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Guidelines for Developing Marketing Strategies for the Complexity of Purchasing Cannabis Extract Products Through the online platform of Thai people

Catthaleeya Rerkpichai*

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Abstract

Purpose: Recent legal changes in Thailand permitting the use of cannabis extract products for medical and research purposes have opened significant opportunities in the cannabis extract market, particularly through online channels. Despite this, consumers face critical challenges in purchasing these products due to legal uncertainties, platform reliability issues, product quality concerns, and limited usage information. This study aims to analyze factors influencing the complexity of purchasing cannabis extract products online and to propose marketing strategies that simplify the process and build consumer confidence. **Research design, data and methodology:** Data were collected from a convenience sample of Thai consumers who had previously purchased cannabis extract products online. A validated 7-point Likert scale questionnaire, using the Index of Consistency (IOC), ensured data accuracy. Descriptive statistics, including mean and percentage, and regression analysis using SPSS were applied to explore factors contributing to purchase complexity. **Results:** The findings reveal that consumer factors partially influence decision-making complexity, demonstrating a negative correlation (B = -0.060, Sig. = 0.064). Additionally, online platform factors significantly impact complexity, with more challenging platform interfaces increasing difficulty (B = -0.073, Sig. = 0.028). **Conclusions:** Marketing mix elements (4Ps) and legal factors were found to have no significant effect on decision-making complexity. These insights inform strategies to streamline the online purchasing experience.

Keywords: Marketing Strategy; Cannabis; Extract Products; Online Platforms

JEL Classification Code: M31; D12; L81; K42; Q13

1. Introduction

Importance of the Problem; The legal changes related to the use of marijuana in Thailand began with the amendment of the Punishable Drugs Act B.E. 2562 (2019), which opened the way for the legal use of marijuana for medical purposes and scientific research. Government agencies and the private sector, including entrepreneurs, are allowed to produce and sell products containing cannabis extracts under a clear and accurate legal framework. This amendment to the law not only promotes research and

development of cannabis-based products but also creates opportunities for the extensive development of the medical industry and cannabis-related businesses (Assanangkornchai et al., 2022).

The expansion of the use of medical cannabis extracts has increased options for patients to treat diseases such as chronic pain, seizures, cancer, and other conditions that require cannabis extracts for symptom relief or treatment. The use of cannabis extracts is becoming more widely accepted. As a result, medical cannabis products have begun to play an important role in the market, particularly in the

^{1*} Catthaleeya Rerkpichai, Lecturer in Creative Digital Marketing Rajabhat University, Bansomdet ChaoPhraya. Thailand. Email: Catthaleeya.re@bsru.ac.th

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online market, which serves as a vital channel for consumers to access these products conveniently and quickly (*National Academies of Sciences, Engineering, and Medicine*, 2017).

Therefore, online platforms have become essential for the rapid distribution of cannabis extract products, especially in the current situation where consumers are comfortable ordering products through digital channels. Consequently, the expansion of the certification of cannabis extract products and related legal changes directly impact the increasing availability of products on online platforms. This not only provides consumers with more choices but also encourages businesses to generate revenue effectively and expand their market in this growing industry (*National Academies of Sciences, Engineering, and Medicine*, 2017).

However, the purchase decision process is still complicated because many factors must be considered, such as legal uncertainty. Cannabis in Thailand is also subject to complex laws and regulations. Although it is permitted in certain cases, such as for medical or commercial production, its use remains restricted. Changes in the law and uncertainty in some regulations leave consumers unsure about the legality of products purchased online. This uncertainty reduces confidence in purchasing decisions, particularly regarding product quality and safety. Many consumers are also concerned about the safety of cannabis extract products sold online because, at times, there may be no standard certification from a trusted authority, or there may be issues with product counterfeiting. This creates hesitation in making a purchase decision. Consumers often want to be sure that the products they buy are of good quality, safe, and inspected by trusted authorities (TDRI, 2024).

Lack of Knowledge and Understanding of Cannabis; Products Many people still lack knowledge about cannabis extract products, such as their real benefits. This has led to some consumers being hesitant to make purchase decisions online. Consumers want clear and accurate information about the products to help them make informed decisions. Distrust in Online Platforms; The credibility of online platforms that sell cannabis extract products is another important factor. Consumers are worried about being scammed, such as through insecure payments, products not meeting advertisements, or products not being received after an order is placed. As a result, consumers tend to avoid buying through unknown or unreliable online channels. Complexity in the Purchase Process; The online ordering process can be complex and inconvenient for certain consumer groups, involving steps like registration, identity verification, or choosing a payment method. In addition, issues with the freight system can also make consumers feel uncomfortable. As mentioned above, online platforms have become an important channel for purchasing cannabis

extract products. This study analyzes the key factors that affect the complexity of consumer decision-making, covering consumer factors, the 4P marketing mix (product, price, distribution channel, and promotion), online platform factors, and psychological and legal factors. Studying the factors that influence the complexity of purchasing cannabis extract products through online platforms is extremely important because it allows entrepreneurs to identify factors that may cause consumers to hesitate or have concerns about making a purchase decision. An in-depth understanding of consumer behavior and thought processes will help entrepreneurs plan marketing strategies that focus on preventing potential problems, such as managing risks related to product reliability, online trading security, and ensuring quality and laws related to products (TDRI, 2024).

2. Literature Review

To develop modern and effective marketing strategies that simplify purchasing decisions for cannabis extract products on Thai online platforms, several contemporary and updated marketing theories and concepts are highly relevant. These approaches provide a robust foundation for improving consumer engagement and enhancing the overall purchasing experience.

The AIDA Model (Lewis, 1898; Páramo et al., 2021) remains a cornerstone of marketing strategy, focusing on the stages of Attention, Interest, Desire, and Action. Modern applications of this model integrate digital tools such as social media ads, personalized email campaigns, and interactive content to capture consumer attention and drive conversions effectively in an increasingly digital landscape.

Value-based marketing (Kaur & Sharma, 2009; Kotler, 1972) has evolved to include customer-centric strategies that leverage big data and analytics. This approach ensures that communication highlights not only the functional benefits but also the emotional and ethical values of products, which are increasingly important to modern consumers. For cannabis extract products, emphasizing transparency, safety, and health benefits aligns with contemporary consumer priorities.

Digital Marketing and E-Commerce (Kotler & Keller, 2016) highlight the integration of advanced technologies like artificial intelligence (AI), chatbots, and predictive analytics to enhance user experience (UX) and user interface (UI) on digital platforms. By optimizing platform functionality and personalizing user journeys, brands can reduce the complexity of the purchasing process, making it seamless and intuitive.

The STP Model (Segmentation, Targeting, Positioning) (Kotler, 1967) has been updated to incorporate psychographic and behavioral segmentation enabled by

advanced analytics. For cannabis extract products, identifying niche markets, such as health-conscious millennials or patients seeking alternative remedies, ensures targeted marketing efforts that resonate deeply with consumer needs and values.

The Theory of Consumption Values (Sheth et al., 1991; Wells & Tan, 2024) has been modernized to address digital consumption behaviors, including the influence of online reviews, peer recommendations, and influencer marketing. Understanding how these elements contribute to the perceived value of cannabis extract products can help marketers address decision-making complexities effectively.

Behavioral economics and nudge theory also play a significant role in simplifying consumer choices. Techniques such as simplifying website navigation, offering limited-time discounts, or highlighting bestsellers use subtle cues to encourage quicker and more confident decision-making.

Drawing on these updated theories and practices, a comprehensive conceptual framework is proposed to develop marketing strategies that address the complexities of purchasing cannabis extract products on Thai online platforms. This framework integrates data-driven insights, personalized experiences, and transparent communication to build consumer trust and streamline the buying journey. (Refer to Figure 1 for a visual representation.)

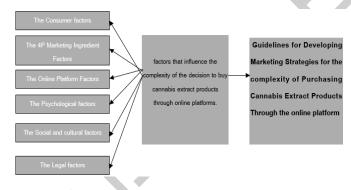


Figure 1: Conceptual Framework

2.1 Objectives

- 1) To analyze the factors contributing to the complexity of purchasing decisions for cannabis extract products on online platforms.
- 2) To propose guidelines for developing marketing strategies that address and simplify the purchasing process for cannabis extract products among Thai consumers on online platforms.

3. Research Methods and Materials

Guidelines for Developing Marketing Strategies for the Complexity of Purchasing Cannabis Extract Products through Thai Online Platforms; The researcher conducted a secondary data review by collecting information from various sources, including books, journals, articles, and domestic and international research documents.

3.1 Population and Sample

The target population for this study comprises Thai individuals who purchase cannabis extract products through online platforms. Since the population size is large and the exact number is unknown, the sample was determined using statistical methods.

For this research, a sample of Thai individuals who had ordered cannabis extract products online was selected. The sample size was calculated using the G*Power 3.1 program (Erdfelder et al., 2007), with an effect size of 0.05, a significance level of 0.05, and a test power of 0.95. Based on these parameters, the required sample size was determined to be 795 participants.

Participants were selected through a convenience sampling method, targeting individuals who were accessible and willing to respond to the questionnaire. The sample consisted of members of cannabis-related networks who had purchased cannabis extract products through online platforms between 2021 and 2024.

3.2 Research Tools

The primary research tool was a peer-reviewed questionnaire.

Part 1: Included closed-ended questions to collect general demographic and background information about the respondents.

Part 2: Focused on factors influencing the complexity of purchasing cannabis extract products through online platforms among Thai consumers, utilizing a 7-point rating scale.

The questionnaire was reviewed by five qualified experts to evaluate its alignment with the research objectives using the Index of Consistency (IOC). The resulting IOC value was 0.76, indicating acceptable consistency.

3.3 Data Collection

The researcher developed an online questionnaire and distributed it to members of cannabis-related communities on various platforms, with prior permission from the page administrators. The data collection period spanned from October 2021 to October 2022, yielding 800 completed responses.

3.4 Data Analysis

A statistical program was used to perform basic descriptive analyses, including calculating percentages. Additionally, regression analysis was conducted using the SPSS software to explore relationships and draw conclusions.

4. Results and Discussion

Based on the gender distribution data from a sample of 800 individuals, males represent the largest group, with 697 individuals (87.1% of the total sample). Females constitute only 20 individuals (2.5%), while the "other gender" group comprises 83 individuals (10.4%) (See Table 1). This analysis indicates that males form the most significant proportion of the sample.

Regarding age distribution, the largest group falls between 20 and 29 years old, with 464 individuals (58% of the sample). This is followed by the 30–39 age group, which includes 161 individuals (20.1%), and the 40–49 age group, with 87 individuals (10.9%). Those aged 50 and above account for 41 individuals (5.1%), while the under-20 group comprises 47 individuals (5.9%).

In terms of education level, the largest group includes individuals who graduated from high school, totaling 357 (44.6% of the sample). This is followed by 336 individuals

with vocational school education (42%), and 36 individuals with lower secondary education (4.5%). Additionally, 55 individuals hold a bachelor's degree (6.9%), while 16 individuals have a postgraduate degree (2%).

For occupational distribution, the self-employed or freelancer group represents the largest category, with 354 individuals (44.3%), reflecting the growing trend toward flexible work styles. The next largest group consists of private company employees, totaling 108 individuals (13.5%), followed by 94 civil servants or employees of state enterprises (11.8%), and 83 entrepreneurs or business owners (10.4%). The retired group includes 66 individuals (8.3%), while 42 students account for 5.3%. Finally, the "Other" category includes 53 individuals (6.6%).

Regarding average monthly income, the largest group earns between 10,001 and 20,000 baht, comprising 287 individuals (35.9%). This is followed by those earning between 20,001 and 30,000 baht, totaling 231 individuals (28.9%). The group earning between 30,001 and 50,000 baht includes 130 individuals (16.3%). Meanwhile, 84 individuals (10.5%) earn less than 10,000 baht, and 68 individuals (8.5%) earn more than 50,000 baht.

Table 1: The Data on the Use of Cannabis Extract Products

Product Intended Use	Number of users (people)			
related symptoms-Treatment of health	567			
Pain relief	233			

Table 2: Coefficients of the factors that influence the complexity of the decision to buy cannabis extract products through online platforms.

	factor	Mean	Std .Deviation	Unstandardized Coefficients		Standardized Coefficients	f	Sig.	95.0 %Confidence Interval for B	
				В	Std . Error	Beta	·	oig.	Lower Bound	Upper Bound
1)Constant(5.027	.353		14.239	.000	4.334	5.720
	TheConsumer factors	4.429	.4939	060	.033	066	-1.857	.064	124	.003
	The 4P Marketing Ingredient Factors	4.506	.4956	.019	.032	.021	.591	.555	044	.083
	TheOnline Platform Factors	4.419	.4830	073	.033	078	-2.205	.028	138	008
	ThePsychological factors	4.440	.5015	018	.032	020	561	.575	081	.045
	The Social and cultural factors	4.462	.5301	019	.030	022	624	.533	078	.041
	TheLegal factors	4.453	.4799	.022	.033	.023	.657	.511	044	.088
	a. Dependent Variable combines the complexity of making a decision to buy cannabis extract products through online platforms									

The data from Table 2 highlights the coefficients of various factors influencing the complexity of purchasing cannabis extract products through online platforms. The constant value is 5.027 with a standard error of 0.353, and its significance level is 0.000, indicating a strong baseline for the analysis. Among the factors:

Consumer factors show a negative unstandardized coefficient (B = -0.060) with a standard error of 0.033 and a t-value of -1.857. While its p-value is slightly above the conventional threshold for significance (Sig. = 0.064), the

confidence interval ranges from -0.124 to 0.003, suggesting a potentially weak negative impact.

4P Marketing mix factors display a positive coefficient (B = 0.019), but with a t-value of 0.591 and a significance level of 0.555, indicating no significant effect on decision-making complexity.

Online platform factors have a significant negative influence, with B = -0.073, a standard error of 0.033, a t-value of -2.205, and a p-value of 0.028. The confidence interval ranges from -0.138 to -0.008, confirming its

significant effect in increasing decision-making complexity when poorly implemented.

Psychological factors also exhibit a negative coefficient (B = -0.018), but their influence is statistically insignificant with a t-value of -0.561 and Sig. = 0.575.

Social and Cultural Factors show a similarly negligible effect, with B = -0.019, a t-value of -0.624, and a p-value of 0.533.

Legal factors present a slightly positive coefficient (B = 0.022), yet their significance is also low (Sig. = 0.511), indicating minimal impact on the complexity of decision-making.

The findings indicate that online platform factors significantly influence the complexity of purchasing decisions, while other factors, such as consumer, psychological, social, cultural, and legal considerations, have limited or no statistically significant effects.

Table 3: Factors Affecting the Complexity of Purchasing Cannabis Extract Products

Factor	Findings	Consistent Theory	Details Details	Recommended Strategies
Consumer	B = -0.060,	AIDA Model	The AIDA model highlights four stages:	Provide complete and clear
Factors	Sig. = 0.064,	(Lewis, 1898);	Attention, Interest, Desire, and Action.	product information (e.g.,
	indicating a	Value-Based	Value-Based Marketing emphasizes	ingredients, benefits, usage, side
	partial effect	Marketing (Kotler,	delivering clear product benefits to help	effects).
	with a negative	1972).	consumers perceive value.	Use simple and engaging
	correlation.			media, such as videos or
				infographics.
				3. Emphasize the benefits of
				products that meet consumer
				needs.
Marketing Mix	B = 0.019, Sig.	Inconsistent with	The 4Ps (Product, Price, Place, Promotion)	Focus on improving platform
(4P)	= 0.555,	the 4Ps model	did not simplify decision-making for	usability and product information
	indicating no	(McCarthy, 1960).	cannabis extract products, suggesting their	rather than modifying the
	significant		limited role in reducing complexity.	traditional 4P strategy.
Online Platform	effect. $B = -0.073$,	Disital Madastina	Disital Madadia analasias adagais	1 I IIV/III f f
Factors	B = -0.073, Sig. = 0.028,	Digital Marketing (Kotler & Keller,	Digital Marketing emphasizes enhancing UX/UI for better usability. STP focuses on	 Improve UX/UI for ease of use. Simplify the order process and
ractors	indicating a	2016); STP Model	segmentation, targeting, and positioning to	offer convenient payment options.
	significant	(Kotler, 1967).	simplify decisions.	3. Add a clear, transparent order
	negative effect.	(Kotter, 1907).	simplify decisions.	tracking system.
Psychological	B = -0.018,	Inconsistent with	Psychological strategies, such as	Avoid relying on psychological
Factors	Sig. = 0.575,	the AIDA model	stimulating consumer demand, showed no	strategies for simplifying
1 actors	indicating no	and marketing	clear impact on decision-making	purchasing decisions.
	significant	psychology	complexity in this case.	parenasing decisions.
	effect.	theories.	1 3	
Social and	B = -0.019,	Inconsistent with	Social and cultural marketing theories,	No need to prioritize social and
Cultural Factors	Sig. = 0.533,	Cultural and Social	which emphasize societal influences, did	cultural strategies for simplifying
	indicating no	Marketing Theory	not significantly impact decision-making	decisions.
	significant	(Kotler & Lee,	complexity.	
	effect.	2008; Kotler &		
		Zaltman, 1971).		
Legal Factors	B = 0.022, Sig.	Partially consistent	Legal compliance, such as adherence to	Ensure compliance with
	= 0.511,	with Compliance	FDA or ISO standards, promotes	regulations (e.g., FDA, ISO) and
	indicating no	Marketing (Kotler	transparency but showed no clear impact on	highlight certifications to build
	significant	et al., 2018).	decision-making complexity.	consumer trust.
	effect.			

Table 3 presents the findings on factors influencing the complexity of purchasing cannabis extract products, linking these results with established marketing theories and providing actionable strategies for improvement.

Consumer Factors; The analysis reveals a partial negative correlation between consumer factors and complexity (B = -0.060, Sig. = 0.064). This aligns with the AIDA Model (Lewis, 1898) and Value-Based Marketing (Kotler, 1972), which emphasize delivering clear product benefits to aid decision-making. Recommended strategies include providing complete product information (e.g.,

ingredients, benefits, usage, side effects), utilizing engaging media formats like videos or infographics, and emphasizing product benefits tailored to consumer needs.

Marketing Mix (4Ps); The findings indicate no significant effect of the 4Ps on decision-making complexity (B = 0.019, Sig. = 0.555), which is inconsistent with McCarthy's (1960) 4Ps model. The traditional components of product, price, place, and promotion appear to play a limited role in simplifying the purchase of cannabis extract products. Consequently, the focus should shift toward improving platform usability and enhancing product

information rather than relying solely on 4P strategies.

Online Platform Factors; Online platform factors demonstrate a significant negative effect on decision-making complexity (B = -0.073, Sig. = 0.028), consistent with Digital Marketing (Kotler & Keller, 2016) and the STP Model (Kotler, 1967). These theories emphasize the importance of enhancing user experience (UX) and segmentation to simplify the purchasing process. Recommended strategies include improving UX/UI for seamless navigation, simplifying the ordering process, offering convenient payment options, and incorporating a transparent order tracking system.

Psychological Factors; Psychological factors show no significant impact on complexity (B = -0.018, Sig. = 0.575), inconsistent with the AIDA model and other marketing psychology theories. While these approaches often stimulate demand, they appear ineffective in this context. Thus, psychological strategies should not be prioritized for simplifying purchasing decisions.

Social and Cultural Factors; These factors also lack significant influence (B = -0.019, Sig. = 0.533), which is inconsistent with cultural and social marketing theories (Kotler & Lee, 2008; Kotler & Zaltman, 1971). Strategies focusing on societal influences are therefore unnecessary for reducing decision-making complexity in this market.

Legal Factors; Legal factors display no significant effect on decision-making complexity (B = 0.022, Sig. = 0.511), although partially consistent with compliance marketing (Kotler et al., 2018). While regulatory adherence (e.g., FDA or ISO standards) promotes trust, it does not simplify decision-making directly. Recommended actions include ensuring regulatory compliance and prominently showcasing certifications to enhance consumer trust.

These insights suggest prioritizing platform improvements and consumer-oriented communication strategies while de-emphasizing social, cultural, psychological, and traditional marketing approaches for this specific market context.

5. Conclusions

Currently, there is no specific research addressing the topic of "Guidelines for Developing Marketing Strategies to Address the Complexity of Purchasing Cannabis Extract Products through Thai Online Platforms." However, existing studies and concepts related to marketing strategies in the cannabis industry offer valuable insights. These include consumer behavior analysis and improving platform experiences to simplify purchasing decisions for online cannabis extract products.

5.1 Key Findings and Supporting Theories

Consumer Factors

The research shows that consumer factors have a partial effect on purchase complexity, with a negative correlation to decision-making. As decisions become more complicated, purchasing likelihood decreases. This aligns with Lewis's (1898) AIDA theory, which emphasizes attracting attention and providing clear information to stimulate demand and simplify decisions. Similarly, Kotler's (1972) value-based marketing concept highlights that clear information and perceived product value reduce hesitation in making purchases. Studies by Cheung and Thadani (2016) and Amonini et al. (2010) further support this, showing that insufficient or unclear information increases decision complexity and discourages purchases. This underscores the importance of clear product information and user-friendly online experiences to facilitate decision-making.

Online Platform Factors

Platform usability significantly impacts purchase complexity, with inconvenient or poorly designed platforms complicating decision-making. This finding is consistent with Kotler and Keller's (2016) digital marketing theory, which emphasizes enhancing user experience (UX/UI) to simplify purchasing processes. The STP (Segmentation, Targeting, Positioning) theory by Kotler (1967) further supports this, suggesting that aligning platform design with target audience needs aids in decision-making. Studies by Johnson and Brown (2021) and Grewal et al. (2020) show that streamlined ordering processes and intuitive platform designs reduce purchase abandonment, especially for complex products like cannabis extracts.

4P Marketing Factors

The study reveals that the 4P framework (Product, Price, Place, Promotion), with a B value of 0.019 and a Sig. value of 0.555, does not significantly affect purchase complexity. This contrasts with McCarthy's (1960) traditional marketing model. However, research by Hawkins and Ray (2020), and Kim and Lee (2021) suggests that cannabis consumers prioritize product quality and safety over price or promotional strategies. Thus, while the 4P model may be less relevant for simplifying purchase decisions, its aspects related to product quality remain crucial.

Psychological Factors

Psychological factors, with a B value of -0.018 and a Sig. value of 0.575, also show no significant effect. This contradicts traditional theories like AIDA, which emphasize leveraging psychological strategies to stimulate demand. Instead, convenience and speed are more critical for online cannabis extract buyers (Johnson & Smith, 2018). Psychological strategies, therefore, may not be necessary for simplifying purchase decisions in this context.

Social and Cultural Factors

Social and cultural factors, with a B value of -0.019 and a Sig. value of 0.533, similarly show no significant impact. This contrasts with Kotler and Zaltman's (1971) cultural marketing theory, which suggests social and cultural influences can shape consumer decisions. Research by Adams and Brown (2020), and Garcia and Malone (2019) indicates that cannabis consumers prioritize personal needs and medicinal purposes over social or cultural considerations, reducing the relevance of these factors in decision-making.

Legal Factors

Legal factors, with a B value of 0.022 and a Sig. value of 0.511, do not directly simplify purchase decisions. However, maintaining legal compliance remains critical for building consumer trust. Studies by Thompson and Taylor (2019) highlight the importance of certifications and adherence to legal standards for ensuring reliability, even though they may not directly influence decision-making.

6. Recommendations

6.1 Strategic Recommendations

Primary Strategies

- Focus on consumer factors by providing clear, detailed product information, such as ingredients, benefits, side effects, and manufacturing standards.
- Simplify platform experiences through multi-channel payment systems, transparent order tracking, and userfriendly designs to reduce complexity.

Secondary Strategies

- While the 4P framework shows limited influence, ensuring product quality remains essential.
- Psychological strategies may not significantly impact cannabis purchases but providing reliable, relevant information can build consumer confidence.
- Aligning marketing communication with social and cultural values, such as safety and proper use, may help foster trust.

Legal Compliance

- Adhere to legal standards and display certifications to strengthen consumer confidence, even if these factors do not directly simplify purchase decisions.

6.2 Research Recommendations

The findings of this research are particularly relevant to individuals involved in the production, sale, or marketing of cannabis extract products, especially through online platforms. The results can be applied by the following groups:

- 1) Executives in the Health and Herbal Products Industry: Executives managing herbal and cannabis extract products can use the research findings to refine their communication strategies and improve the online customer experience. Enhancing platform convenience and building consumer confidence will help attract and retain customers.
- 2) Researchers and Public Health Policy Agencies: Researchers and agencies focusing on consumer behavior in the health and cannabis product sectors can use this information to guide future studies or explore additional factors influencing purchasing decisions.
- 3) Public Health Policy Agencies: These agencies can utilize the findings to evaluate and develop policies for controlling and providing cannabis extract products. Establishing clear and comprehensive standards for presenting product information will help ensure consumer safety and informed decision-making.
- 4) Online Platform Providers: Platform providers can use the data to improve user experience (UX) and user interface (UI), simplifying the ordering process. Enhancements might include streamlining navigation, integrating diverse payment options, and eliminating unnecessary steps in the purchasing process to create a more user-friendly platform.
- 5) Regulatory Agencies and Standards Organizations: Agencies such as the Food and Drug Administration (FDA) and those responsible for setting standards for cannabis product production and distribution can use these insights to validate and establish guidelines. Providing clear and detailed information about cannabis products will help consumers make informed choices while ensuring compliance with safety and quality standards.

7. Further Studies

- 1) Improving Consumer Insights; Future research should broaden its focus to explore in-depth consumer characteristics that influence purchasing decisions, such as age, income level, and product knowledge. These factors may significantly impact the complexity of purchasing decisions related to cannabis extracts. Incorporating qualitative research methods, such as in-depth interviews with target audiences, can provide deeper and more nuanced insights.
- 2) Comparative Evaluation of Online Platforms; Conducting an analysis of factors that enhance convenience and simplify purchase decisions, along with evaluating the UX/UI of online platforms, will help identify key areas for platform improvement. This can contribute to the development of more user-friendly and efficient online shopping experiences.

- 3) Investigation of the Impact of Psychological and Social Factors; Expanding research to include psychological and social influences, particularly the role of familiarity with cannabis extract products in Thai society, could offer valuable insights. This may help simplify the decision-making process by addressing societal attitudes and consumer comfort levels.
- 4) Exploring Effective Marketing Strategies in Different Contexts; Examining the effectiveness of marketing strategies across various contexts, such as niche or local marketing, may provide clarity on which approaches are most impactful. This could guide the prioritization of factors that simplify consumer decision-making.
- 5) Assessment of Legal and Regulatory Influences; Future studies could investigate the role of legal and regulatory frameworks in shaping consumer trust and confidence. Understanding how compliance with legal standards impacts purchasing behavior may highlight additional strategies for simplifying purchase decisions.

References

- Adams, R., & Brown, S. (2020). Personal vs. social the changing dynamics of cannabis consumer behavior. *International Journal of Consumer Studies*, 47(1), 87-95.
- Amonini, C., McColl-Kennedy, J. R., Soutar, G. N., & Sweeney, J. C. (2010). How professional service firms compete in the market: an exploratory study. *Journal of Marketing Management*, 26(1-2), 28-55.
- Assanangkornchai, S., Thaikla, K., Talek, M., & Saingam, D. (2022). Medical cannabis use in Thailand after its legalization: a respondent-driven sample survey. *PeerJ*, 10, e12809. https://doi.org/10.7717/peerj.12809
- Cheung, C. M. K., & Thadani, D. R. (2016). Social networking site addiction: The cognitive bias perspective. *PACIS 2016 Proceedings*, 323. http://aisel.aisnet.org/pacis2016/323
- Erdfelder, E., Faul, F., & Buchner, A. (2007). G*Power 3 A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191.
- Garcia, T., & Malone, M. (2019). Cultural factors in cannabis consumption A comparative analysis of online and offline purchasing behaviors. *Journal of Cannabis Research*, 12(2), 123-135.
- Grewal, D., Levy, M., & Kumar, V. (2020). E-commerce and the complexities of consumer decision making Insights for cannabis products. *Journal of Retailing and Consumer* Services, 54, 101723.
- Hawkins, M., & Ray, A. (2020). Consumer behavior in the cannabis industry A study of the CBD market. *Journal of Consumer Marketing*, 37(5), 321-332.
- Johnson, R., & Brown, P. (2021). Understanding cannabis consumer behavior on e-commerce platforms. *Journal of Consumer Marketing*, 38(5), 15-23.

- Johnson, R., & Smith, J. (2018). Consumer purchasing behavior in online cannabis markets. *Electronic Commerce Research*, 18(3), 341-350.
- Kaur, G., & Sharma, R. D. (2009). Voyage of marketing thought from a barter system to a customer centric one. *Marketing Intelligence & Planning*, 27(5), 567-614.
- Kim, Y., & Lee, S. (2021). Marketing cannabis products Understanding consumer preferences in the online market. *Journal of E-commerce Research*, 22(2), 145-157.
- Kotler, P. (1967). Marketing management Analysis, planning, and control (1st ed.). Prentice-Hall.
- Kotler, P. (1972). Marketing management Analysis, planning, and control (2nd ed.). Prentice-Hall.
- Kotler, P., Armstrong, G., & Opresnik, M. O. (2018). Principles of marketing (17th ed.). Pearson.
- Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson.
- Kotler, P., & Lee, N. (2008). Social marketing Influencing behaviors for good (4th ed.). Sage Publications.
- Kotler, P., & Zaltman, G. (1971). Social marketing an approach to planned social change. *Journal of Marketing*, 35(3), 3-12.
- Lewis, E. S. E. (1898). AIDA model. *Journal of Marketing*, 35(3), 3-12
- National Academies of Sciences, Engineering, and Medicine. (2017). Therapeutic effects of cannabis and cannabinoids. In The health effects of cannabis and cannabinoids: The current state of evidence and recommendations for research. National Academies Press (US).
- McCarthy, E. J. (1960). *Basic Marketing: A Managerial Approach*. McGraw-Hill.
- Páramo, Á. J. L., García, Á. H., & Peláez, J. C. (2021). Modelling e-mail marketing effectiveness—An approach based on the theory of hierarchy-of-effects. *Cuadernos de gestión*, 21(1), 19-27.
- Sheth, J. N., Newman, B. I., & Gross, B. L. (1991). Why we buy what we buy A theory of consumption values. *Journal of Business Research*, 22(2), 159-170.
- TDRI. (2024, July 3). Thailand's weed legalization dilemma TDRI: Thailand Development Research Institute. TDRI: Thailand Development Research Institute. https://tdri.or.th/en/2024/06/thailands-weed-legalisation-dilemma/
- Thompson, M., & Taylor, S. (2019). The influence of legal factors on cannabis consumer behavior. *Journal of Marketing Studies*, 28(6), 213-229.
- Wells, J., & Tan, C. S. L. (2024). Examining the influence of functional value, social value and emotional value on purchase intention for tires in Japan, *Journal of Asia Business Studies*, 18(3), 593-608. https://doi.org/10.1108/JABS-01-2023-0007