The Role of Digital Media Communication in Shaping Prospective Students' Perceptions and Preferences for Bali State Polytechnic

Jeni Susanti[1], Ni Ketut Sukasih[2], and I Putu Mertha Astawa[3]

[1,2,3] Accounting Department, Politeknik Negeri Bali, Bali, Indonesia
susanti@pnb.ac.id

Abstract. The purpose of this study is to investigate the impact of digital media on the decision of prospective students about Politeknik Negeri Bali (PNB). As digital platforms become the primary mode of communication, understanding their role in shaping educational decisions is critical. The research uses a quantitative approach to examine how PNB uses digital media channels to engage with prospective students and influence their perceptions and preferences. The aim is to determine prospective students' perceptions of the digital marketing communication channels used by PNB and to test the influence of perceived usefulness/PEU and perceived ease of use/PEO on prospective students' intentions to choose PNB. Data collection involved distributing surveys to incoming PNB students, focusing on those admitted through the 2024 Achievement-Based National Selection (SNBP) route, from a total applicant pool of 1,023. A sample size of 95 was established using purposive sampling. Research findings show that the digital marketing communication channels used by PNB significantly influence prospective students' intentions to choose PNB. These results explain the important role of digital marketing communication media in shaping prospective students' views and tendencies toward PNB.

Keywords: Digital Media, Intention to Choose, Prospective Students

1 Introduction

Social behavior has changed profoundly with the advent of the digital age. According to 2023 data, Indonesia is poised to witness a substantial rise in internet usage, with projections indicating that it will encompass 212.9 million individuals, equivalent to 77.0 percent of the population. Concurrently, social media adoption is expected to reach 60.4 percent, while mobile phone penetration is forecasted to hit 128.0 percent (Kemp, 2023). This transformative shift in behavior has catalyzed significant changes within the realm of marketing. Traditionally, marketing strategies were predominantly executed through conventional means. However, with the rise of digital platforms, there has been a paradigm shift towards employing digital approaches and leveraging social media platforms and websites. By embracing marketing systems that harness the power of social media and online platforms, businesses can offer clients swift and efficient access to product and service information. Consequently, this facilitates heightened customer satisfaction (Susanti, 2018).

The surge of digitalization has significantly revolutionized marketing approaches within the higher education sector over the years. Universities are grappling with escalating hurdles in capturing the attention of potential students. Traditional marketing tactics such as print advertisements and brochures have become less effective in an age dominated by information technology and the Internet. Consequently, relying solely on conventional marketing methods is no longer adequate. Presently, an increasing number of prospective students are turning to online avenues to glean information about universities and academic programs, while also engaging in communication via social media platforms. As a result, it is imperative for higher education institutions, including Bali State Polytechnic (PNB), to overhaul their strategies for connecting with prospective students. This necessitates a paradigm shift towards innovative and digitally-driven approaches to marketing and engagement.

Marketing communications strategies in various sectors, including higher education, are increasingly adopting digital marketing communications (DMC) in line with advances in information technology. DMC encompasses a range of tools and platforms such as social media (e.g. Facebook, Instagram, Twitter, LinkedIn, Snapchat), mobile apps, websites, digital advertising (including visual content and digital billboards), email newsletters, and podcasts. By using DMC, businesses can maintain ongoing communications and transactions that are accessible from multiple locations. This allows businesses to expand their market reach (Yasmin et al., 2015), access a broader consumer base (Chaffey & Patron, 2012), increase sales and competitiveness (Rizaldi & Hidayat, 2020), and raise awareness among potential customers, thereby influencing their purchasing decisions (Stephen, 2016). Similarly, educational institutions can use digital media to showcase the services and benefits they offer to students on a national and global scale (Baltes, 2015).

The impact of digital marketing communications (DMC) on consumer purchase intentions and behavior has been thoroughly investigated in numerous studies. The results of these studies consistently show a positive and significant relationship between DMC and consumer purchase intentions (Ering & Pandowo, 2015; Sawaftah, 2020) as well as consumer behavior (Mihaela, 2015; Pratama & Prasandy, 2018; Mensah & Amenuvor, 2022). For example, Heimonen's study highlights the transformative impact of digital media in fostering purchase intention (Heimonen, 2018). However, some studies report conflicting findings regarding the influence of DMC on purchase intentions. For example, Hawila and Samuel's research suggests that DMC does not have a significant impact on purchase intentions (Hawila & Samuel, 2017). In addition, several previous studies have shown that the relationship between digital marketing and purchase intentions is not significant.

While the utilization of digital media can undeniably augment the sales of products or services, the research underscores that elements such as information presentation, perceived presence, and attention play pivotal roles in engendering purchase intentions (Karman, 2015; Pazeraite & Repoviene, 2018). Referring to the concept of Digital Marketing Communications from Kliatchko, digital marketing communications must pay attention to two pillars, namely content and digital communication channels in building intent. According to Oana (2018), the success of marketing actions is mainly determined by the choice of interesting content and channels that are relevant to the target audience. Content and channel selection. based on the target audience's preferences to convey the message successfully. Content includes content types content

values and communication channels selected for promotional purposes according to prospective students' preferences.

The research aims to understand prospective students' perceptions of the digital marketing communication channels used by Politeknik Negeri Bali (PNB) and how these perceptions (particularly Perceived Usefulness (PEU) and Perceived Ease of Use (PEO) influence their decision to enroll at PNB. Two hypotheses are proposed in this research, namely Hypothesis 1 (H1): There is a positive relationship between the perceived usefulness (PEU) of PNB's digital marketing channels and prospective students' intentions to choose PNB. Hypothesis 2 (H2): There is a positive relationship between the perceived ease of use (PEO) of PNB's digital marketing channels and prospective students' intentions to choose PNB.

2   Methodology

The purpose of this study is to examine, through the use of quantitative methods, the impact of the perception of digital marketing channels on the interest of prospective students in Politeknik Negeri Bali (PNB). Specifically, it focuses on students who applied through the 2024 National Achievement-Based Selection Programme (SNBP). With a total of 1,716 applicants to the SNBP, a purposive sampling technique was used to select a sample of 95 participants. This approach ensures that participants have relevant characteristics, namely being prospective students who applied through SNBP. The purpose of the analysis is to assess how digital marketing communications influence their decision to choose the SNBP. This study used a 1-5 Likert scale questionnaire to collect primary data on three main factors: perceived usefulness and ease of use of digital marketing channels (DMCs), and intention to choose. The validity of the data was assessed using Pearson correlation ($r \geq 0.3$) and reliability was assessed using Cronbach's alpha ($\alpha \geq 0.6$). Detailed results are presented in Table 1.

Table 1. Results of the validity and reliability of the instrument

Item	Validity		Reliability	
	Value	Description	Value	Description
Perceived Usefulness (PU):				
a. Effective	0.870	Valid		
b. According to the needs	0.826	Valid	0.835	Reliable
c. Efficient	0.727	Valid		
d. Accurate	0.851	Valid		
Perceived Ease of Use (PEU):				
a. Easy to understand	0.812	Valid		
b. Simple	0.759	Valid	0.791	Reliable
c. Flexible	0.739	Valid		
d. Easy to Access	0.843	Valid		
Intention to choose (ICHO)				
a. Pay attention	0.841	Valid		
b. Create interest	0.908	Valid	0.849	Reliable
c. Desire to try	0.912	Valid		

Item	Validity		Reliability	
	Value	Description	Value	Description
d. Would recommend	0.647	Valid		

The data analysis methods employed include descriptive statistical analysis and inferential analysis using PLS-SEM. Descriptive statistics offer an overview of the characteristics of each variable, providing a general description of the data. The PLS-SEM method is a causal-predictive approach to SEM that emphasizes prediction in estimating statistical models, the structure of which is designed to provide causal explanations (Sarstedt et al., 2017).

3   Result and Discussion

3.1. Result

Characteristics of Research Respondents. A considerable portion of the research participants were female, making up 70.5 percent of the sample, which reflects a higher level of female participation compared to their male counterparts. The remaining 29.5 percent of respondents were male. Participants were from three types of schools: Madrasah Alawiyah (5.3%), High School (54.7%), and Vocational High School (40.0%). An overview of the research respondents is presented in Table 2 below.

Table 2. Research respondents

Gender	Madrasah alawiyah		High school		Vocational high school	
	Amount	Percent	Amount	Percent	Amount	Percent
Female	5	5.3%	34	35.8%	28	29.5%
Male	0	0.00%	18	18.9%	10	10.5%
Total	5	5.3%	52	54.7%	38	40.0%

Results of Descriptive Statistical Analysis. Respondents' perceptions of the construct variables perceived usefulness, perceived ease of use, and intention to choose are shown in Table 3.

Table 3. Respondents' perceptions of indicators

No.	Indicators	Frequency					Score		Description
		1	2	3	4	5	Total	Avg.	
1	Effective	0	12	36	244	80	372	3.88	Useful
2	According to the needs	0	8	42	228	100	378	3.94	Useful
3	Efficient	0	2	24	240	130	396	4.13	Useful
4	Accurate	0	24	42	216	75	357	3.72	Useful
Perceived Usefulness								3.91	Useful
1	Easy to understand	0	16	81	184	70	351	3.66	Easy
2	Simple	0	14	66	216	50	346	3.60	Easy
3	Flexible	0	12	87	164	95	358	3.73	Easy
4	Easy to Access	0	12	60	216	75	363	3.78	Easy
Perceived Ease of Use								3.69	Easy
1	Pay attention	0	12	27	268	65	372	3.88	Intend
2	Create interest	0	18	42	232	70	362	3.77	Intend
3	Desire to try	2	26	45	204	70	347	3.61	Intend
4	Would recommend	1	24	45	200	85	355	3.70	Intend
Intention to choose								3.74	Intend

The average perception of respondents towards the perceived usefulness construct is 3.91, suggests that respondents generally found the digital marketing channels used by Politeknik Negeri Bali (PNB) to be useful. perceived ease of use an average score of 3.69 indicates that respondents perceived the PNB's digital marketing channels as somewhat easy to use. Intention to choose with an average score of 3.74, respondents expressed a moderate intention to choose PNB.

PLS-SEM Analysis Results. Measurement Model Testing (Outer Model), The outer model test aims to specify the relationship between variables and their indicators. The analysis stage in the outer model is measured using convergent validity, discriminant validity, and reliability testing.

Testing with convergent validity. Tests of convergent validity are needed to ensure that indicators of a construct are highly correlated. This test can be evaluated in two stages: by examining the outer loadings and the average variance extracted (AVE). If the cross-loading value with the measured construct is equal to or greater than 0.70, the individual reflective indicator is considered to have a high correlation. The outer loading results for each indicator are illustrated in Figure 1.
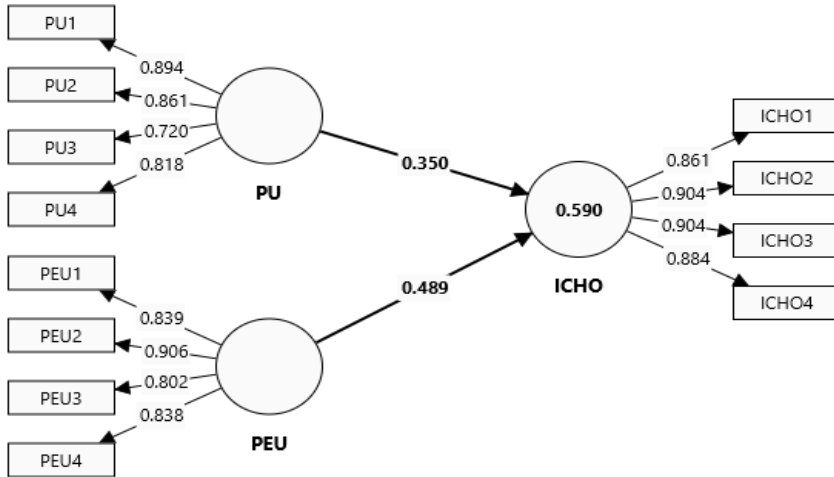
Figure 1. PLS algorithm diagram output

According to the PLS algorithm output (Figure 1), all indicators exhibit a positive relationship with their respective latent variables, with each indicator having a loading factor greater than 0.7, which is considered quite high. These results indicate that each indicator is effective in accurately measuring the latent variables. Construct validity is assessed by examining the AVE score in the next step. According to Ghozali & Latan (2015), a good model has an AVE for each construct greater than 0.50 (> 0.50). The results indicate that the AVE values for the PU, PEU, and ICHO constructs all exceed 0.50, demonstrating adequate convergent validity (see Table 4).

Table 4. Average variance extracted (AVE) value

Construct	Average variance extracted (AVE)
Intention to choose (ICHO)	0.790
Perceived Ease of Use (PEU):	0.717
Perceived Usefulness (PU):	0.682

Construct Reliability Test. Reliability tests are conducted to confirm the accuracy, consistency and precision of the instrument in measuring the construct. Construct reliability is assessed using two measures: composite reliability and Cronbach's alpha. A variable is considered reliable if the composite reliability is greater than 0.6 and the Cronbach's alpha is at least 0.70 (Hair et al., 2019). The results for Cronbach's alpha and composite reliability are presented in Table 5.

Table 5. Cronbach's alpha and composite reliability values

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)
ICHO	0.912	0.916	0.938
PEU	0.868	0.868	0.910
PU	0.843	0.861	0.895

The alpha and composite reliability values in Table 5 indicate that the data from the research instrument are consistent and stable. Both Cronbach's Alpha and Composite Reliability values meet the required threshold of 0.70, indicating satisfactory reliability across all variables.

Discriminant Validity Test. The discriminant validity test uses cross-loadings (CL), Fornell-Larcker criterion (FLC), and heterotrait monotrait ratio (HTMT) values (Hair et al., 2019). The criteria for each method are as follows: Cross-loading values (Table 6) should be greater than 0.70 to ensure good discriminant validity (Henseler et al., 2016). For FLC, a variable is considered to have good discriminant validity if its FLC value is higher than those of other variables (Table 7). The HTMT ratio (Table 8) should ideally be less than 0.90 or 0.85 (Franke & Sarstedt, 2019).

Table 6. Cross loadings value

	ICHO	PEU	PU
ICHO1	0.861	0.684	0.677
ICHO2	0.904	0.609	0.734
ICHO3	0.904	0.620	0.503
ICHO4	0.884	0.647	0.446
PEU1	0.609	0.839	0.565
PEU2	0.616	0.906	0.544
PEU3	0.591	0.802	0.497
PEU4	0.627	0.838	0.638
PU1	0.579	0.608	0.894
PU2	0.629	0.650	0.861
PU3	0.422	0.369	0.720
PU4	0.572	0.524	0.818

Table 7. Fornell-larcker criterion (FLC)

	ICHO	PEU	PU
ICHO	0.889		
PEU	0.722	0.847	
PU	0.675	0.664	0.826

Table 8. Heterotrait-monotrait ratio (HTMT)

	Heterotrait-monotrait ratio (HTMT)
PEU <-> ICHO	0.810
PU <-> ICHO	0.748
PU <-> PEU	0.761

Model Fit Test. The goodness of fit test in PLS is assessed by evaluating the R-squared and adjusted R-squared values to determine how well the endogenous variable is explained by the exogenous variable. R-squared values are interpreted as follows: 0.67 indicates strong explanatory power, 0.33 indicates moderate explanatory power and 0.19 indicates weak explanatory power. In this study, the R-squared and adjusted R-squared values were 0.590 and 0.581 respectively, indicating that the model has almost strong explanatory power. Model fit was also assessed using the Q-squared measure of predictive relevance. A Q-squared (Q2) value greater than 0, 0.25 and 0.50 indicates low, medium and high predictive relevance respectively. The study yielded a Q-squared value of 0.561, indicating high predictive relevance. In addition, the Standardized Root Mean Square Residual (SRMR) was used to assess model fit, with a value of 0.08 indicating a good fit (Hu & Bentler, 1999). The SRMR in this study was 0.08, which met the criterion for good fit.

Hypothesis Test Results. The next test is to see the significance between the influence of the construct variables perceived usefulness, perceived ease of use on intention to choose. The significant relationship is seen through path coefficients in the Bootsrapping report. The results obtained from testing the Research Hypothesis are shown in Table 9.

Table 9. Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
PEU -> ICHO	0.489	0.488	0.099	4.962	0.000
PU -> ICHO	0.350	0.355	0.100	3.518	0.000

Referring to Table 9, it can be observed that hypothesis: As the t-values exceed the critical t-value of 1.98, hypothesis 1 (H1) and hypothesis 2 (H2) are supported. This suggests that both perceived usefulness and perceived ease of use have a statistically significant positive effect on the intention to choose PNB. The results suggest that students who perceive PNB's digital marketing channels as useful and easy to use are more likely to consider choosing PNB.

3.2.   Discussion

The study's findings robustly support Hypotheses 1 (H1) and 2 (H2), as indicated by the t-values surpassing the critical t-value of 1.98, demonstrating statistical significance. This confirms that both perceived usefulness and perceived ease of use have a significant impact on prospective students' intentions to choose PNB.

These results align with previous research by Rho et al. (2014) and Ifinedo (2016), which emphasized the importance of perceived usefulness in influencing user intention.

Additionally, the study highlights that perceived ease of use also has a statistically significant positive effect on the intention to choose PNB. This supports and builds on the findings of Nofal et al. (2020) and Briez et al. (2022), which showed that communication channels affect purchase intentions. Overall, when students view PNB's digital marketing channels as both valuable and easy to use, they are more likely to consider PNB as their preferred educational institution. This underscores the critical role of PNB's digital marketing strategies in shaping prospective students' perceptions and preferences.

4   Conclusion

These results highlight the crucial role that digital marketing channels play in shaping the perception and choices of PNBs. By ensuring their digital marketing efforts are informative, user-friendly, and cater to student needs, PNB can effectively attract and retain prospective students. Further research could explore the specific types of digital marketing channels that resonate most with prospective students and how these channels can be optimized for maximum impact. Additionally, qualitative studies could delve deeper into students' perceptions and decision-making processes to gain richer insights.

Acknowledgment

References

Baltes, P. (2015). Content marketing the fundamental tool of digital marketing. *Bulletin of the Transilvania University of Brasov Series V: Economic Sciences, 8*(2), 111-118.

Briez, M. G., Ezzat, M., & Eljalil, S. G. (2022). Assessing the influence of using online marketing tools on egyptian domestic tourism: Online behavior, online purchase intention and e-satisfaction. *International Journal of Tourism and Hospitality Management, 5*(1), 137-163.

Chaffey, D., & Patron, M. (2012). From web analytics to digital marketing optimization: Increasing the commercial value of digital analytics. *Journal of Direct, Data and Digital Marketing Practice 14*(1), 30–45.

Ering, M. C., & Pandowo, M. (2015). Analisa komunikasi pemasaran dan efeknya pada minat beli konsumen emas di PT Pegadaian (Persero) Cabang Manado Utara. *Jurnal EMBA 3*(2), 776-786.

Franke, G., & Sarstedt, M. (2019). Heuristics versus statistics in discriminant validity testing: A comparison of four procedures. *Internet research*, *29*(3), 430-447.

Ghozali, I., & Latan, H. (2015). *Konsep, teknik, aplikasi menggunakan Smart PLS 3.0 untuk penelitian empiris.* Semarang: BP Undip.

Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review, 31*(1), 2-24.

Hawila, R., & Samuel, H. (2017). Analisa pengaruh marketing communication terhadap purchase intention dimediasi oleh brand image pada produk LCV PT Astra International TBK – ISUZU. *Jurnal Strategi Pemasaran 5*(1), 1-10.

Heimonen, L. (2018). *Utilizing integrated marketing communications to advance purchase intention of customers by improving digital marketing content and channels* (Master Thesis). https://www.semanticscholar.org/.

Henseler, J., Hubona, G., & Ray, P. A. (2016). Using PLS path modeling in new technology research: Updated guidelines. *Industrial Management & Data Systems, 116*(1), 1-19.

Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling, 6*, 1-55.

Ifinedo, P. (2016). The moderating effects of demographic and individual characteristics on nurses' acceptance of information systems: A Canadian study. *International Journal of Medical Informatics, 87*, 27-35.

Karman, M. A. (2015). The impact of social media marketing on brand equity toward the purchase intention of Starbucks Indonesia. *iBuss Management, 3*(2), 77-88.

Kemp, S. (2023). *Digital 2023: Indonesia*. Indonesia: Datareportal.

Mensah, K., & Amenuvor, F. E. (2022). The influence of marketing communications strategy on consumer purchasing behaviour in the financial services industry in an emerging economy. *Journal of Financial Services Marketing , 27*, 190–205.

Mihaela, O. E. (2015). The influence of the integrated marketing communication on the consumer buying behaviour. *2nd Global Conference on Business, Economics, Management and Tourism Procedia Economics and Finance, 23*, 1446 – 1450.

Nofal, M. I., Al-Adwan, A. S., Yaseen, H., & Alseikh, G. A. (2020). Digital marketing effect to intention to domestic tourism during COVID-19 in Jordan. *Periodicals of Engineering and Natural Sciences, 8*(4), 2471-2483.

Oana, D. (2018). Integrated marketing communication and its impact on consumer behavior. *Studies in Business and Economics, Lucian Blaga University of Sibiu, Faculty of Economic Sciences, 13*(2), 92-102.

Pazeraite, A., & Repoviene, R. (2018). Content marketing decisions for effective internal communication. *Organizacijų Vadyba: Sisteminiai Tyrima*, *79*, 117-130.

Pratama, Y., & Prasandy, C. M. (2018). The effect of marketing communication mix towards the purchase decision of mice products: A case study from Santa Monica Hotel & Convention in Bogor. *Emerging Markets : Business and Management Studies Journal, 6*(1), 9-20. https://doi.org/10.33555/ijembm.v6i1.99.

Rho, M. J., Choi, I., & Lee, J. (2014). Predictive factors of telemedicine service acceptance and behavioral intention of physicians. *International Journal of Medical Informatics, 83*(8), 559–571.

Rizaldi, A., & Hidayat, H. (2020). Digital marketing communication strategy. *Jurnal Entrepreneur dan Entrepreneurship, 9*(2), 101–110.

Sarstedt, M., Ringle, C. M., & Hair, J. F. (2017). Partial least squares structural equation modeling. *Handbook of Market Research*, 1-47.

Sawaftah, D. (2020). The effectiveness of electronic integrated marketing communications on customer purchase intention of mobile service providers: The mediating role of customer trust. *Journal of Sustainable Marketing 1*(1), 33-42.

Stephen, A. T. (2016). The role of digital and social media marketing in consumer behavior. *Current Opinion in Psychology, 10,* 17-21.

Susanti, N. (2018). Perancangan e-marketing UMKM kerajinan tas. *Simetris: Jurnal Teknik Mesin, Elektro, dan Ilmu Komputer, 9*(1), 717–722.

Yasmin, A., Tasneem, S., & Fatema, K. (2015). Effectiveness of digital marketing in the challenging age: An empirical study. *International Journal of Management Science and Business Administration, 1*(5), 69–80.