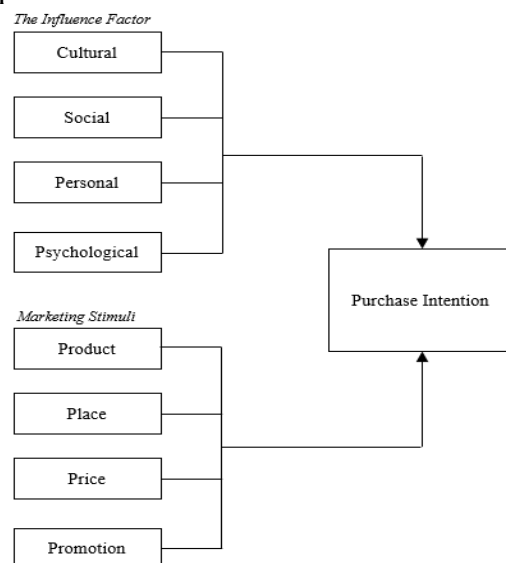


Figure 1. Conceptual Framework

RESEARCH METHODS

This research uses a quantitative approach as it enables us to analyze phenomena and causal relationships among predetermined variables. The quantitative approach allows accurate hypothesis testing through statistical analysis, which ensures validity and reliability.

Sample and Data Collection

In this research, the author collected primary data through questionnaire that was delivered to cigarette consumers. The data is used for better perspective of consumer preferences, purchase frequency, brand perceptions and respond to marketing strategy. As the research focuses on consumer behavior in tobacco industry, the population for this study consist of adult tobacco consumer in Indonesia including those who consume conventional cigarettes, kretek, and alternative tobacco products. According to Indonesian Health Survey conducted by Ministry of Health (*Kemenkes*) in 2023, the total active smoker in Indonesia reaches 70 million with 7.4% of them being smokers aged 10 to 18 years old. Based on the data availability, the total population of this study is 70 million individuals. Due to time and budget constraints, the sample will be drawn from the population. The sampling method in this research will use convenience stratified sampling based on geographic locations referring to the population proportion based on Statistics Indonesia (BPS) in 2020.

According to Malhotra (2010), to conduct problem-solving research, the minimum sample size that is suggested to use is 200 samples. Therefore, in this research the author will generate minimal 210 samples consisting of 70 samples of Sampoerna consumers, 70

samples of Gudang Garam Consumers, and 70 sample of Djarum consumers.

RESULTS AND DISCUSSION

Respondents Demographics

The descriptive statistics provide an important part to understand the characteristic of the target population to support the data interpretation and behavioral patterns relevant to the study. The questionnaire respondents and those who meet the criterion for legal-age smokers are 84% male and only 16% female. Based on age range, most of the respondents' age is between 26-30 years (34%), followed by 31-35 years (29%), 21-25 years (24%), 36-40 years (7%), and 41-45 years (6%). The majority of respondents is currently living in Java (55%) followed by Sumatera (19%), Bali (9%), Kalimantan (8%), Sulawesi 6%, Nusa Tenggara (3%). As the author is using stratified sampling based on geographic location, the data was collected to meet the national geographic proportion to make sure that there will be no bias in collecting the consumer's cultural aspects. Related to the educational background, majority of the respondents graduated from senior high schools or equivalent to 38%, bachelor's degree (32%), diploma (16%), junior high school (10%), elementary school (2%), postgraduate (1%) and others (1%). Based on the data, respondents having an occupation in private sector (26%) followed by entrepreneur (20%), laborer/ freelance/ daily worker (18%), university student (13%), civil servant (6%), unemployed/job seeker (5%), teacher/lecturer (4%), farmer/ fisherman/ livestock breeder (3%), state-owned enterprise (3%), Military/Police (2%), and others (1%). Regarding the respondents' monthly spending, most of the respondents have monthly income range between IDR 3-7 million (4%), followed by IDR less than 3 million

(29%), IDR 7-15 million (15%), IDR 15-25 million (5%), IDR 25-35 million (3%), and more than IDR 35 million (1%). This data showed that most of the respondents were most likely to purchase middle and low-price cigarette products.

Cigarette Consumption Behavior

Along with the questions regarding respondents' demographic characteristics, there are also questions related to respondents' cigarette consumption behavior used to gain better knowledge of consumer's purchasing behavior. Minimarket and small shop (*warung*) have an equal result as the most often cigarette place to buy. 50% of respondents purchased from minimarkets (Alfamart/ Indomaret/ others) while other 50% of the respondents purchased from traditional outlets like small shops (*warung*). Most of the respondents frequently see advertisements through Billboard (37%), indicating that outdoor advertising remains the most dominant and visible media for cigarette ads. Majority of respondents bought cigarette with price range between IDR 25,000 – IDR 35,000 (39%), IDR 15,000 – 25,000 (34%), more than IDR 35,000 (21%) and less than IDR 15,000 (6%). In terms of cigarette consumption, most of the respondents consume cigarettes less than 12 sticks per day (54%), while the other 42% of the respondents consume 12-20 sticks per day, and the other 4% of the respondent's consumer more than 20 sticks per day.

Variable Descriptive Analysis

The results of each question using Likert scale can be analyzed to understand customer perceptions on purchase intention across the influence factor such as cultural, personal, social, psychological and marketing stimuli factors include product, place, price,

promotion. The data is analyzed by calculating the overall score distribution based on the mean of each variable.

Tabel 1. Overall Variable Mean Score

Variable	Mean	Classification
Cultural (X1)	3.255	Moderate
Social (X2)	3.374	Moderate
Personal (X3)	3.296	Moderate
Psychological (X4)	3.535	High
Product (X5)	3.528	High
Place (X6)	3.542	High
Price (X7)	3.540	High
Promotion (X8)	3.335	Moderate
Purchase Intention (Y1)	3.375	Moderate

Based on the overall variable mean score of consumer behavior dimensions, psychological factors recorded the highest mean score (3.535) suggesting a strong role of motivation, perception and attitudes toward purchase decision. In contrast, cultural factors showed the lowest mean score (3.255) implying a comparatively weaker influence. For marketing stimuli, place (3.542) and price (3.540) come as the most influential factors, followed closely by product (3.528). Meanwhile, promotion showed as the lowest mean score (3.335) indicating that advertising and promotional efforts may have less impact on the purchase intention. For purchase intention, the overall mean score is 3.375 indicates that it has moderate level of consumer's willingness to buy.

PLS SEM Analysis

The PLS-SEM analysis was conducted several times, until the model is considered reliable and valid in the outer model before the model is being evaluated in the inner model testing. There will be two stages of evaluation,

the first stage is evaluation of measurement models, and the second stage is evaluation of the structural model.

A. Evaluation of Measurement Models:

Cronbach Alpha and Composite Reliability

The Cronbach alpha score reflects the correlation between indicators within a construct while the composite reliability will show the difference in outer loading of indicator variables. Hair

et al (2017) states that the acceptable values for both Cronbach's alpha and composite reliability should be greater than 0.7 to be considered as reliable. From the result as shown in table 2, all the latent variables meet the validity criteria of reliability test as the Cronbach alpha and composite reliability score > 0.7. Therefore, all the latent variables are considered reliable after meeting all measurement criteria. This provides strong foundation on the structural model.

Table 2. Cronbach Alpha and Composite Reliability Test

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Cultural (CUL)	0.772	0.776	0.854
Personal (PER)	0.863	0.864	0.895
Place (PLA)	0.85	0.852	0.889
Price (PRI)	0.816	0.817	0.872
Product (PRO)	0.842	0.843	0.884
Promotion (PRM)	0.857	0.858	0.891
Social (SOC)	0.835	0.838	0.879
Psychological (PSY)	0.844	0.847	0.885
Purchase Intention (PUR)	0.778	0.778	0.857

Convergent Validity: Indicator Reliability and Average Variance Extracted

The next step is to evaluate the outer loading of the indicators. High outer loading score indicates a strong correlation between the indicators and the construct measured. The minimum score for outer loading is 0.7 (Hair et al, 2017). Based on the results, all indicators have an outer loading value > 0.7. Therefore, all the indicators in this study are categorized as valid and meet the

criteria. For each indicator, neighborhood regulations, cigarette stocks, discounts, store banner placement, packaging, and releasing stress are the top dominant factors. The convergent validity could be conducted by evaluating the Average Variance Extracted (AVE). When AVE value is greater than 0.5, the construct is able to explain more than 50% of the variance of its indicator. Based on the results, all constructs meet the criteria for convergent validity with AVE value

Table 3. Heterotrait Monotrait Ration (HTMT)

	CUL	PER	PLA	PRI	PRO	PRM	PSY	PUR	SOC
CUL									
PER	0.565								
PLA	0.585	0.695							
PRI	0.533	0.659	0.689						
PRO	0.561	0.667	0.643	0.648					
PRM	0.533	0.67	0.709	0.671	0.65				
PSY	0.528	0.717	0.702	0.691	0.636	0.662			
PUR	0.645	0.86	0.87	0.817	0.793	0.844	0.837		
SOC	0.561	0.699	0.712	0.707	0.627	0.726	0.703	0.872	

more than 0.5. This indicates that indicators are able to explain more than 50% of the variance of each construct and confirm that the constructs have strong convergent validity.

Discriminant Validity

Usually, researchers use several tests for discriminant validity such as the cross loading, Fornell-Larcker criterion, and the Heterotrait-Monotrait ratio (HTMT). The result shows that all the outer loadings are greater than the cross loading. The next criterion to be considered in discriminant validity is the

Fornell-Larcker criterion. To meet the requirements, the square root of the AVE must be greater than its highest correlation with any other construct. The results show that square root values of AVE for each construct are greater than their correlations with other constructs. It means that the values are meet the Fornell-Larcker criterion.

The next important criterion is HTMT or Heterotrait-Monotrait ratio. In short, HTMT is the ratio of the between-trait correlations to the within trait correlations (Henseler et al., 2015). Based table 3, there are no HTMT correlations values that are greater than 0.9. These values meet the HTMT criteria and fulfill the requirements of discriminant validity testing. In this stage, each construct has met the criteria

for discriminant validity testing. In overall, it can be concluded that each construct is empirically distinct from the others and capable of capturing phenomena not represented by other constructs. This demonstrates that the constructs are not only distinct but structurally valid.

B. Evaluation of Structural Models

In the structural models, the most important evaluation metrics are R² (explained variance), f² (effect size), Q² (predictive relevance), and the size and statistical significance of the structural path coefficients.

Structural Model of Collinearity Issues (VIF)

The test of collinearity is done using VIF (Variance Inflation Factor) values. If the VIF value is less than 5, the model categorized fit and can be proceed to the next analysis the result of VIF value testing is shown in table 4.18. From the result, the VIF values between research variables are met the test threshold (less than 5). Therefore, based on inner model testing, the model is generally considered to be adequate.

Size and Significance of Path Coefficients

The next test is the size and significance of path coefficients which

involves examining the path coefficients value and the T-value. The value of path coefficients closes to 1 indicates a positive relationship, while a value close to 0 indicates a weak relationship within the model structure. Furthermore, the t-value indicates the significance of relationship between variables at certain error level. In this research, the author uses significance level of 5% and the t-

value must be greater than 1.96 (Hair et al, 2017). From table 4, purchase intention is significantly influenced by personal, place, product, promotion, psychological, and social whereas cultural is not significant. In terms of coefficient magnitude, the strongest determinants are personal, place and social.

Table 4. Size and Significance of Path Coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Cultural -> Purchase Intention	0.027	0.027	0.039	0.697	0.243
Personal -> Purchase Intention	0.183	0.183	0.055	3.328	0.000
Place -> Purchase Intention	0.181	0.18	0.06	3.016	0.001
Price -> Purchase Intention	0.101	0.101	0.051	1.995	0.023
Product -> Purchase Intention	0.123	0.124	0.047	2.619	0.004
Promotion -> Purchase Intention	0.157	0.157	0.051	3.088	0.001
Psychological -> Purchase Intention	0.134	0.133	0.055	2.437	0.007
Social -> Purchase Intention	0.175	0.178	0.056	3.099	0.001

Coefficient of Determination (R^2) Model

This model relates to its ability to fit the existing data by measuring the strengths of associations indicated by PLS path model. Coefficients of determination (R^2) is the most commonly used metric to evaluate the explanatory power of a structural model. The R^2 value is used to assess the strength of the structural model. The higher R^2 value, the better the predictive capability of the proposed research model.

Table 5. Coefficient of Determination (R^2)

	R-square	R-square adjusted
Purchase Intention	0.741	0.732

Based on the result, R^2 score 0.741 is categorized as strong or 74.1% variance in purchase intention could be explained with the model. This model is

effective to explain the consumer behavior related to purchase intention. Moreover, all factors such as personal, psychology social and marketing mix are contributed to the purchase intention. The adjusted R^2 0.732 calculated the variables in the model and sample size which more accurate to model with more predictor.

Effect Size (f^2)

By evaluating the effect size, we could determine the magnitude of influence that exogenous variable have on endogenous variable within the model. The value of f^2 : 0.02, 0.15 and 0,35 represents small, medium, and large effects respectively (Hair et al, 2017). From the results, the relative contribution to purchase intention is categorized small according to Hair et al, however as the score of personal, place, and social area relative higher compared to the other constructs, it could be

concluded that those factors are the most contributed factor to the purchase intention. Meanwhile, the cultural factor has the least impact to purchase intention. From this result, although most of the constructs shows a relatively small effect size, the overall model demonstrates strong explanatory power for purchase intention ($R^2 = 0.741$). This indicates that the consumer is influenced by a combination of complementary factors and that the effective marketing strategy needs to consider a holistic approach.

Q² Predict

MAE (Mean Absolute Error) and RMSE (Root Mean Square Error) are used to assess the prediction accuracy. The smaller values indicate higher predictive capability of the model. However, since these values are influenced by the scale of the dependent variable's indicator, their interpretation couldn't stand alone. Shmueli et al, 2019 recommend using Q² predict as simple benchmark that compare the prediction error or the PLS model If the Q² predict value is positive, it means that PLS model provides better predictions than the simple average approach. As from table 6, the number of Q² predict is 0.75. It could be concluded that the predictive relevance of the model is strong to predict the consumer purchase intention.

Table 6. Q² Predict

	Q ² predict	RMSE	MAE
Purchase Intention	0.715	0.538	0.432

Standard Root Mean Square (SRMR)

Henseler et al (2017), assessed the efficacy of the standardized root mean square residual (SRMR), a model fit measure well known from CB-SEM, which has previously not been applied in a PLS-SEM context According to (Hu &

Bentler, 1998), a value less than 0.08 is generally considered a good fit. Based on table 4.23, the SRMR value of both the saturated and estimated model is 0.055 (<0.08) which indicates that the model is fit.

Table 7. Standard Root Mean Square

	Saturated model	Estimated model
SRMR	0.055	0.055

PLS SEM Model

The study findings offer insightful information that seven out of eight factors have statistically significant positive influence on Purchase Intention except for cultural factors as shown in Figure 2.

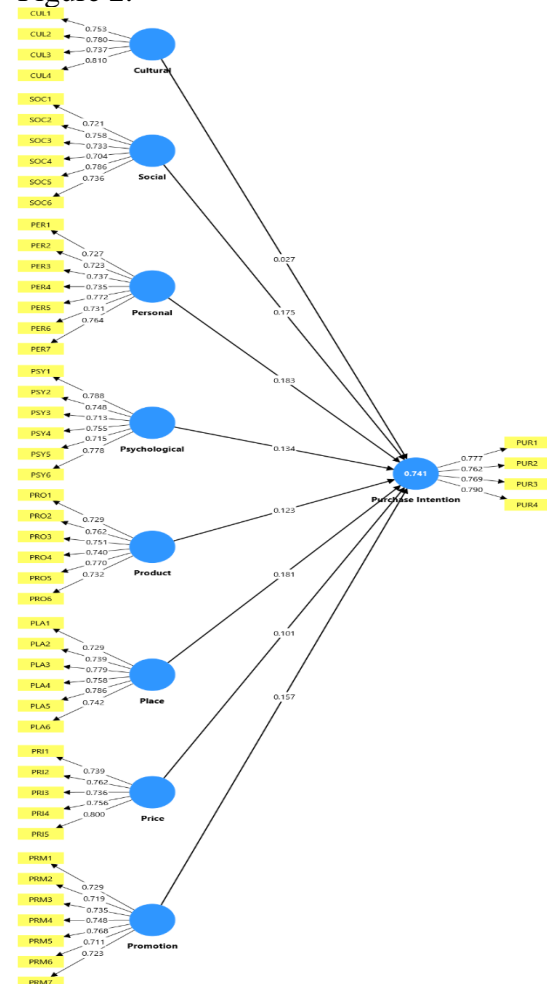


Figure 2. PLS SEM Model

Cultural Factors have a broad and deep influence on consumer behavior

especially purchase intention (Kotler & Armstrong, 2024). Therefore, H1 predicts that there is a positive influence of cultural factors on purchase intention. However, the result revealed that cultural did not have significant influence to purchase intention. (Coefficient 0.027, p-value 0.243; H1 rejected). This result indicates that the cultural factors such as macro level social norms or value are not a primary driver of purchase intention within the context of this sample. The interview with some respondents revealed that cultural aspects are not a significant influence as they think that social factors are the most dominant factor. Therefore, cultural factors did not always align with peer pressure.

According to Kotler & Armstrong (2024), consumer behavior is influenced by social factors such as Groups, Social Networks, Influencer Marketing, Family, Social Roles & Status. H2 predicts that there is a positive influence of social factors on purchase intention. Based on PLS-SEM results, H2 is proven as social influence includes family, friends, communities, influences have significant positive effects on purchase intention (coefficient 0.175, p-value 0.001; H2 supported). Credible recommendations, testimonials and social proof (rating/review) could accelerate the formation of purchase intention.

As mentioned by Kotler & Armstrong (2024), buyer decisions are influenced by personal characteristics such as buyer's occupation, age and stage, economic situation, lifestyle, personality and self-concept. Many of these factors have direct impact on consumer behavior and it is important for marketers. In addition, consumers typically choose and use brands with personality consistent with their actual self-concept (Kotler, Keller & Chernev,

2022). Based on that theory, H3 predicts that there is a positive influence of personal factors on purchase intention. Personal factors with coefficient 0.183 and p-value 0.000 confirming that H3 supported. Personal factors such as demographics, lifestyle, income or preferences have significant positive effects. The more products offering suit the consumer's personal profiles, the higher the purchase intention will be. Therefore, personalization strategies could be the key marketing factor.

According to Kotler & Armstrong (2024), a person buying choices are influenced by four psychological factors such as motivation, perception, learning, beliefs and attitudes. When marketing and environmental stimuli enter the consumer's consciousness, a set of psychological process combines with certain consumer characteristics to results in decision process and purchase decisions. The marketer's task is to understand what happens in the consumer's consciousness between the arrival of the outside marketing stimuli and the ultimate purchase decisions (Kotler, Keller & Chernev, 2022). Based on this theory, H4 predicts that there is a positive influence of psychological factors on purchase intention. With coefficient 0.134, p-value 0.007, the PLS-SEM results revealed that H4 is supported. The attitudes, risk/benefit perceptions, motivation, and personality traits influence the purchase intention. To strengthen the purchase intention, the intervention that reduce perceived risk such as warranties or positive reviews are recommended.

A model of buyer behavior by Kotler & Armstrong (2024) mentioned that product is one of the marketing stimuli that enter the consumer's decision-making process and produce certain buyer responses. Products capture the offering from the company to

the target market. H5 predicts that there is a positive influence of product attributes on Purchase Intention. Product with coefficient 0.123, p-value 0.004 confirming that H5 is supported. Product attributes such as quality, features, design and variants significantly drive purchase intention. It is suggested to have the relevant feature updates and a consistent quality to reinforce consumer trust prior to purchase.

Place includes company activities that make the product available to target consumers. The place attributes include channels, coverage, locations, inventory, transportation and logistics (Kotler & Armstrong, 2024). H6 predicts that there is a positive influence of place (purchase location) attributes on Purchase Intention. Referring to PLS-SEM result, place factor has a significant influence to purchase intention (coefficient 0.181, p-value 0.001; H6 supported) showing that accessibility, channel availability and distribution convenience significantly enhance purchase intention. Therefore, the optimization of channel mix (i.e. marketplaces, nearby stores, delivery services) and ensuring stock availability are the key critical factors.

According to Kotler & Armstrong (2024) price is some amount of money that customers must pay to acquire the product. Component of the price attributes are list price, discounts, allowances, payment period and credit terms. H7 predicts that there is a negative influence of price sensitivity on Purchase Intention. The result revealed that price has a significant positive effect on purchase intention (Coefficient 0.101, p-value 0.023; H7 supported). The influence is not merely in terms of affordability but in perceived value for money. Price transparency, time-limited promotions and bundling strategies can enhance the value perceptions as well as stimulate the purchase intention.

Promotion refers to activities that communicate the benefits of the product and persuade target consumer to buy it. Promotional activities include advertising, personal selling, sales promotion and public relations. (Kotler & Armstrong, 2024). H8 predicts that there is a positive influence of promotion exposure on Purchase Intention. According to the PLS-SEM result, promotional activities such as advertising, discounts, endorsements, or digital campaigns are proven to significantly increase purchase intention with coefficient 0.157 and p-value 0.001 (H8 supported). Therefore, targeted promotions with clear messaging and strong call to action will contribute to purchase intention.

CONCLUSION AND SUGGESTION

This study emphasizes that seven out of eight factors have statistically significant positive influence on purchase intention except for cultural. These findings suggest that both individual characteristics and elements of the marketing mix play critical role in shaping consumer buying behavior. Conversely, from the sample questions and respondents the cultural factor has low influence on purchase intention. The variable with strongest influence on purchase intention is personal followed by place, social and promotion. This indicates that marketing strategies emphasizing personalization, in-store experience, social influence, and promotion will be more effective in increasing the consumer's purchase intention.

In accordance with the study, industry practitioners should prioritize strategies that enhance personal experience and product accessibility while also reinforcing relevant promotional activities as these factors

have strong influence on purchase intentions in regulated markets. However, it is strongly recommended that industry practitioners need to follow the compliance requirements to be more responsible in doing promotional activities. On the other hand, policymakers should enhance transparency in compliance by monitoring the companies to clearly disclose their regulatory adherence. Because personal factors have the strongest impact, policymakers should provide clearer guidelines for ethical personalization such as privacy protection or personal educational content. Regulation also needs to extend oversight to digital channel where accessibility strongly influences purchase intention. These channels often bypass traditional restrictions and make products more accessible which could lead to purchase intention.

Limitation and Future Research

The rejected hypothesis regarding cultural factors suggests an opportunity for future research. The next studies could incorporate variables such as regulatory perception or trust in compliance as this may mediate the relationship between cultural norms and purchase intention. Moreover, other potential variables may also provide deeper insights such as the interaction between cultural and social in terms of subjective norm or peer pressure to understand whether culture strengthens or weakens the influence of social factor on purchase intention.

REFERENCES

- [1] CDC (Centers for Disease Control and Prevention). (2007). *The Social-Ecological Model: A Framework for Prevention*. National Center for Injury Prevention and Control, Division of Violence Prevention. <http://www.cdc.gov/ncipc/dvp/Social-Ecological>.
- [2] Choi K., Kreuger K., McNeel T. S., Osgood N. (2021). *Point-of-sale cigarette pricing strategies and young adult smokers' intention to purchase cigarettes: An online experiment*. *Tobacco Control*, 31(3), 473–478. <https://doi.org/10.1136/tobaccocontrol-2020-056004>
- [3] Government of Indonesia. (2024). *Government Regulation No. 28 of 2024 concerning Implementing Regulations of Law No. 17 of 2023 on Health*. State Gazette of the Republic of Indonesia 2024 Number 135, Supplement Number 6952.
- [4] Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM) (2nd ed.)*. SAGE Publications.
- [5] Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). *A new criterion for assessing discriminant validity in variance-based structural equation modeling*. *Journal of the Academy of Marketing Science*, 43, 115–135.
- [6] Kosijungan, Pingkan A. (2020). *A Policy Perspective on Tobacco Farming and Public Health in Indonesia*. Jakarta: Center for Indonesian Policy Studies. Accessed from <https://www.loc.gov/item/2021307471/>.
- [7] Kotler, Philip, Armstrong, Gary, Balasubramanian, Sridhar. (2024). *Principle of Marketing (Nineteen Edition)*. Pearson Education Limited

- [8] Kotler, Philip., Keller, Kevin Lane., Chernev, Alexander. (2022). *Marketing Management (Sixteen Edition)*. Pearson Education Limited.
- [9] Malhotra, Naresh. K. (2010). *Marketing research: An Applied Orientation (6th ed.)*. Upper Saddle River, NJ: Pearson Education.
- [10] Ministry of Finance of the Republic of Indonesia. (2024). *Peraturan Menteri Keuangan Nomor 97 Tahun 2024 tentang Perubahan Ketiga atas Peraturan Menteri Keuangan Nomor 192/PMK.010/2021 tentang Tarif Cukai Hasil Tembakau Berupa Sigaret, Cerutu, Rokok Daun atau Klobot, dan Tembakau Iris*. Jakarta: Ministry of Finance of the Republic of Indonesia.
- [11] Ministry of Health of the Republic of Indonesia. (2023). *Indonesian Health Survey 2023*. Jakarta: Ministry of Health of the Republic of Indonesia.
- [12] Sharma A., June K. M., Norton K. J., Fix B., Bansal-Travers M., Rees V. W., O'Connor R. J. (2022). *Intention to purchase alternative tobacco products as a function of smoking status and responses to advertising, packaging, and sensory experiences*. *Addictive Behaviors*, 130, Article 107291. <https://doi.org/10.1016/j.addbeh.2022.107291>.
- [13] Statista Market Insight. (2023). *Tobacco Industry in Indonesia*. Statista. <https://www.statista.com/study/67357/tobacco-industry-in-indonesia/>.
- [14] Statista Market Insight (2023). *Smoking prevalence forecast in Indonesia*. <https://www.statista.com/forecasts/1148704/smoking-prevalence-forecast-in-indonesia>.
- [15] Statistics Indonesia. (2023). *Production of Plantation Crops*. <https://www.bps.go.id/id/statistic-stable/2/MTMyIzI=/production-of-plantation-crops.html>.
- [16] Statistics Indonesia. (2020). *The population results SP2020 by region and gender*. <https://www.bps.go.id/en/statistics-table/2/MjEzMSMY/number-of-population-results-sp-2020-by-region-and-gender>.
- [17] Tran T. B. Y., Nguyen N., Greenland S., Saleem M. A. (2024). *Unrestricted tobacco marketing prompts young adults to smoke in an emerging market: A study of emotional responses*. *Journal of Strategic Marketing*, 32(5), 575–589. <https://doi.org/10.1080/0965254X.2023.2268667>