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Comparative Analysis of Instagram, Facebook, and TikTok on students Photography Interests in Batam

Jimmy Pratama¹, Justin Chua²

Jimmy.pratama@uib.edu, 2031148.justin@uib.edu

¹ Faculty of Computer Science, Universitas Internasional Batam, Batam, Indonesia

² Faculty of Computer Science, Universitas Internasional Batam, Batam, Indonesia

Abstract

Social media is an internet-based platform that allows users the opportunity to interact and present themselves, both in real-time and delayed, to a broad or specific audience, promoting the value of user-generated content and the perception of interaction with others. The research aims to determine the comparison of Instagram, Facebook, and TikTok concerning the photography interest of students in Batam. This study employs a quantitative method by distributing questionnaires to 213 students in Batam. The collected data will be tested using the SPSS 26 application with regression analysis. The results of this research indicate that Instagram has an impact of 34.4%, Facebook has an impact of 33.7%, and TikTok has an impact of 29.5% on students' photography interest.

Keywords: Instagram, Facebook, TikTok, Photography Interest, SPSS

Introduction

The digital era with the technological advancements we are currently facing presents both challenges and opportunities. Especially in this pandemic period, where all crowd-related activities are limited, there is a necessity to leverage digital technology. From working, studying, community engagement, socializing, to almost all aspects, communication methods have shifted to long-distance communication using social media such as WhatsApp, Facebook, YouTube, and Instagram.

The current development in communication technology has provided increasingly diverse communication media. Along with the progression of time, human needs for information are growing. The discovery and development of technology have rapidly evolved, particularly in the case of the internet. The internet can facilitate access to information without limitations of distance, space, and time. It can also assist in the success of students who engage in business, socialize in the virtual world, exchange data, and information, which, in turn, can have both positive and negative impacts on users.

Similar to other communication technologies, the internet shapes communication patterns and social interactions. This is because the introduction of new communication methods always modifies how someone receives desired information. An aspect that can be considered ever-present and novel in the internet world is social media. Social media is an internet-based medium that allows users to interact and present themselves, both instantly and delayed, to a broad or limited audience, promoting the value of user-generated content and the perception of interaction with others.

One of the social media platforms aided by communication technology is smartphones. Social media is currently utilized by many people to express their lives. The development of social media can now be utilized more extensively, not only to report on one's existence but also as a substitute for life in the virtual world, such as sending messages, commenting on others' messages, expanding friendships, finding partners, sending photos, and as a space for exchanging opinions. The social media platforms that are popular among all age groups, especially among young people and widely accessed on smartphones, are Instagram, Facebook, and TikTok.

Currently, Instagram, Facebook, and TikTok have a significant presence and are widely favored by teenagers because they can be used as a means to promote photos and as information media. With these social media platforms, the younger generation becomes more creative in taking and posting photos on their social media. Instagram is a photo-sharing application that allows users to take photos, apply filters, and share them on social media. Facebook, on the other hand, is a social network that can be utilized by users to get to know each other and communicate for various purposes, including recreation. TikTok serves as a social network and a platform for photo and video music (Utara et al., 2022).

Instagram, Facebook, and TikTok are social networks that can be used as a channel for those who have an interest in photography. The benefits of these social media platforms include assisting users who enjoy capturing events around them through photos and expressing creative ideas through photos. They can also serve as promotional media for information relying on visual media that will be useful in searching for information.

The phenomenon of photography begins with taking photos that can spark a hobby. This hobby is pursued continuously, resulting in good photos that can be developed into a business. Photography interest is also supported by various social media platforms such as Instagram, Facebook, and TikTok, allowing photographers to promote their work. A photo can convey events, daily occurrences, natural phenomena, special moments, and other impactful subjects, creating grassroots photography art that blends into everyday life and can be enjoyed by anyone. Photography is defined as the art or process of creating images and light on film or photos. To produce a good or interesting work, several factors, such as lighting, lens quality, and precision in determining the photo object, need to be considered. The benefits of photography include documenting activities and various aspects of life for documentation, providing information about events for the future, and marketing photos as a business (Marrahmah, n.d.).

Based on the background described, the problem can be formulated as follows first how to determine the photography interests of students in Batam using Instagram, Facebook, and TikTok with a quantitative approach and second how to analyze the results of the comparison of Instagram, Facebook, and TikTok using a quantitative approach

Research objectives for the theme "Comparative Analysis of Instagram, Facebook, and TikTok on students Photography Interests in Batam" are as follows: First to determine the comparison of Instagram, Facebook, and TikTok as the photography interests of students in Batam. Second to find out whether social media influences the photography interests of students in Batam.

Its benefits of this research are expected to be valuable for the community. The following are the benefits of this research from various aspects: Theoretical benefits are as information material for making decisions on which social media platform is most frequently used by students in Batam. And as information material to determine which social media platform can be used to identify the photography interests of students in Batam. From practical benefits provides reference material for students in need of topics related to photography and social media. And as a reference source of information and input for individuals who want to introduce and promote photography through social media.

Literature Review

The research journal developed by Tasem Suryani (Utara et al. 2022) aims to determine the impact of Instagram usage intensity on the photography interest of Generation Z. This study utilizes a quantitative method employing questionnaires distributed to all members of Generation Z in Indonesia who actively use Instagram as research samples. The questionnaire will be created using Google Forms and disseminated online through social media. The research results indicate a positive impact of Instagram usage intensity on the photography interest of Generation Z.

The research journal developed by Fabiana Meijon Fadul (2019) aims to investigate whether marketing communication strategies through the use of photography on social media can sustain tourist numbers during the pandemic. This qualitative study reveals that marketing communication strategies using photography on social media contribute to maintaining tourist numbers during the pandemic. The research emphasizes the success of marketing strategies, including providing good service, sharing updated information on social media platforms like Instagram, and maintaining the positive reputation of Wisata Siantar Zoo.

The study developed by Marrahmah (n.d.) explores Facebook's role as a platform for collecting students' work, compiling photos of each student's learning experiences during their studies in the DKV UNM Facebook group. This qualitative research highlights the active role of Facebook in supporting students and teachers by facilitating photography lectures. The benefit of this research lies in Facebook's use as a platform for collecting students' work and demonstrating the alignment of students' photographic learning with societal concepts.

Another study by Yohana Noni Bulele and Tony Wibowo (Bulele and Wibowo 2020) aims to provide information about the social media application favored by young people, namely TikTok. The research employs interview and meta-analysis methods, revealing information about the benefits of the TikTok application that can be experienced by various age groups. The research emphasizes the impact of social media, such as becoming content creators, particularly among young people.

Rina Nurfitri and Anggi Rahmansyah's study (Pour 2022) aims to design promotional media on social media using photography for the brand "Pour and Peace." This research utilizes marketing design methods to identify product and marketing data, leading to the synthesis and design concept, including media planning and creative planning. The study results in

promotional media for the "Pour and Peace" brand in the form of photos and videos published on social media.

Choirun Nisa's research (Nisa, Widodo, and Dhesti Anggriani 2021) aims to determine the relationship between Instagram social media and photography interest using a quantitative method. The research findings indicate a strong relationship between Instagram social media and creative interest.

Ray Darma Yoga's study (Ray et al. 2023) aims to determine the influence of photography and promotion through Instagram on tourist interest. This quantitative research indicates that the role of photography does not significantly affect tourist interest, while promotion through Instagram has a significant impact on tourist interest.

Research Methods

Research Flow

This research aims to determine the comparison of social media platforms Instagram, Facebook, and TikTok that influence the photography interest of students in Batam. The author adopts a quantitative approach by distributing three questionnaires to students in Batam. The results from these questionnaires will be used to analyze the comparison of these social media platforms concerning photography interest. The analysis method employed is using SPSS with regression analysis.



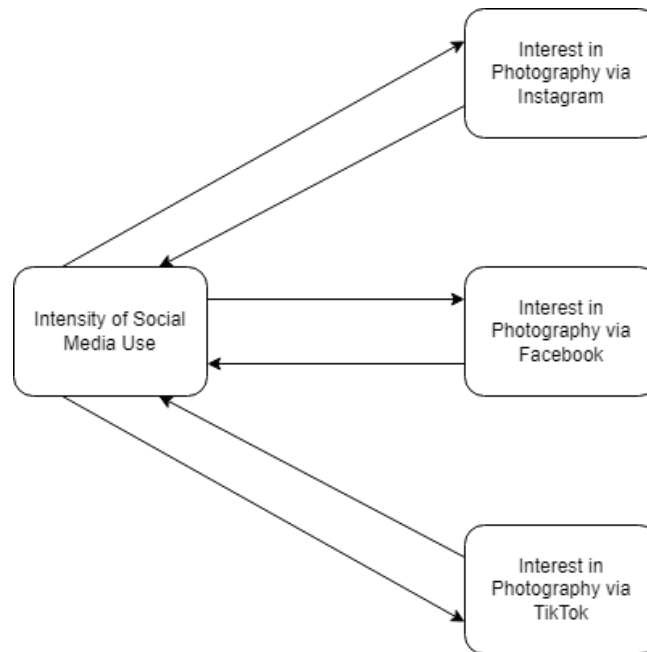
Figure 1. Research Flow

Problem Description

In this study, the author seeks to understand the level of comparison of Instagram, Facebook, and TikTok usage influencing the photography interest of students in Batam. Due to different social media usage, the author will utilize three datasets from each of these social media platforms. The author will also compare the three sets of data to draw conclusions about the differences in variables affecting students' photography interest.

Research Model

The research model used includes variables such as Instagram, Facebook, TikTok, and Photography Interest.



This model will analyze whether the variables Instagram, Facebook, and TikTok have an impact on the photography interest of students in Batam.

Data Collection Technique

The author will distribute questionnaires through Google Forms to obtain data for this research. The questionnaires will be openly distributed through social media platforms like WhatsApp, Line, Facebook, and others. The population consists of individuals residing or domiciled in the city of Batam. The sample size used in the study is 200 respondents for each dataset, calculated based on the Slovin Formula with a sampling error rate of 0.05. The estimated population is approximately 1,196,396 inhabitants of Batam. The target respondents or strata in this study are students in Batam.

Data Analysis Technique

In the analysis phase, the author will begin by testing the validity and reliability of each variable using SPSS. A variable will be considered valid if the Pearson Correlation value is greater than 0.05 and less than 0.05, and reliable if the Cronbach's Alpha value is greater than 0.6. If any indicators do not meet the criteria from the validity and reliability tests, those indicators will be removed from the research variables.

Data Comparison

A comparison of the three analyzed datasets will be conducted. The comparison in this study involves drawing conclusions about the differences and similarities in the results obtained from the three datasets.

Results and Discussion

1. Regression Analysis

Regression analysis is employed to determine the magnitude of the influence of social media platforms Instagram, Facebook, and TikTok on the photography interest of students in Batam. The regression test results are presented in the following table:

Variable	B Unstandardized Coefficients
Constant	2.054
Intensity of Instagram usage on photography interest on Instagram	0.535

With the regression equation as follows:

$$Y = a + bX$$

$$Y = 2.054 + 0.535X$$

From this regression equation, the overall Intensity of Instagram usage on photography interest on Instagram is 2.589, indicating that Instagram's social media usage intensity can influence photography interest on Instagram by 2.58 times. Instagram social media usage has a positive impact on photography interest on Instagram with a correlation value of 0.535.

Variable	B Unstandardized Coefficients
Constant	2.273
Intensity of Facebook usage on photography interest on Facebook	0.491

Regression table for Facebook

With the regression equation as follows:

$$Y = a + bX$$

$$Y = 2.273 + 0.491X$$

From this regression equation, the overall Intensity of Facebook usage on photography interest on Facebook is 2.764, indicating that Facebook's social media usage intensity can influence photography interest on Facebook by 2.76 times. Facebook social media usage has a positive impact on photography interest on Facebook with a correlation value of 0.491.

Variable	B Unstandardized Coefficients
Constant	2.383
Intensity of TikTok usage on photography interest on TikTok	0.482

Regression table for TikTok

With the regression equation as follows:

$$Y = a + bX$$

$$Y = 2.383 + 0.482X$$

From this regression equation, the overall Intensity of TikTok usage on photography interest on TikTok is 2.864, indicating that TikTok's social media usage intensity can influence photography interest on TikTok by 2.86 times. TikTok social media usage has a positive impact on photography interest on TikTok with a correlation value of 0.482.

2. Hypothesis Testing

T-tests are conducted to determine the magnitude of the influence of social media usage intensity on photography interest in Batam. The magnitude of the influence value from independent variables on dependent variables can be observed in the following table:

Variable	t	Sig
Constant	9.991	.000
Intensity of Instagram usage on photography interest on Instagram	10.335	.000

T-test table for Instagram

Based on the table, it is found that the intensity of Instagram usage significantly influences photography interest on Instagram with a significance value of 0.000, where the significance value is <0.05 .

Variable	t	Sig
Constant	12.126	.000
Intensity of Facebook usage on photography interest on Facebook	10.171	.000

T-test table for Facebook

Based on the table, it is found that the intensity of Facebook usage significantly influences photography interest on Facebook with a significance value of 0.000, where the significance value is <0.05 .

Variable	t	Sig
Constant	12.263	.000
Intensity of TikTok usage on photography interest on TikTok	9.238	.000

T-test table for TikTok

Based on the table, it is found that the intensity of TikTok usage significantly influences photography interest on TikTok with a significance value of 0.000, where the significance value is <0.05 .

3. Coefficient of Determination (R^2)

The coefficient of determination (R^2) test to determine the percentage of influence of social media usage intensity on photography interest of students in Batam is presented in the following table:

Variable	Adjusted R Square
Intensity of Instagram usage on photography interest on Instagram	0.344

Coefficient of determination (R^2) for Instagram

Based on the table, it is known that the influence of Instagram's social media usage intensity on photography interest on Instagram is 34.4% (0.344), while 65.6% is explained by factors not included in the model.

Variable	Adjusted R Square
Intensity of Facebook usage on photography interest on Facebook	0.337

Coefficient of determination (R^2) for Facebook

Based on the table, it is known that the influence of Facebook's social media usage intensity on photography interest on Facebook is 33.7% (0.337), while 66.3% is explained by factors not included in the model.

Variable	Adjusted R Square
Intensity of TikTok usage on photography interest on TikTok	0.295

Coefficient of determination (R^2) for TikTok

Based on the table, it is known that the influence of TikTok's social media usage intensity on photography interest on TikTok is 29.5% (0.295), while 70.5% is explained by factors not included in the model.

COMPARISON RESULTS

Based on the analysis conducted by the researcher, it is found that the intensity of Instagram usage on photography interest on Instagram is 34.4% with a correlation value of 0.535. Additionally, the influence of Facebook's social media usage intensity on photography interest on Facebook is 33.7% with a correlation value of 0.491, and the influence of TikTok's social media usage intensity on photography interest on TikTok is 29.5% with a correlation value of 0.482. The intensity of Instagram, Facebook, and TikTok usage also significantly influences photography interest on their respective platforms, with a significance value of 0.000 where the significance value is < 0.05 .

Conclusions

From this study, which aims to analyze the comparison of social media platforms Instagram, Facebook, and TikTok in relation to photography interest among students in Batam. Using a quantitative method, questionnaires were distributed to 213 respondents, who are students in Batam. This research employs a model involving the intensity of social media usage (Instagram, Facebook, and TikTok), photography interest through Instagram, photography interest through Facebook, and photography interest through TikTok. The collected data is then analyzed using the SPSS application to conduct validity and reliability tests, and hypothesis

testing is performed using regression methods. From the data analysis, it can be concluded that Instagram has the most significant impact on photography interest through Instagram, accounting for 34.4%, followed by Facebook with 33.7%, and TikTok with 29.5%. This study provides theoretical and practical implications for other researchers to conduct future research.

References

- Ardiansyah, H., Sindu, I. G. P., & Putrama, I. M. (2019). Pengembangan Video Pembelajaran PPKn Untuk Pengenalan Suku Dan Budaya Indonesia (Studi Kasus : Kelas IV Madrasah Ibtidaiyah Negeri Singaraja). *Kumpulan Artikel Mahasiswa Pendidikan Teknik Informatika (KARMAPATI)*, 8(2), 319. <https://doi.org/10.23887/karmapati.v8i2.18386>
- Bulele, Y. N., & Wibowo, T. (2020). Analisis Fenomena Sosial Media Dan Kaum Milenial: Studi Kasus Tiktok. *Conference on Business, Social Science and Innovation Technology*, 1, 565–572. <http://journal.uib.ac.id/index.php/cbsit>
- Fabiana Meijon Fadul. (2019). 濟無 *No Title No Title No Title*.
- Garwita, E. P., Dharta, F. Y., & Ema. (2022). Pemanfaatan Media Sosial Instagram sebagai Sarana Promosi Jasa Fotografi. *NUSANTARA: Jurnal Ilmu Pengetahuan Sosial*, 9(5), 1715–1720.
- Mahardhika, S. V., Nurjannah, I., Ma'una, I. I., & Islamiyah, Z. (2021). Faktor-Faktor Penyebab Tingginya Minat Generasi Post-Millennial Di Indonesia Terhadap Penggunaan Aplikasi Tik-Tok. *SOSEARCH: Social Science Educational Research*, 2(1), 40–53. <https://doi.org/10.26740/sosearch.v2n1.p40-53>
- Nisa, C., Widodo, T., & Dhesti Anggriani, S. (2021). Hubungan Penggunaan Fitur Media Sosial Instagram Dengan Minat Berkarya Fotografi Pada Komunitas Malang Raya Landscaper. 206–210.
- Pour, F. U. (2022). *Procedia of Social Sciences and Humanities Perancangan Media Promosi Dalam Media Sosial menggunakan Fotografi Untuk Pour And Peace Promotional Media Design in Social Media Using Photography to Pour And Peace Procedia of Social Sciences and Humanities*. 0672(c), 343–348.
- Ray, M., Yoga, D., Semara, I. M. T., & Sari, R. J. (2023). Peran Fotografi dan Promosi Media Sosial Instagram Terhadap Minat Berkunjung Wisatawan *The Role of Photography and Instagram Social Media Promotion Toward Tourist Visiting Interest*. 02(7), 1685–1701.
- Sumerta, I. K., Redianingsih, N. K., Pranawa, I. M. B., & Indahyani, D. N. T. (2020). Pengaruh Tingkat Penggunaan Media Sosial Dan Motivasi Terhadap Minat Berwirausaha Pada Mahasiswa Program Studi Manajemen Perguruan Tinggi Di Kota Denpasar. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, 7, 627. <https://doi.org/10.24843/eeb.2020.v09.i07.p03>
- Utara, K. L., Mariam, J., Praburangkasari, J., Cermen, D., & Mataram, S. K. (2022).
 <https://binapatria.id/index.php/MBI> Vol.16 No.10 Mei 2022
 *Open Journal Systems*. 16(10), 7639–7646.