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Brand image analysis of Indonesian telecommunication company: A quantitative approach

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Abstract: Social media has become an essential marketing tool for companies to establish and maintain their brand image, with Instagram offering a highly effective platform due to its visual and interactive features. This research aims to explore how strategic elements such as content creativity, consistency, and user engagement influence the brand image of Indonesian Telekomunikasi (PT INTI). A quantitative approach was utilized, with data collected through a questionnaire distributed to 458 respondents, all of whom were familiar with the @ptintiofficial Instagram account. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS software. Based on our findings, recommendations are provided to optimize PT INTI's Instagram strategy, such as improving user interaction, ensuring consistent posting schedules, and utilizing innovative Instagram features. This study contributes to understanding the role of social media in shaping brand image and offers practical insights for PT INTI and other organizations aiming to strengthen their branding via Instagram. Future research is encouraged to investigate additional variables and employ diverse methodologies to broaden the scope of this topic.

Keywords: Brand image, Digital marketing, Instagram, PT INTI (Persero), Social media strategy.

1. Introduction

Social media has grown to be a crucial tool for businesses' marketing and communication in the current digital era. Instagram, one of the most widely used social media sites, enables instantaneous sharing of images, videos, and narratives. Instagram is a platform for brands to interact with their audience in addition to being used for friend interaction. PT INTI (Persero), in Indonesian: PT (TbK). *Industri Telekomunikasi Indonesia*, a leading technology company in Indonesia, leverages Instagram (@ptintiofficial) to build and strengthen its brand image among the public. The official Instagram profile of PT INTI, @ptintiofficial, provides a glimpse of how the company uses the platform to establish a consistent and appealing brand identity. The profile features an attractive visualization, highlights of Stories, and posts designed to engage the audience. Brand image, defined as the perception consumers have about a brand, is shaped through interactions and experiences with the brand. The critical role of effective communication in building a positive company image. By employing the right social media strategy, PT INTI can influence public perceptions of its brand, making brand image one of its most valuable assets [1].

Our research focuses on PT INTI since the company engages its audience with educational yet casual content. Captions invite followers, referred to as "*Sahabat* INTI," to listen to the podcast while promoting other social media channels, such as YouTube, Threads, and TikTok. Hashtags like

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#INTIYourFuturePartner and #INTIPodcast, combined with visually appealing elements, strengthen the brand's identity. These posts reflect PT INTI's efforts to connect with its audience and build a strong social media presence. Research has shown that strategic social media use can enhance brand awareness and loyalty. Integrated digital marketing strategies, including social media, yield better results in brand recognition. Given the increasing role of social media in shaping public perception, analyzing PT INTI's strategy on Instagram becomes highly relevant [2].

Moreover, effective Public Relations (PR) plays a crucial role in fostering relationships between companies and their audience. Companies like PT INTI, as state-owned enterprises, bear significant social responsibilities. Social media platforms allow them to interact directly with the community, provide information, and address concerns. Engaging and relevant content is more likely to capture audience attention. PT INTI employs various content types, including product images, educational videos, and inspirational stories, to build a positive narrative around its brand and contributions to society. In addition to content, interaction strategies are key to building brand image. Effective two-way communication fosters consumer trust and loyalty [3]. PT INTI actively interacts with its followers by responding to comments and encouraging discussions, demonstrating its commitment to its audience and reinforcing a positive company image [4].

However, challenges in managing social media cannot be ignored. The potential risks companies face, such as public criticism and feedback. PT INTI must adopt a robust communication strategy to address these challenges effectively [5]. Features like Instagram Stories highlights, which organize content into easily accessible categories, further showcase PT INTI's efforts to maintain audience engagement. The significance of social media in building brand image is supported by studies linking communication on these platforms to positive brand perceptions. Qualitative research offers in-depth insights into audience responses to social media messaging. By understanding audience perspectives, PT INTI can craft more effective communication strategies.

2. Literature Review

This study refers to relevant theories to explain the influence of social media strategies on brand image. Social media strategies, particularly through Instagram, are considered highly effective marketing tools for building relationships with audiences, enhancing brand awareness, and creating positive consumer experiences [6]. Key elements in social media strategies, such as long-term consistency, content creativity, and active audience interaction, all of which contribute to building a positive brand image [7]. the role of brand awareness and customer satisfaction as mediators in the relationship between brand image and marketing outcomes. The use of social media has transformed business communication into a more interactive process, enabling two-way communication between the company and its audience [8]. In the context of PT INTI (Persero), social media strategies through Instagram @ptintiofficial involve message consistency, creative content, and audience interaction to build brand image. Based on previous theories and studies, this research proposes a framework that social media strategies have a direct influence on brand image through improved brand awareness and customer satisfaction [9].

H₁ Social media strategy has a positive and significant influence on the brand image of PT INTI (Persero).

3. Methodology

The research adopts a quantitative approach to systematically examine the influence of social media strategy on brand image. This method emphasizes the collection and analysis of numerical data using structured questionnaires. The questionnaire is designed to evaluate three dimensions of social media strategy—long-term consistency, content creativity, and interaction with stakeholders—and their impact on brand image [10]. The Likert scale is employed for measurement, with scores ranging from 1 (strongly disagree) to 5 (strongly agree). The sample size is determined using the Slovin formula, yielding 390 respondents from the Instagram followers of PT INTI (Persero), ensuring representativeness and generalizability.

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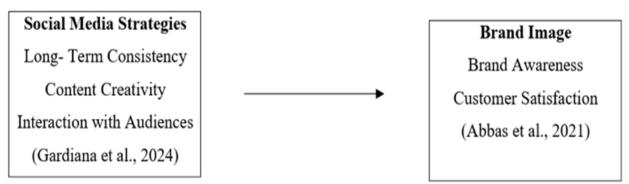


Figure 1.

Research Framework.

Figure 1 shows the research framework which conceptually wraps the essence of the hypothesis. Inferential statistics are used to test hypotheses and model relationships between variables, while descriptive statistics are used to understand trends. The measurement and structural models are evaluated using Structural Equation Modeling (SEM) with Partial Least Squares (PLS), which looks at reliability using Cronbach's alpha and composite reliability as well as convergent and discriminant validity [11]. By carrying out validity and reliability tests, the study guarantees methodological rigor and offers a strong framework for examining the causal relationship between social media strategy and brand image [12].

4. Results

Table 1 shows the analysis of outer loadings of the indicators. X shows Social Media Strategy indicators while Y shows the indicators of brand image. We can see from Table 1 that all the analyses are valid.

Table 1	1.
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Indicators	Social Media Strategy	Brand Image	Description
X1	0.847		VALID
K2	0.780		VALID
K3	0.795		VALID
Κ4	0.703		VALID
K5	0.768		VALID
K6	0.777		VALID
K7	0.770		VALID
K8	0.823		VALID
K9	0.778		VALID
K10	0.749		VALID
X11	0.760		VALID
K12	0.817		VALID
(1		0.846	VALID
2		0.838	VALID
3		0.854	VALID
ľ4		0.759	VALID
(5		0.807	VALID
ľ6		0.831	VALID
ľ7		0.850	VALID

Outer Loading Value Results

Based on the Table 1 above, it can be seen that all indicators of this research variable are declared valid, because the Outer Loadings value of each indicator is greater than 0.7. Thus, the questionnaire items can be used in further analyses.

Table 2.

Discriminant Validity Test Results (Fornell Larcker Criterion).

Variable	Brand Image	Social Media Strategy
Social Media Strategy	0.784	0.782
Brand Image	0.821	

Table 2 indicates that the correlation between one construct and another in the model is less than the square root of the Average Variance Extracted for each construct. The value derived from the aforementioned statement indicates that the estimated model's construct satisfies the requirements for discriminant validity.

Table 3.

Composite Reliability and Cronbach's Alpha Test Results.

Variable	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
Brand Image	0.931	0.933	0.943
Social Media Strategy	0.942	0.943	0.949

Table 3 demonstrates that the Composite Reliability and Cronbach's Alpha test results are satisfactory, meaning that all latent variables have been dependable since their Composite Reliability and Cronbach's Alpha values are ≥ 0.70 . Thus, it can be said that the research tool, the questionnaire, has been dependable or consistent.

Table 4.

R-Square (R2) Value Test Results

Variable	R-square
Brand Image	0.615

The R-Square (\mathbb{R}^2) test results show that the Brand Image variable has an \mathbb{R}^2 value of 0.615. This means that the model is able to explain 61.5% of the variability in Brand Image influenced by independent variables in the model, such as Social Media Strategy. Meanwhile, the remaining 38.5% is explained by other factors not included in the model. With this fairly high \mathbb{R}^2 value, it can be concluded that the model has good predictive power in describing the relationship between these variables [13].

Table 5.

12 Effect Size Test Results	
Model	F-Square
Social Media Strategy -> Brand Image	1.596

Source: Processed Data by the Author (2024).

The results of the f² Effect Size test show that the influence of Social Media Strategy on Brand Image has an f² value of 1.596. Based on the f² interpretation criteria this value is far above the threshold of ≥ 0.35 , so it can be concluded that Social Media Strategy has a very strong influence on Brand Image. This finding indicates that social media strategies, such as long-term consistency, content creativity, and active interaction with audiences, are very dominant factors in increasing brand image of PT. INTI (Persero) through the Instagram platform.

Table 6. Q-Square Test Results

Dependen	SSO	SSE	Q^2 (=1-SSE/SSO)
Brand Image	3664.000	2162.784	0.410

According to the predictive relevance (Q^2) value obtained from the Goodness of Fit Model test, the model's Q^2 value for the Brand Image variable is 0.410. It is possible to conclude that the model has relevant predictive ability because the Q2 value is greater than 0. According to this figure, the model in use can account for 41.0% of the variation in brand image, with other factors outside the model influencing the remaining 59.0%. Therefore, it can be said that this model does a good job of explaining how independent variables affect endogenous variables [14].

Table 7.

Hypothesis Testing Results

Variable	0	T statistics	Р	Descriptiom
Social Media Strategy -> Brand Awareness	0.784	33.795	0.000	Support

The results of the hypothesis test show that the influence of Social Media Strategy on Brand Image has a path coefficient estimate of 0.784 with a T-value of 33.795 and a P- value of 0.000. Based on the significant criteria at alpha 0.05 (5%), the t-count (33.795) far exceeds the t-table (1.96), so it can be concluded that this influence is significant. In other words, the implementation of a social media strategy, which includes aspects of long-term consistency, content creativity, and interaction with audiences on the Instagram account of PT. INTI (Persero), has a strong positive impact on increasing brand image.

4.1. Discussion

The test results show that Social Media Strategy has a significant effect on Brand Awareness with a path coefficient estimate of 0.784, a t-statistic of 33.795, a p-value of 0.000, and a t-value (33.795) far exceeding the t-table (1.96) at alpha 0.05. The relationship between Social Media Strategy and Brand Awareness is one of the important aspects of digital marketing. social media strategy includes a series of planned activities designed to create, manage, and maximize brand interactions with the audience through digital platforms. In brand awareness, this strategy serves as a tool to expand brand exposure and build recognition in the minds of consumers [15]. Activities such as the use of consistent, creative, and relevant content help brands not only attract audience attention but also instill a memorable brand image [6]. Repeated exposure and positive interactions on social media can influence brand awareness formation through consumer association and memory mechanisms [16].

Social media provides a unique environment for brands to build direct connections with consumers. The Engagement Theory in digital marketing emphasizes the importance of consumer engagement through compelling content, where visual elements, interactivity, and personalization play a key role [17]. If social media strategies are designed to encourage engagement, consumers are more likely to recognize and remember the brand in question. Brand awareness is formed through the process of creating consistent experiences across various platforms, which can strengthen the brand's identity in the minds of consumers. Relevant storytelling approaches in social media strategies are often used to build emotional connections, which ultimately deepens brand awareness in a more authentic and easily accepted manner [18].

Every post, comment, or other interaction on social media creates a touchpoint that can enhance brand visibility. These touchpoints accelerate the cognitive process of consumers in recognizing the brand [19]. The relationship between social media strategy and brand image is mutually reinforcing, where the successful implementation of social media strategy directly impacts the level of brand recognition by consumers [20]. This shows that social media is not just a communication channel, but also a strategic foundation in creating and maintaining strong brand awareness.

Social media provides a platform that allows brand-related information to be quickly distributed through content sharing features, comments, and viral hashtags. If brands consistently present innovative and relevant social media strategies, such as leveraging current trends or involving influencers, audiences are more likely to be exposed to that information [21]. This exposure not only increases the likelihood of the brand being recognized by consumers but also strengthens brand associations in various relevant cultural or social context [222].

Meaningful consumer interactions through social media contribute to strengthening emotional and cognitive connections with the brand. Personalized and interactive content, such as surveys, Q&A sessions, or user-generated content campaigns, helps create deep and memorable experiences [23]. A well-designed social media strategy allows brands to create such experiences, making the audience more aware not only of the brand in general, but also on the specific values and characteristics that want to be conveyed. As a result, the relationship between social media strategies and brand awareness is not only transactional but also transformative in shaping brand perception in the minds of consumers [24].

The findings of this study are pertinent to a number of earlier investigations that also address how social media tactics affect brand recognition. In the context of Indonesian tourism, social media marketing can greatly raise brand awareness, brand image, and brand loyalty, which is consistent with the discovery that social media is a powerful tool for increasing brand exposure. The significance of social media in enhancing brand recognition prior to influencing consumer behavior is supported by research by Ardiansyah and Sarwoko [15] which demonstrates that brand awareness acts as the primary mediator in the relationship between social media marketing strategies and purchase decisions. According to the results of this study on the value of original and consistent content, structured social media activities can improve brand equity by reinforcing brand awareness. The research by Aljumah, et al. [3] identifies that social media interactions, e-WOM, and public relations play a crucial role in enhancing brand awareness, reflecting the significant role of stakeholder interactions as found in this study. Furthermore, the research by Syafna and Rejeki [12] shows that digital marketing communication strategies on social media platforms directly impact brand awareness, reinforcing the relevance of this study's findings in the context of effective social media application.

5. Conclusion

The research findings confirm that the Social Media Strategy (X) significantly influences the Brand Image (Y) of PT INTI (Persero), as evidenced by the path coefficient estimate of 0.784, a T-value of 33.795, and a P-value of 0.000. The implementation of a strategic Instagram presence through consistent posting, creative content, and audience engagement has positively shaped the company's brand image. These efforts have successfully positioned PT INTI as an innovative and professional company, leveraging Instagram's features to enhance visibility and communicate its values effectively.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- [1] U. Abbas, K. M. A. Islam, S. Hussain, M. Baqir, and N. Muhammad, "Impact of brand image on customer loyalty with the mediating role of customer satisfaction and brand awareness," *International Journal of Marketing Research Innovation*, vol. 5, no. 1, pp. 1–15, 2021. https://doi.org/10.46281/ijmri.v5i1.987
- [2] M. Abdurachman, "Corporate social responsibility in state-owned enterprises: An analysis of public perceptions," *Journal of Corporate Communication*, vol. 14, no. 1, pp. 45–57, 2023.
- [3] A. A. Aljumah, M. Faisal, and K. Rehman, "The effect of social media engagement on brand awareness and consumer behavior," *Journal of Digital Marketing*, vol. 8, no. 3, pp. 28–40, 2023.
- [4] P. A. Argenti, Corporate communication: The role of communication in building a positive company image. New York: McGraw-Hill Education, 2021.
- [5] N. K. Denzin and Y. S. Lincoln, *Qualitative research strategies: A handbook of methods and techniques.* Thousand Oaks, CA: SAGE Publications, 2019.
- [6] T. Febrian, D. Nugraha, and H. Santoso, "Social media strategies for enhancing brand awareness: A case study approach," *Journal of Marketing Innovation*, vol. 13, no. 4, pp. 99–110, 2022.
- [7] R. Gardiana, P. Hartono, and S. Kurniawan, "Social media strategies for building brand image: A study of instagram marketing," *International Journal of Marketing Research*, vol. 19, no. 2, pp. 17–33, 2024.
- [8] S. Heni, "Content marketing and audience engagement in digital platforms," Journal of Public Relations and Communication, vol. 10, no. 2, pp. 67-79, 2018.
- [9] L. J. Moleong, *Qualitative research methodology for social media analysis*. Bandung: PT Remaja Rosdakarya, 2024.
- [10] D. Ryan and C. Jones, Digital marketing: Strategies for online success. London: Kogan Page, 2019.
- [11] M. Sarstedt and J. H. Cheah, "Partial least squares structural equation modeling using SmartPLS: A software review," *Journal of Marketing Analytics*, vol. 7, no. 3, pp. 196–202, 2019. https://doi.org/10.1057/s41270-019-00058-3
- [12] L. Syafna and S. Rejeki, "Engagement theory in digital marketing: Building connections through social media," Journal of Marketing Science, vol. 15, no. 3, pp. 54–72, 2021.
- [13] R. B. Islami, A. Wardhana, and M. Pradana, "The influence of social media influencer and product quality on purchase decisions (Case Study on Promotion of Hand & Body Lotion Scarlett Whitening in Instagram)," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2021, pp. 560-567.
- [14] A. Wardhana, M. Pradana, B. R. Kartawinata, M. Mas-Machuca, T. P. Pratomo, and L. W. W. Mihardjo, "A twitter social media analytics approach on Indonesian digital wallet service," presented at the 2022 International Conference Advancement in Data Science, E-learning and Information Systems (ICADEIS), IEEE, 2022.
- [15] F. Ardiansyah and E. Sarwoko, "How social media marketing influences consumers purchase decision? A mediation analysis of brand awareness," *JEMA: Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*, vol. 17, no. 2, pp. 156-168, 2020. https://doi.org/10.31106/jema.v17i2.6916
- [16] A. A. Putri, A. Wardhana, and M. Pradana, "The influence of service quality and consumer trust on consumer loyalty of carousel apps," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2021, pp. 2884-2889.
- [17] S. Karlinawati, M. Pradana, A. M. Hidayat, R. Joviano, and H. G. M. Saleh, "Measuring continuance intention of Indonesian internet service provider: A quantitative study," presented at the 2024 Asian Conference on Communication and Networks (ASIANComNet), IEEE, 2024.
- [18] M. Achyarsyah, G. N. Hermana, M. R. Gorbyandi, P. Puspitasari, H. Hendrayati, and M. Pradana, "Worldwide research trend on steel casting: A visualization and future research directions," *Recent Innovations in Chemical Engineering*, vol. 17, no. 4, pp. 333-340, 2024.
- [19] H. Hendrayati, M. I. Atrisia, and S. Disman, "The innovation of digital dockless bike-sharing for City's air quality as sustainable transportation," *Journal of Engineering Science and Technology*, vol. 14, no. 2, pp. 557-568, 2019.
- [20] I. Hasbi, M. Fakhri, R. Saragih, B. Kurnia, and A. G. Aini, "Determinant factors of consumer preferences on electronic wallet users in bandung," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2020, vol. 59, pp. 914–919.
- [21] D. W. Nugraha, H. Ismail, A. Wardhana, T. I. Wijaksana, and A. Yunani, "A systematic literature review: implementation of ERP systems in logistics companies supply chain management in developed and developing countries," presented at the International Conference on Mathematical and Statistical Physics, Computational Science, Education and Communication (ICMSCE 2023), SPIE, 2023.
- [22] A. Wardhana, B. R. Kartawinata, A. Akbar, and I. Muslimin, "The effect of the use of influencer on the purchase decision of MSME culinary products in Indonesia (Study On Snack Product Kripik Belings On Instagram)," in *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2021, pp. 190-198.
- D. Kurnia, H. Mulyadi, H. Hendrayati, and Z. Denan, "When does entrepreneurial bricolage mediate the effect of [23] entrepreneurial orientation on new product development? The role of environmental dynamism as moderator," Entrepreneurial **Business** and Economics Review, vol. 103-119, 2023.11. no. 2.pp. https://doi.org/10.15678/EBER.2023.110205

[24] R. Hurriyati, L. A. Wibowo, H. Hendrayati, A. I. Gunawan, N. Afifah, and E. Rosalina, "Memorable experiential reality tech as an environmentally friendly technology: reducing energy consumption from consumer perspectives," presented at the IOP Conference Series: Earth and Environmental Science, IOP Publishing, 2024.