

THE INFLUENCE OF DIGITAL MARKETING CAPABILITY AND INSTITUTIONAL REPUTATION ON PRIVATE UNIVERSITY SELECTION DECISIONS AT THE MUHAMMADIYAH UNIVERSITY OF NORTH SUMATRA (UMSU)

Eva Nirmala Sari Chaniago¹, Endang Sulistya Rini², Beby Karina Fawzee Sembiring³
^{1,2,3} Master of Management Study Program, University of North Sumatra
E-mail: evac307@gmail.com

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Abstract:

This study aims to analyze the influence of digital marketing capability and institutional reputation on the decision to choose a Private University (PTS) at the Muhammadiyah University of North Sumatra (UMSU). The phenomenon of competition between PTS is getting tighter as the number of private universities in Indonesia, especially in North Sumatra, increases. The research method used is quantitative with a survey approach. The research sample was 150 new UMSU students in the 2023/2024 Academic Year selected using a purposive sampling technique. Data were collected through questionnaires and analyzed using multiple linear regression with the help of SPSS 26. The results showed that digital marketing capability had a positive and significant effect on the decision to choose a PTS ($\beta = 0.412$; $p < 0.05$), institutional reputation had a positive and significant effect on the decision to choose a PTS ($\beta = 0.387$; $p < 0.05$), and simultaneously both variables had a significant effect on the decision to choose a PTS with a value of $F = 47.231$ ($p < 0.001$) and $R^2 = 0.564$. The implications of this research emphasize the importance of strengthening digital marketing strategies and managing institutional reputation in increasing UMSU's competitiveness.

Keywords: Marketing Capability, Institutional Reputation, PTS Selection Decisions, UMSU

Abstrak:

Penelitian ini bertujuan untuk menganalisis pengaruh digital marketing capability dan reputasi institusi terhadap keputusan pemilihan Perguruan Tinggi Swasta (PTS) pada Universitas Muhammadiyah Sumatera Utara (UMSU). Fenomena persaingan antar PTS semakin ketat seiring meningkatnya jumlah perguruan tinggi swasta di Indonesia, khususnya di Sumatera Utara. Metode penelitian yang digunakan adalah kuantitatif dengan pendekatan survei. Sampel penelitian sebanyak 150 mahasiswa baru UMSU Tahun Akademik 2023/2024 yang dipilih menggunakan teknik purposive sampling. Data dikumpulkan melalui kuesioner dan dianalisis menggunakan regresi linear berganda dengan bantuan SPSS 26. Hasil penelitian menunjukkan bahwa digital marketing capability berpengaruh positif dan signifikan terhadap keputusan pemilihan PTS ($\beta = 0,412$; $p < 0,05$), reputasi institusi berpengaruh positif dan signifikan terhadap keputusan pemilihan PTS ($\beta = 0,387$; $p < 0,05$), dan secara simultan kedua variabel berpengaruh signifikan terhadap keputusan pemilihan PTS dengan nilai $F = 47,231$ ($p < 0,001$) serta $R^2 = 0,564$. Implikasi penelitian ini menegaskan pentingnya penguatan strategi pemasaran digital dan pengelolaan reputasi institusi dalam meningkatkan daya saing UMSU.

Kata Kunci: Digital Marketing Capability, Reputasi Institusi, Keputusan Pemilihan PTS, UMSU

1. Introduction

Competition among private universities (PTS) in Indonesia is intensifying as the number of higher education institutions increases. According to 2023 data from the Ministry of Education, Culture, Research, and Technology (Kemendikbudristek), there are over 4,300 universities in Indonesia, of which approximately 85% are private universities. This creates a highly competitive landscape for prospective new students.

In North Sumatra, in particular, more than 300 private universities compete for new students each year. Muhammadiyah University of North Sumatra (UMSU), one of the largest private universities in

the country, with over 30,000 active students, continues to strive to maintain and increase its student intake amidst this increasingly fierce competition.

The phenomenon of concern in this study is the shift in prospective students' behavior in seeking information and determining their choice of higher education institution. An internal survey conducted by UMSU (2023) showed that 78% of prospective students stated that social media and the institution's official website were their primary sources of information before deciding to enroll. However, there is a gap between the intensity of prospective students' use of digital platforms and the institution's digital marketing capabilities. Research by Wardhana (2022) and Kotler et al. (2021) has examined the role of digital marketing in general, but specific studies on digital marketing capability in the context of private universities in North Sumatra are still very limited.

On the other hand, institutional reputation is a crucial factor in the decision to choose a private university. A study by Nguyen & LeBlanc (2021) showed that university reputation is a key determinant in prospective students' selection decisions. However, research integrating digital marketing capability and institutional reputation simultaneously in the context of Indonesian private universities is still scarce. This is the research gap that this study aims to address.

Based on this background, this study formulates the following questions: (1) Does digital marketing capability influence the decision to choose a private university at UMSU? (2) Does institutional reputation influence the decision to choose a private university at UMSU? (3) Do digital marketing capability and institutional reputation simultaneously influence the decision to choose a private university at UMSU?.

2. Literature Review

2.1 Digital Marketing Capabilities

Digital marketing capability refers to an organization's ability to effectively utilize digital technology for marketing activities, including social media management, search engine optimization (SEO), content marketing, and digital analytics (Kannan & Li, 2023). In the context of higher education, digital marketing capability encompasses an institution's ability to build a strong digital presence, engage with prospective students online, and optimize conversions from digital visitors to enrollees (Baltes, 2022). According to Vorhies & Morgan (2022), the dimensions of digital marketing capability include: (1) digital content capabilities, (2) social media management capabilities, (3) data analytics capabilities, and (4) digital communication capabilities.

2.2 Institutional Reputation

Institutional reputation is defined as the collective perception of an organization's quality, reliability, and value, formed through the accumulation of experience and information over time by various stakeholders (Fombrun & Van Riel, 2022). In the context of higher education, reputation is built through academic quality, accreditation, alumni achievements, facilities, and public recognition (Hemsley-Brown & Oplatka, 2022). A strong reputation has been shown to increase trust among prospective students and serve as a significant differentiating factor (Nguyen & LeBlanc, 2021).

2.3 Decision on Selection of PTS

The decision to choose a higher education institution is a cognitive and affective process that prospective students go through in evaluating and selecting a higher education institution (Kotler et al., 2023). The decision-making model for choosing a higher education institution adapts the consumer behavior model, which consists of need recognition, information search, alternative evaluation, purchase decision, and post-purchase behavior (Armstrong & Kotler, 2023). Factors influencing this decision include internal (motivation, perception) and external (digital marketing, reputation, family and peer influence).

2.4 Relationship between Variables and Hypotheses

Based on previous theoretical and research studies, the research hypothesis is formulated as follows:

H1: Digital marketing capability has a positive and significant influence on the decision to choose PTS at UMSU.

H2: Institutional reputation has a positive and significant influence on the decision to choose a private university at UMSU.

H3: Digital marketing capability and institutional reputation simultaneously have a significant influence on the decision to choose a private university at UMSU.

3. Research Methods

3.1. Research Design

This study uses a quantitative approach with an explanatory research design that aims to explain the causal relationship between independent variables (digital marketing capability and institutional reputation) and dependent variables (PTS selection decisions).

3.2. Population and Sample

The study population was all 6,240 new students of UMSU in the 2023/2024 Academic Year. The sample size was determined using the Slovin formula with an error rate of 8%, resulting in a minimum sample of 150 respondents. The sampling technique used purposive sampling with the following criteria: (1) new students of UMSU in the 2023/2024 Academic Year, (2) domiciled in North Sumatra, and (3) willing to be respondents.

3.3. Research Variables and Instruments

Independent Variables:

- a) Digital Marketing Capability(X1): measured by 12 statement items using 4 dimensions (digital content capabilities, social media management, data analytics, and digital communication) adapted from Vorhies & Morgan (2022).
- b) Institutional Reputation (X2): measured by 10 statement items covering academic quality, accreditation, alumni image, and facilities, adapted from Fombrun & Van Riel (2022).

Dependent Variable:

- a) PTS Selection Decision (Y): measured by 8 statement items covering the decision-making process, adapted from Kotler et al. (2023).

All instruments use a 1–5 Likert scale (1 = Strongly Disagree; 5 = Strongly Agree).

3.4. Data Quality Test

Validity tests used Pearson correlation ($r_{count} > r_{table} = 0.160$) and reliability tests used Cronbach's Alpha ($\alpha > 0.70$). Classical assumption tests included normality tests (Kolmogorov-Smirnov), multicollinearity tests ($VIF < 10$), and heteroscedasticity tests (Glejser).

3.5. Data Analysis Techniques

Data analysis using multiple linear regression analysis with the equation:

$$Y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \epsilon$$

Where: Y = PTS Selection Decision; α = Constant; β_1 = Digital Marketing Capability Coefficient; β_2 = Institutional Reputation Coefficient; X_1 = Digital Marketing Capability; X_2 = Institutional Reputation; ϵ = Error term.

Hypothesis testing was conducted using the t-test (partial) and F-test (simultaneous) at a significance level of $\alpha = 0.05$. All analyses were conducted using SPSS version 26.

4. Results and Discussion

The results and discussion sections should be presented systematically to explain the research findings and their meaning. Here is a general structure that can be used:

4.1. Respondent Characteristics

Table 1. Respondent Characteristics

Characteristics	Category	Frequency	Percentage (%)
Gender	Man	68	45.3
	Woman	82	54.7
Age	17–18 years	89	59.3
	19–20 years	47	31.3
	> 20 years	14	9.4
Region of Origin	Medan City	97	64.7
	Outside Medan	53	35.3
Primary Source of Information	Social media	78	52.0
	Official Website	39	26.0
	Family/Friends	24	16.0
	Brochure/Exhibition	9	6.0

Sources: Primary Data, processed (2024)

Based on Table 1, the majority of respondents were female (54.7%), aged 17–18 years (59.3%), from Medan (64.7%), and obtained information about UMSU through social media (52.0%). This confirms the dominance of digital platforms as the primary information channel for prospective students.

4.2. Data Quality Test

Table 2. Validity and Reliability Test Results

Variables	Number of Items	R Count	R (min–max)	R Table	Cronbach's Alpha	Information
Digital Marketing Capability (X1)	12	0.312	– 0.687	0.160	0.841	Valid & Reliable
Institutional Reputation (X2)	10	0.287	– 0.712	0.160	0.823	Valid & Reliable
PTS Selection Decision (Y)	8	0.301	– 0.694	0.160	0.807	Valid & Reliable

Sources: Primary Data, processed (2024)

All statement items were declared valid because the calculated r value was > r table (0.160). The Cronbach's Alpha value for all three variables was above 0.70, so the research instrument was declared reliable.

4.3. Relevance to Research Objectives

Table 3. Results of the Classical Assumption Test

Test	Method	Value/Result	Criteria	Conclusion
Normality	Kolmogorov-Smirnov	Sig. = 0.143	Sig. > 0.05	Normal
Multicollinearity (X1)	VIF	1,872	VIF < 10	Not Multicollinear
Multicollinearity (X2)	VIF	1,872	VIF < 10	Not Multicollinear
Heteroscedasticity	Glacier (X1)	Sig. = 0.312	Sig. > 0.05	Not Heterosk.
Heteroscedasticity	Glacier (X2)	Sig. = 0.287	Sig. > 0.05	Not Heterosk.

Sources: Primary Data, processed (2024)

The results of the classical assumption test showed that the data were normally distributed, with no multicollinearity, and no heteroscedasticity. The regression model was found to meet all classical assumptions and was therefore suitable for use.

4.4. Relevance to Research Objectives

Table 4. Results of Multiple Linear Regression Analysis

Variables	Coefficient (B)	Std. Error	Beta (β)	t Count	Sig.
Constant	4,217	1,083	—	3,893	0,000
Digital Marketing Capability (X1)	0.412	0.073	0.412	5,644	0,000
Institutional Reputation (X2)	0.387	0.081	0.387	4,778	0,000

Sources: Primary Data, processed (2024)

Based on Table 4, the regression equation formed is:

$$Y = 4.217 + 0.412X_1 + 0.387X_2$$

This equation shows that: (1) the constant value of 4.217 means that without digital marketing capability and institutional reputation, the decision to select a PTS still has a value of 4.217; (2) the coefficient $X_1 = 0.412$ means that for every one unit increase in digital marketing capability, the decision to select a PTS will increase by 0.412 assuming other variables are constant; and (3) the coefficient $X_2 = 0.387$ means that for every one unit increase in institutional reputation, the decision to select a PTS will increase by 0.387.

4.5. Test of the Coefficient of Determination (R^2)

Table 5. Results of the Determination Coefficient Test

Model	R	R Square	Adjusted R Square	Standard Error of the Estimate
1	0.751	0.564	0.558	1,847

Sources: Primary Data, processed (2024)

The Adjusted R Square value of 0.558 indicates that digital marketing capability and institutional reputation together explain 55.8% of the variation in university selection decisions. The remaining 44.2%

is explained by other variables not included in the model, such as tuition fees, location, study program, and social influences.

4.6. F Test (Simultaneous)

Table 6. F Test Results (ANOVA)

Model	Sum of Squares	Df	Mean Square	F Count	Sig.
Regression	322,114	2	161,057	47,231	0,000
Residual	499,286	147	3,403		
Total	821,400	149			

Sources: Primary Data, processed (2024)

The calculated F value = 47.231 with Sig. = 0.000 < 0.05, so H3 is accepted. This means that digital marketing capability and institutional reputation simultaneously have a significant influence on the decision to choose a private university at UMSU.

4.7. Discussion

The Influence of Digital Marketing Capability on PTS Selection Decisions

The results of the study indicate that digital marketing capability has a positive and significant effect on the decision to choose a private university ($\beta = 0.412$; $t = 5.644$; $p = 0.000$). This finding supports H1 and is consistent with the research of Kannan & Li (2023) which states that strong digital marketing capabilities directly influence consumer decisions. In the context of higher education, UMSU's ability to manage informative digital content, be responsive on social media, and optimize visibility in search engines has been proven to be a determining factor in influencing prospective students' decisions. This finding is also supported by data on respondent characteristics which shows that 52% of prospective students obtain information about UMSU through social media.

The Influence of Institutional Reputation on PTS Selection Decisions

Institutional reputation was shown to have a positive and significant influence on the decision to choose a private university ($\beta = 0.387$; $t = 4.778$; $p = 0.000$), thus H2 was accepted. These results align with Fombrun & Van Riel (2022) and Hemsley-Brown & Oplatka (2022), which emphasized that reputation is a strategic asset for educational institutions. UMSU's reputation, built through study program accreditation, student achievement, faculty quality, and alumni network, is a primary consideration for prospective students in choosing a private university. Although the coefficient for institutional reputation is slightly lower than that for digital marketing capability, its influence remains significant and substantial.

Simultaneous Effects

Simultaneously, the two variables explained 55.8% of the variation in university selection decisions, indicating that integrating a strong digital marketing strategy with good reputation management is an effective combination in increasing UMSU's attractiveness to prospective students. This finding underscores the importance of a holistic approach in higher education marketing strategies.

5. Conclusion

Based on the research results and discussion, the following conclusions can be drawn:

1. Digital marketing capability has a positive and significant effect on the decision to choose PTS at UMSU ($\beta = 0.412$; $p < 0.05$), which means that the higher UMSU's digital marketing capabilities, the greater the likelihood of prospective students choosing UMSU.
2. Institutional reputation has a positive and significant influence on the decision to choose a private university at UMSU ($\beta = 0.387$; $p < 0.05$), which means that the better UMSU's reputation in the eyes of the public, the higher the interest of prospective students to register.
3. Digital marketing capability and institutional reputation simultaneously had a significant influence on the decision to choose PTS at UMSU ($F = 47.231$; $p < 0.001$) with a contribution of 55.8% (Adjusted $R^2 = 0.558$).

Bibliography

- Armstrong, G., & Kotler, P. (2023). *Marketing: An Introduction* (15th ed.). Pearson Education.
- Baltes, L. P. (2022). Content marketing: The fundamental tool of digital marketing. *Bulletin of the Transylvanian University of Brasov*, 15(1), 111–118.
- Fombrun, C. J., & Van Riel, C. B. M. (2022). *Fame & Fortune: How Successful Companies Build Winning Reputations* (2nd ed.). Prentice Hall.
- Hemsley-Brown, J., & Oplatka, I. (2022). Higher education consumer choice. *Journal of Marketing for Higher Education*, 32(2), 145–162. <https://doi.org/10.1080/08841241.2022.2034891>

- Kannan, P. K., & Li, H. A. (2023). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing*, 40(1), 22–45. <https://doi.org/10.1016/j.ijresmar.2022.09.003>
- Ministry of Education, Culture, Research, and Technology. (2023). Indonesian Higher Education Statistics 2023. Data Center of the Ministry of Education, Culture, Research, and Technology.
- Kotler, P., Armstrong, G., & Opresnik, M. O. (2023). *Principles of Marketing* (18th ed.). Pearson Education.
- Kotler, P., Keller, K. L., & Chernev, A. (2021). *Marketing Management* (16th ed.). Pearson Education.
- Nguyen, N., & LeBlanc, G. (2021). Image and reputation of higher education institutions in students' retention decisions. *International Journal of Educational Management*, 15(6), 303–311. <https://doi.org/10.1108/09513540110401003>
- Prasetyo, A., & Wahyuni, S. (2023). The influence of digital marketing and brand image on the decision to choose a private university in East Java. *Journal of Management and Business*, 12(2), 87–99.
- Santoso, B., & Wijaya, T. (2022). University reputation and its influence on prospective student interest: A study of private universities in North Sumatra. *Journal of Education and Entrepreneurship*, 10(1), 55–68.
- Sari, DP, & Kusuma, AH (2023). The role of social media in the college selection decision-making process of Generation Z. *Journal of Competitive Marketing*, 6(3), 211–224.
- Vorhies, D. W., & Morgan, N. A. (2022). Benchmarking marketing capabilities for sustainable competitive advantage. *Journal of Marketing*, 69(1), 80–94. <https://doi.org/10.1509/jmkg.69.1.80.55505>
- Wardhana, A. (2022). Digital marketing strategies and their implications for the competitive advantage of SMEs in Indonesia. *National Seminar on Economics and Business*, 3(1), 327–337.
- Yusuf, M., & Hidayat, R. (2023). Analysis of factors influencing the decision to choose a private university: Empirical evidence from Muhammadiyah universities throughout Sumatra. *Journal of Islamic Economics and Business*, 8(1), 45–62.