

### ผลของการสื่อสารการตลาดที่ใช้กลยุทธ์การสื่อสารบนเฟซบุ๊กโดยใช้ความหลากหลาย จากการนำเสนอด้วยภาพและข้อความและลักษณะของสินค้าที่มีความเกี่ยวพันสูง และต่ำต่อทัศนคติของผู้บริโภคต่อโฆษณาและตราสินค้า

# THE EFFECTIVENESS OF MARKETING COMMUNICATION OF VISUAL AND TEXTUAL COMMUNICATION STYLES ON FACEBOOK UNDER DIFFERENT TYPES OF PRODUCT INVOLVEMENT ON ADVERTISING AND BRAND PERCEPTION OF CONSUMERS

ศริญญา คงเที่ยง<sup>1</sup>

<sup>1</sup>คณะบริหารธุรกิจ มหาวิทยาลัยเทคโนโลยีราชมงคลกรุงเทพ Sarinya Kongtieng<sup>1</sup>

<sup>1</sup>The Faculty of Business Administration, Rajamangala University of Technology Krungthep (Received: September 28, 2024; Revised: October 30, 2025; Accepted: October 31, 2025)

#### าเทคัดย่อ

การวิจัยนี้เป็นการวิจัยเชิงทดลองแบบ 2 x 2 แฟคทอเรียล เพื่อศึกษาถึงผลกระทบทั้งทางตรงและ เชิงปฏิสัมพันธ์ของการโฆษณาสินค้า 2 ประเภท ประเภทของเนื้อหาที่นำเสนอ (เน้นภาพ และ เน้นข้อความ) กับ ประเภทของสินค้า (สินค้าที่มีความเกี่ยวพันสูงและสินค้าที่มีความเกี่ยวพันต่ำ) กับ ที่ส่งผลต่อทัศนคติต่อ โฆษณาและตราสินค้าของผู้บริโภค วิจัยครั้งนี้ได้ทำการทดลองกับนักศึกษาสาขาวิชาการตลาด ปริญญาตรี มหาวิทยาลัยเทคโนโลยีราชมงคลกรุงเทพ จำนวน 157 คน .ในช่วงระหว่างเดือน ธันวาคม 2565 - มกราคม 2566 ผลการวิจัยพบว่า สินค้าที่มีความเกี่ยวพันต่ำจะมีทัศนคติที่สูงต่อโฆษณากว่าสินค้าที่มีความเกี่ยวพันสูง และ รูปภาพจะช่วยให้ทัศนคติต่อตราสินค้าสูงกว่าการใช้ข้อความ

คำสำคัญ: การสื่อสารการตลาดสื่อสังคมออนไลน์, การโฆษณา, การสื่อสารด้วยภาพและข้อความ, ทัศนคติ ของผู้บริโภค, สินค้าที่มีความเกี่ยวพันสูงและต่ำ

#### **ABSTRACT**

This study aims to understand the effectiveness of using high-low involvement and visual communication on attitude toward advertising and attitude toward brand. One hundred and fifty-five students were randomly assigned into four experiment groups. This study uses factorial design, creating a 2 (visual dominance vs text dominance) x 2 (product types high vs low involvement) factorial design. Data were collected by using a questionnaire and using mean, standard deviation and ANOVA. The results show that low involvement products lead to high attitude toward advertising scores, and using picture dominance leads to higher attitude toward brand scores.

**Keywords**: Social Media Marketing Communication, Advertising, Visual and Verbal Communication, Consumer Attitude, Level of Product Involvement



#### Introduction

Recent changes in consumer behavior and marketing strategies stem from an increasing variety of products, prompting organizations to adopt diverse communication methods for broader engagement (Jantanarmsri & Chomngam, 2018). Aligning visuals and text with marketing goals is crucial for both high- and low-involvement products, as engagement significantly impacts communication effectiveness (Aljukhadar & Senecal, 2021).

This study will fulfill the gap to explores how these combinations on Facebook influence consumer attitudes toward advertisements and brands, focusing on high- and low-involvement products.

#### Concepts of Visual and Textual Communication

Research categorizes communication into picture-dominant and text-dominant formats (Lewis et al., 2013; Akhtar et al., 2014; Kim & Jang, 2019). Brandts et al. (2023) note that visuals convey meaning more effectively than text, enhancing understanding and reducing misunderstandings. Effective visual communication simplifies complex concepts (Kongtieng, 2019). Stan (2020) demonstrated the significance of pictures in shaping brand personality. High-quality visuals improve engagement and cognitive processing (Kujur & Singh, 2020), influenced by cultural backgrounds (Kujur & Singh, 2020). Creative visuals are crucial for product selection and brand reputation (Schroeder, 2020).

#### Concepts of High and Low Involvement Products

High- and low-involvement products, defined by the Elaboration Likelihood Model (ELM), influence consumer perceptions of importance. High-involvement products prompt complex decision-making requiring detailed information (MacInnis et al., 1991; Handriana, 2017). Consumer involvement stems from intrinsic needs and perceived value (Zaichkowsky, 1994). Studies on advertising effectiveness for both product types on platforms like Facebook include health-related products (Lee et al., 2020) and low-involvement items (Kuenzel & Musters, 2007).

Celebrity endorsements enhance positive attitudes for low-involvement products (Handriana, 2017). Ren et al. (2023) indicate that social media effectively markets low-involvement products, while celebrity endorsements can aid high-involvement product launches and enhance brand awareness.

## Concepts and Theories Related to the Use of Social Media for Marketing Communication

The growth of online platforms poses challenges for marketers to capture consumer attention amid vast content (Bahcecik et al., 2019). Brands must strategically leverage online



media and use data analytics to tailor messages and enhance engagement (Pelletier et al., 2020). The interactive nature of social media allows for real-time feedback and dynamic campaign adjustments. Visual elements are essential for improving user engagement and message retention (Zhang et al., 2022). Continuous adaptation is crucial for success in the digital landscape.

#### Conceptual Framework

The conceptual framework draws from literature on the use of pictures and text in marketing communication (Lewis et al., 2013; Akhtar et al., 2014; Kim & Jang, 2019; Brandts et al., 2023). It includes variables such as picture vs. text dominance and theories on high- and low-involvement products (Handriana, 2017; Ren et al., 2023) and social media marketing (Pelletier et al., 2020), shaping the framework that addresses consumer attitudes (Handriana, 2017; Winter et al., 2021).

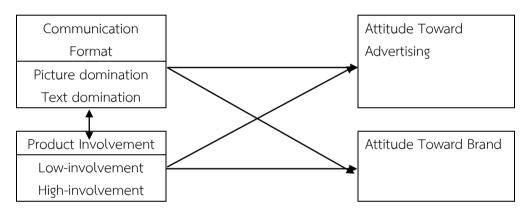


Figure 1. Conceptual Framework

#### Research Objectives

- 1. To examine the effects of using different types of pictures in products with varying levels of involvement on consumers' attitudes towards advertisements.
- 2. To investigate the effects of using different types of pictures in products with varying levels of involvement on consumers' attitudes towards brands.

#### Research Methodology

#### 1. Research Design

This study examines the effects of marketing communication through strategic messaging on Facebook, focusing on the use of pictures and text, and the characteristics of high and low involvement products on consumer attitudes toward advertisements and brands. An experimental approach with a 2x2 factorial design tests the impact of communication format and product involvement on brand and advertisement attitudes. Experiments were conducted in a controlled laboratory setting to ensure internal validity.



#### 2. Experimental Design

The factorial design includes two communication formats (picture-dominant vs. text-dominant) and two levels of product involvement (high vs. low), with the following independent and dependent variables:

#### Independent Variables:

- 1. Communication Format: This variable comprises two categories: text-focused communication (where text occupies more space than picture) and picture-focused communication (where picture dominate in size and proportion).
- 2. Product Involvement: This variable distinguishes between high involvement products (important, typically higher-priced items like computers and mobile phones) and low involvement products (lower-priced, less impactful items like stationery and cosmetics). Product selection was guided by focus group discussions and aligns with previous research categorizing high involvement products (Handriana, 2017)

#### Dependent Variables:

- 1. Attitude Toward Advertising: This measures consumers' inclinations toward advertisements, reflecting preferences, aversions, and emotional responses.
- 2. Attitude Toward Brand: This denotes consumers' inclinations toward the brand, including preferences, aversions, and emotional responses.

#### Treatment Administration

Participants were randomly assigned to each group (randomization) to ensure that each group is controlled for the variables set in the factorial experiment design, which comprises 2 communication formats (picture-focused vs. text-focused) and 2 levels of product involvement (high vs. low), resulting in four experimental groups as follows

**Table 1** Treatment Allocation for All Experimental Groups

Group	Treatment	Content	Product
		Style	Involvement
G1	Text-dominance advertisement for a	High	Text-
	mobile phone	involvement	dominance
G2	Picture-dominance advertisement for a	High	Picture-
	mobile phone	involvement	dominance
G3	Text-dominance advertisement for a pen	Low	Text-
		involvement	dominance
G4	Picture-dominance advertisement for a	Low	Picture-
	pen	involvement	dominance



#### Research Instruments

The instruments used in this research are advertisements for two different types of products mobile phones (high-involvement products) and pens (low-involvement products). These advertisements employ different presentation formats, either text-focused or picture-focused, with varying proportions. This study also uses pilot test and also control factors, such as font types, font style, color,

#### Population and Sample Characteristics

The participants in this experiment consisted of 157 undergraduate students from the Marketing program at Rajamangala University of Technology Krungthep, enrolled in the Digital Marketing course during the 2022/2 academic semester. They were divided into four groups: one group of 40 participants and three groups of 39 participants each. Questionnaires were distributed randomly in the classroom via Google Forms, resulting in 157 collected responses.

#### **Preliminary Testing**

A preliminary survey was conducted to assess high-involvement and low-involvement products with a group similar to the target sample. This was done to test the reliability of the questionnaire.

#### High and Low Involvement Measurement

The researcher adapted a 7-point Likert scale questionnaire from Prendergast, Tsang, & Chan (2010) to assess product involvement, achieving a reliability score of .922. The scale comprises 10 items, including statements such as "This product is important to me," "This product is interesting," and "This product is necessary for me." Responses were measured from 1 (strongly disagree) to 7 (strongly agree).

#### Attitude Toward Advertisement

The attitude toward the advertisement was measured using a 7-point Likert scale adapted from Sukkul & Anantachart (2020). The scale demonstrated high reliability, with a Cronbach's alpha of .917. It includes four items: 1) I really like this advertisement, 2) I have a positive attitude toward this advertisement, 3) This advertisement is very good, and 4) I am satisfied with this advertisement.

#### Attitude Toward the Brand

The attitude toward the brand was also assessed using a 7-point Likert scale from Sukkul & Anantachart (2020), achieving a Cronbach's alpha of .945, indicating its reliability. The scale consists of four questions: 1) I really like this brand, 2) I have a positive attitude toward this brand, 3) This is a very good brand, and 4) I am satisfied with this brand.

#### Research Procedures and Implementation



The researcher secured a cooperation letter from the Dean of the Faculty of Business Administration to survey Principles of Marketing students and sought expert reviews for the questionnaire. A focus group selected product types, while experts created and reviewed four media types. The questionnaires were validated, achieving reliability scores over 0.9, and converted to an online format. After a pilot study with 40 participants (Kramsaksa, 2008) confirmed reliability, they were distributed to four randomly assigned student groups, each receiving one set of advertisements. The population consists of marketing major students, and the sample is drawn randomly assign into groups from this population. All participants completed the questionnaire at the same time under identical conditions.

The completed questionnaires were reviewed for accuracy, and the scores were analyzed using SPSS for statistical values, including percentages, two-way ANOVA, and MANOVA.

#### Results

**Table 2** shows the number and percentage of participants in the experiment, classified by gender.

Gender	N	Percentage
Male	54	34.4
Female	103	65.6
Total	157	100.0

From Table 2, it can be observed that the total number of participants in the experiment is 157, divided into male and female categories. The majority are female, with a total of 103 participants, accounting for 65.6%, while males comprise 54 participants, representing 34.4%.

Table 3 shows the number and percentage of participants in the experiment, categorized by age.



Age	N	Percentage
19	33	21.0
20	89	56.7
21	22	14.0
22	7	4.5
23	4	2.5
25	1	0.6
26	1	0.6
Total	157	100

Table 3 shows the number of participants categorized by age, with most aged 20 years, accounting for 89 people or 56.7%. This is followed by participants aged 19 years, making up 21.0%, those aged 21 years at 14.0%, and participants aged 22 years, representing 4.5%. The 23-year-olds total 4 participants or 2.5%, and finally, one participant is aged 25, accounting for 0.6%.

The distribution of participants across four experimental groups. Group 1 (G1) includes 40 participants exposed to text-dominant ads for high-involvement products, while Group 2 (G2) has 39 participants exposed to picture-dominant ads for high-involvement products. Group 3 (G3) comprises 39 participants exposed to text-dominant ads for low-involvement products, and Group 4 (G4) includes 39 participants exposed to picture-dominant ads for low-involvement products.

**Table 4** Comparison of Brand Attitudes between High- and Low-Involvement Products under Text-Dominant Condition Comparison of Brand Attitudes between High- and Low-Involvement Products with a focus on text

	Group	М	SD	t	df	Р
Brand	Phone-Text	4.61	1.462	-1.303	77	.196
Attitude	Pen - Text	5.01	1.209			

From Table 4, the experimental group that received advertisements for pens with text had a higher average (5.01) compared to the group that received advertisements for phones with text (4.61).

**Table 5** Comparison of Brand Attitudes between High- and Low-Involvement Products under Text-Dominant Condition Comparison of Brand Attitudes between High- and Low-Involvement



Products with a focus on results of testing different product types on brand attitudes with a focus on picture.

	Group	М	SD	t	df	Р
Brand	Phone - Picture	5.10	1.337	161	76	.872
Attitude	Pen - Picture	5.15	1.106			

From Table 5, the average for the use of pens with picture was 5.15, which is higher than the average for phones with picture at 5.10.

**Table 6** The average values of product involvement, attitudes towards advertisements, and brands among participants in each experimental group.

31	Group 1		Grou	Group 2		Group 3		Group 4	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	
Product involvement	4.69	1.114	4.72	1.011	4.58	.996	4.61	1.038	
Attitude towards	4.78	1.228	4.80	1.407	5.28	1.183	5.00	1.225	
advertisements			4.00	1.407	3.20	1.105	5.00	1.223	
Attitude towards	4.61	1.462	5.10	1.337	5.01	1.209	5.15	1.106	
brands			5.10	1.551	3.01	1.209	5.15	1.100	

Experimental Group 1 (G1) This group received media for a high-involvement product focusing on text. The average score for product involvement was 4.69, attitude towards the advertisement was 4.78, and attitude towards the brand was 4.61.

Experimental Group 2 (G2) This group received media for a high-involvement product focusing on pictures. The average score for product involvement was 4.72, attitude towards the advertisement was 4.80, and attitude towards the brand was 5.10.

Experimental Group 3 (G3) This group received media for a low-involvement product focusing on text. The average score for product involvement was 4.58, attitude towards the advertisement was 5.28, which was the highest in this study and attitude towards the brand was 5.01.

Experimental Group 4 (G4) This group received media for a low-involvement product focusing on pictures. The average score for product involvement was 4.61, attitude towards the advertisement was 5.00, and attitude towards the brand was 5.15.

Research Question Response Using Statistical Data

1. Does the use of different types of picture in products with varying levels of involvement affect consumer attitudes toward advertisements?



**Table 7** Test Results for Product Types and Attitudes Toward Text-Focused Advertisements

	Group	М	SD	t	df	Р
Attitude toward	Phone-Text	4.78	1.228	-1.868	77	.066
Ads	Pen-Text	5.28	1.183			

From Table 7, the experimental group had a more positive attitude toward text-focused advertisements for pens, with a mean of 5.28, compared to phones, which had a mean of 4.78.

**Table 8** Test Results for Different Product Types and Attitudes Toward Picture-Focused Advertisements

	Group	М	SD	t	df	Р
Attitude	Phone-Picture	4.80	1.407	-1.291	76	.201
toward Ads	Pen-Picture	5.16	1.017			

From Table 8, the experimental group showed a more positive attitude toward image-focused advertisements for pens, with a mean of 5.00, compared to phones, which had a mean of 4.80. However, the difference between the two is not statistically significant (p = 0.309).

2. Does the use of different types of picture in products with varying levels of involvement affect consumer attitudes toward brands?

**Table 9** Multivariate Analysis of Variance (MANOVA)



				Hypothesi		
	Effect	Value	F	s df	Error df	Sig.
Product	Pillai's Trace	.037	2.920 <sup>b</sup>	2.000	152.000	.057
	Wilks' Lambda	.963	2.920 <sup>b</sup>	2.000	152.000	.057
	Hotelling's Trace	.038	2.920 <sup>b</sup>	2.000	152.000	.057
	Roy's Largest Root	.038	2.920 <sup>b</sup>	2.000	152.000	.057
Content	Pillai's Trace	.044	3.495 <sup>b</sup>	2.000	152.000	.033
	Wilks' Lambda	.956	3.495 <sup>b</sup>	2.000	152.000	.033
	Hotelling's Trace	.046	3.495 <sup>b</sup>	2.000	152.000	.033
	Roy's Largest Root	.046	3.495 <sup>b</sup>	2.000	152.000	.033
Product	*Pillai's Trace	.006	.439 <sup>b</sup>	2.000	152.000	.645
Content	Wilks' Lambda	.994	.439 <sup>b</sup>	2.000	152.000	.645
	Hotelling's Trace	.006	.439 <sup>b</sup>	2.000	152.000	.645
	Roy's Largest Root	.006	.439 <sup>b</sup>	2.000	152.000	.645

Table10 shows no significant difference between high-correlation and low-correlation products, as well as between text-focused and image-focused presentations.



Table 10 Shows the relationship between high-involvement and low-involvement products analyzed in conjunction with attitudes toward advertisements and brand attitudes.

Tests of B	etween-Subjects Effects					
		Type III		Mean		
Source	Dependent Variable	Sum of	df		F	Sig.
		Squares		Square		
Corrected	Attitude toward	7.668 <sup>a</sup>	3	2.556	1.726	.164
Model	Advertisement	7.000	3	2.330	1.720	.104
	Attitude toward Brand	7.073 <sup>b</sup>	3	2.358	1.424	.238
Intercept	Attitude toward	2021 007	1	2021 007	2654.000	000
	Advertisement	3931.827	1	3931.827	2654.990	.000
	Attitude toward Brand	3873.250	1	3873.250	2339.001	.000
Product	Attitude toward	7 2 5 0	1	7 2 5 0	4.060	007
	Advertisement	7.358	1	7.358	4.969	.027
	Attitude toward Brand	1.889	1	1.889	1.141	.287
Content	Attitude toward	000	1	.090	.060	007
	Advertisement	.090				.806
	Attitude toward Brand	3.908	1	3.908	2.360	.127
Product *	Attitude toward	215	1	215	145	704
Content	Advertisement	.215	1	.215	.145	.704
	Attitude toward Brand	1.195	1	1.195	.722	.397
Total	Attitude toward	41/4 250	157			
	Advertisement	4164.250	157			
	Attitude toward Brand	4130.625	157			
Corrected	Attitude toward	024 040	156			
Total	Advertisement	234.248	156			
	Attitude toward Brand	260.432	156			
a. R Square	ed = .033 (Adjusted R Squa	red = .014)				
b. R Square	ed = .027 (Adjusted R Squa	red = .008)				

From Table 10 The relationship between high-involvement and low-involvement products analyzed alongside attitudes toward advertisements and brand attitudes reveals that the use of high-involvement and low-involvement products, when considering the content type with two presentation formats (text-focused and image-focused), shows no significant differences in attitudes toward advertisements and brand attitudes.



#### Discussions

This study investigates the impact of marketing communication strategies on Facebook, focusing on visual and textual presentations and product involvement levels regarding consumer attitudes towards advertising and brands.

#### Research Ouestions:

- 1. Does the type of picture used for high and low involvement products affect attitudes toward advertisements?
- 2. Does the type of picture used for high and low involvement products affect attitudes toward brands?

#### Response to Research Question 1:

Statistical analysis shows no significant difference in attitudes toward advertisements for high and low involvement products when using picture and text. Familiarity with product types, like mobile phones and pens, diminishes the impact of extensive information. It might be because of consumers can infer usage from previous experiences, leading to similar attitudes regardless of emphasis on text or picture (Brandts et al., 2023; Stan, 2020; Gharibshah et al., 2020).

#### Response to Research Question 2:

There is also no significant difference in brand attitudes based on advertisements for high and low involvement products. New brand designs were introduced to mitigate bias. Findings suggest that consumers view advertisements primarily as marketing tools, not as opportunities for brand engagement, even when visually appealing (Bigne et al., 2020; Schroeder, 2020). Participants showed little sensitivity to purchasing either product type, indicating a lack of motivation to engage with ad content on popular platforms (Kuenzel & Musters, 2007; Xue, 2019; Gordon et al., 2023). This aligns with the trend of low involvement products being prevalent online, which may reduce brand attachment (Ren et al., 2023).

#### Recommendations

#### 1. For Practical Application:

Use both picture and text in advertisements to enhance communication effectiveness, especially considering the differences in consumer attitudes toward low and high involvement products.

#### 2. For Future Research:

Incorporate celebrity endorsements to explore their effects on consumer perceptions across demographics.

Expand the participant age range to evaluate how age influences reactions to marketing strategies, facilitating more targeted communication.



#### Acknowledgement

This research was supported the Revenue Budget Research Grant 2022 from Rajamangala University of Technology Krungthep.

#### เอกสารอ้างอิง

- Akhtar, N., Siddique, B., & Afroz, R. (2014, September). **Visual and textual summarization of webpages**. In *2014 International Conference on Data Mining and Intelligent Computing (ICDMIC)* (pp. 1–5). IEEE.
- Aljukhadar, M., Boeuf, B., & Senecal, S. (2021). Does consumer ethnocentrism impact international shopping? A theory of social class divide. **Psychology & Marketing**, **38**(5), 735–744.
- Bahcecik, Y. S., Akay, S. S., & Akdemir, A. (2019). A review of digital brand positioning strategies of Internet entrepreneurship in the context of virtual organizations: Facebook, Instagram and YouTube samples. **Procedia Computer Science**, **158**, 513–522.
- Bigne, E., Chatzipanagiotou, K., & Ruiz, C. (2020). Pictorial content, sequence of conflicting online reviews and consumer decision-making: The stimulus-organism-response model revisited. **Journal of Business Research**, **115**, 403–416.
- Brandts, J., Busom, I., Lopez-Mayan, C., & Panadés, J. (2023). Picture say more than just words: Effectiveness of visual and text communication in dispelling the rent-control misconception (CESifo Working Paper No. 10537).
- Gharibshah, Z., Zhu, X., Hainline, A., & Conway, M. (2020). Deep learning for user interest and response prediction in online display advertising. **Data Science and Engineering**, **5**(1), 12–26.
- Gordon, B. R., Moakler, R., & Zettelmeyer, F. (2023). Close enough? A large-scale exploration of non-experimental approaches to advertising measurement. **Marketing Science**, **42**(4), 768–793.
- Handriana, T. (2017). Consumer attitudes toward advertisement and brand, based on the number of endorsers and product involvement: An experimental study. **Gadjah Mada**International Journal of Business, 19(3), 289–306.
- Jantanarmsri, T., & Chomngam, P. (2018). Content and format of communication via infographic on Infographic Thailand Facebook fan pages. **Suthiparithat Journal**, **32**(104), 143–154.
- Kim, D., & Jang, S. S. (2019). Ethnic food advertising formats and consumers' responses: Picture-dominant or text-dominant?. **International Journal of Hospitality Management, 82**, 5–12.
- Kongtieng, S. (2019). Effect of spokesperson types and the use of first person pronoun in crisis communication on food organization reputation and purchase intention [Doctoral dissertation, Bangkok University].



- Kongtieng, S., & Phadung, J. (2023). Content analysis in mascot studies, Thailand. **Journal of Management Science, Udon Thani Rajabhat University**, **5**(2), 99–110.
- Kramsaksa, K. (2008). Impact of product category and corporate social responsibility activities on consumers' attitudes [Thesis, Chulalongkorn University].
- Kuenzel, J., & Musters, P. (2007). Social interaction and low involvement products. **Journal of Business Research**, **60**(8), 876–883.
- Kujur, F., & Singh, S. (2020). Visual communication and consumer-brand relationship on social networking sites-uses & gratifications theory perspective. **Journal of Theoretical and Applied Electronic Commerce Research**, **15**(1), 30–47.
- Lewis, M., Whitler, K. A., & Hoegg, J. (2013). Customer relationship stage and the use of picture-dominant versus text-dominant advertising: A field study. **Journal of Retailing**, **89**(3), 263–280.
- MacInnis, D. J., Moorman, C., & Jaworski, B. J. (1991). Enhancing and measuring consumers' motivation, opportunity, and ability to process brand information from ads. **Journal of Marketing**, **55**(4), 32–53.
- Pelletier, M. J., Krallman, A., Adams, F. G., & Hancock, T. (2020). One size doesn't fit all: A uses and gratifications analysis of social media platforms. **Journal of Research in Interactive Marketing**, **14**(2), 269–284.
- Prendergast, G. P., Tsang, A. S., & Chan, C. N. (2010). The interactive influence of country of origin of brand and product involvement on purchase intention. **Journal of Consumer Marketing**, **27**(2), 180–188.
- Ren, F., Tan, Y., & Wan, F. (2023). Know your firm: Managing social media engagement to improve firm sales performance. **MIS Quarterly**, **47**(1).
- Schroeder, J. E. (2020). Visual consumption in the image economy. In **Elusive consumption** (pp. 229–244). Routledge.
- Stan, A. M. (2020). Talking with chatbots: The influence of visual appearance and conversational style of text-based chatbots on UX and future interaction intention [Master's thesis, University of Twente].
- Sukkul, P., & Anantachart, S. (2020). Effects of in-game advertising on gamers' responses. **Journal** of Communication Arts, 38(2), 16–34.
- Winter, S., Maslowska, E., & Vos, A. L. (2021). The effects of trait-based personalization in social media advertising. **Computers in Human Behavior**, **114**, 106525.
- Xue, F. (2019). Facebook news feed ads: A social impact theory perspective. **Journal of Research** in Interactive Marketing, 13(4), 529–546.
- Zhang, Y., Yu, R., Shi, X., & Hong, K. (2022). Visual communication design in print advertising under new media environment. **Wireless Communications and Mobile Computing**, **2022**(1), 7664127.