



Digital Marketing Strategies In Attracting Generation Z Students At Private University

Yaser Arafat^{1*}, Thomas Stefanus Kaihatu¹, David Sukardi Kodrat¹

¹ Universitas Ciputra Surabaya, Indonesia

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Abstract

This study examines how digital marketing strategies influence Generation Z's enrollment intentions at Indonesian private universities through the Theory of Planned Behavior framework. Data collected from 212 Generation Z respondents across five major Indonesian cities were analyzed using PLS-SEM. Results reveal that Generation Z characteristics significantly influence enrollment intentions with digital marketing emerging as the strongest direct predictor. Contrary to conventional expectations, brand image demonstrated a negative relationship with enrollment intentions. Digital marketing positively moderates the relationship between Generation Z characteristics and enrollment intentions, while brand image exhibits a negative moderation effect. The model demonstrated substantial explanatory power, effectively capturing key determinants of enrollment decisions. These findings suggest a paradigm shift in higher education marketing for Generation Z, where authentic digital engagement outperforms traditional reputation-based approaches. High factor loadings for digital information sources, visual content, social media advertising, and direct digital interaction highlight specific aspects of digital marketing most valued by Generation Z. This research contributes both theoretical insights into digital-native decision-making and practical guidance for higher education institutions developing effective recruitment strategies in Indonesia's competitive educational landscape.

Abstrak

Generasi Z di perguruan tinggi swasta Indonesia menggunakan kerangka Theory of Planned Behavior. Data dikumpulkan dari 212 responden Generasi Z di lima kota besar Indonesia dan dianalisis menggunakan PLS-SEM. Hasil menunjukkan bahwa karakteristik Generasi Z secara signifikan mempengaruhi niat mendaftar, dengan pemasaran digital muncul sebagai prediktor langsung terkuat. Bertolak belakang dengan ekspektasi konvensional, citra merek menunjukkan hubungan negatif dengan niat mendaftar. Pemasaran digital secara positif memoderasi hubungan antara karakteristik Generasi Z dan niat mendaftar, sementara citra merek menunjukkan efek moderasi negatif. Model menunjukkan kekuatan penjelasan yang substansial, secara efektif mengidentifikasi faktor-faktor kunci dalam keputusan pendaftaran. Temuan ini menunjukkan pergeseran paradigma dalam pemasaran pendidikan tinggi untuk Generasi Z, di mana keterlibatan digital yang autentik lebih efektif dibandingkan pendekatan berbasis reputasi tradisional. Nilai loading faktor yang tinggi untuk sumber informasi digital, konten visual, periklanan media sosial, dan interaksi digital langsung menyoroti aspek-aspek spesifik pemasaran digital yang paling dihargai oleh Generasi Z. Penelitian ini memberikan kontribusi wawasan teoretis mengenai proses pengambilan keputusan digital native dan panduan praktis bagi institusi pendidikan tinggi dalam mengembangkan strategi rekrutmen yang efektif di lanskap pendidikan Indonesia yang kompetitif.

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* Corresponding Author.

yaserarafat01@student.ciputra.ac.id. Yaser Arafat

INTRODUCTION

Global digitalization has effectively rearranged the post-secondary education landscape into a new paradigm within student recruitment and attraction programs (Asghar et al., 2024; Bueckmann-Diegoli et al., 2021). The trend accelerated even further with the entry into the post-secondary education's primary market of Generation Z—a population defined in the mid-1990s and early 2010s as “digital natives” with high tendencies toward digital interactive behaviors and immediate access (Pérez Escoda et al., 2021; Reinikainen et al., 2020; Tejedor et al., 2021). Post-secondary education institutions across the globe now have a strategic imperative toward adopting these Generation Z ideals or face lower levels of relevance within an increased competitive education landscape (Bunea et al., 2024; Sharma et al., 2024).

Although wide-scale research has documented the applicability of digital marketing approaches overall in the context of the world of higher education, there is a significant lack of thorough insight into how these dynamics play out in the specific context of developing economies with diversified digital infrastructures (Ouyang et al., 2021). Although the extensive work of Ouyang et al. (2021) depicted a high positive relationship between personalized digital marketing approaches and increased prospective student interest among Generation Z, the study had used the context of high and homogeneous digital penetration—a context entirely different from that of developing nations such as Indonesia with complex digital inequalities (Bunea et al., 2024; Mahayosnand & Sabra, 2024). This framework of knowledge is increasingly vital to acquire as Indonesian private higher education is facing increased competition both domestically and internationally (Smaliukiene et al., 2021).

The COVID-19 pandemic served as a catalyst accelerating the need for digital transformation of marketing strategy within the realm of post-secondary education (Dangelico & Vocalelli, 2017; Li et al., 2021). Traditional marketing tactics previously proven effective have undergone a sudden dip in popularity, particularly among members of Generation Z which is more attune with the multi-sensoriality, interactivity, and personalization of digital mediums (Elareshi et al., 2022; Kim & Yu, 2022). Smaliukiene et al. (2021) confirmed that institution-controlled brand image through digital mediums greatly influences the intention of Generation Z to enroll with the most significant platform being social media. This current work is limited, however, to regions with relatively level digital access and presents an epistemology lacuna of how the same is the case in the Indonesian context with its complex mosaic of digital infrastructure and diversity a lacuna that this paper is seeking to plug (Fu & Ren, 2023; Kim & Yu, 2022).

Theory of Planned Behavior (TPB) is a robust theoretical framework that is applicable in explaining Generation Z decision-making within the choice of private higher education in Indonesia. Behavioral intention in this context of enrolling is influenced by three factors according to Ajzen, (1991), which are attitude towards behavior, subjective norms, and perception of behavioral control. Attitude towards behavior within the context of this study is observed in Generation Z positive attitude towards taking a digital approach. Empirical evidence within the *Journal of Higher Education Policy and Management* by Mohd Rahim et al. (2022) shows that the vast majority of Generation Z bases the pursuit of higher education information on digital sources but Pérez Escoda et al. (2021) within the computers in human behavior shows high Generation Z respondent preference for visual-interactive multimedia. Subjective norms have themselves changed drastically with analysis by Shahjahan et al. (2023) within the *Journal of Marketing for Higher Education* revealing Generation Z more likely to rely on online peer review as opposed to official institution reputation. Perceived behavioral control is supported by digital accessibility as found by (Zarubina et al., 2024) within the *International Journal of Educational Management* with digital response times and multi-platform messaging reducing psychological barriers within the generation's application process. Over time, analysis by Agnihotri and Gabler (2024), and Rangaswamy et al. (2020) within the *Journal of Interactive Marketing* shows how digital marketing programs tailored to individuals moderate the relationship between Generation Z characteristics and intent to enroll with far greater effectiveness compared to conventional marketing practices. TPB and internet behavior consolidation research conducted by Sherief (2024) in the *Academy of Management Learning & Education* underscores the urgency of reconceptualizing subjective norm constructs among digital natives, in which social media is unveiled as the most significant normative influence

driving Generation Z's choice of pursuing university education. Conceptualization of this nature forms a basic rationale for developing more specific marketing strategy for Indonesian private universities in attracting Generation Z potential students.

Bagdi et al. (2023) developed a positive relationship between Generation Z characteristics and intentions towards the choice of higher education with digital marketing activities and brand image as the moderating factors. These findings highlight the strategic importance of the digital orientation of Generation Z and naturally positioning them in the marketing process of providers of higher education (Reinikainen et al., 2020; Wee et al., 2019). Paradoxically however, in a follow-up analysis, Fu and Ren (2023); Kim and Yu (2022) presented incongruent findings for the moderating role of individual brand image dimensions in the relationship between digital marketing and intentions towards the choice of higher education. Empirical contradiction such as this indicates the complexity of the phenomenon and the enormous amount of variation in the success of digital marketing activities with respect to contextual conditions and institutional context a gap in the theory that deserves closer examination in the Indonesian private higher education context (Habib et al., 2022; Pascucci et al., 2023).

Thus, the Indonesian higher education sector should be capable of reflecting the distinct complexities under sociocultural diversity as well as enormous differences in access to technology (Juanda et al., 2024; Muslihati et al., 2023). Enduring digital divides across a range of socioeconomic segments place a strategic imperative in creating digital marketing approaches that not just work but ought to be inclusive and responsive to contextual diversity (Azizi et al., 2020; Pesci et al., 2023). Data-analytic solutions can enable the formulation of more precise approaches; however, their value is highly reliant on nuanced insight into target segment-based requirements. Although the literature is rich in breaking up the digital behavior of Burlea-Schiopoiu and Popovici (2024) as a whole, there remain significant research needs for comprehending their specific requirements in opting for higher education in Indonesia most specifically in the ideal composition among digital platforms, forms of content, and forms of interaction that can accelerate the decision of taking admission (Farrar, 2010; Surmanidze, 2024; Wijaya, 2022).

The current research aims to fill this gap using a systematic methodological process and sociocultural contextualization. By investigating digital marketing most desired among Generation Z's ambitions and aspirations within the Indonesian context, the current research considerably contributes to the literature and possesses practical importance for private universities of higher learning (Goh et al., 2018; Ling & Lew, 2024). With systematic due consideration of the Indonesian context peculiarities and unequal digital access among the nation's socioeconomic segments, the current research utilizes an empirically based strategic framework for enhanced digital marketing effectiveness and institutional competitiveness in enrolling Generation Z students a strategic imperative in a digitally intensified and competitive landscape of higher learning.

METHOD

Theoretical framework of the current study investigates the relationship between Generation Z traits and the intention to join the universities with brand image and online advertising as moderating variables. Generation Z as digital natives born between the mid-1990s and early 2010s have inherent digital tendencies that play an instrumental role in their educational decision-making process. Tejedor et al, (2021) research confirms the fact that Generation Z spends a greater amount of time on the internet and heavily relies on digital media for searching for education information. The dependent variable "intention to enroll" is the likelihood of the potential students' intention towards enrolling in some of the institutions, with the current work of Almeida et al, (2016) demonstrating Generation Z's decision towards getting into the institution being heavily influenced by information obtained using digital media.

Brand image as the initial moderator influences such association in that it forms impressions of the institution. Shahjahan et al. (2023) found that academic reputation ranks high among Generation Z consideration of pursuing higher learning. Moreover, Škerháková et al. (2022) establish that institution images that adopt innovative and technology-based images realized high scores in Generation Z's intent towards enrolling as compared with institution images that evoked conventional images. Digital marketing as the second moderator reinforces the Generation Z traits

and enrollment intent association. The work of authenticates that customized digital promotion campaigns play a significant contribution towards increased enrollment, and Zarubina et al, (2024) illustrates that most Generation Z members have a high potential of enrolling after undergoing the process of watching the online content of such universities.

The framework demands an across-the-board student recruitment strategy that combines Generation Z specifics, brand image management intentionally, and smart digital marketing implementation. According to the recent research by Beesoon and Cant (2023), the universities that integrate all these three aspects have brought considerable recruitment growth compared with the universities that still rely on the traditional methods of marketing.

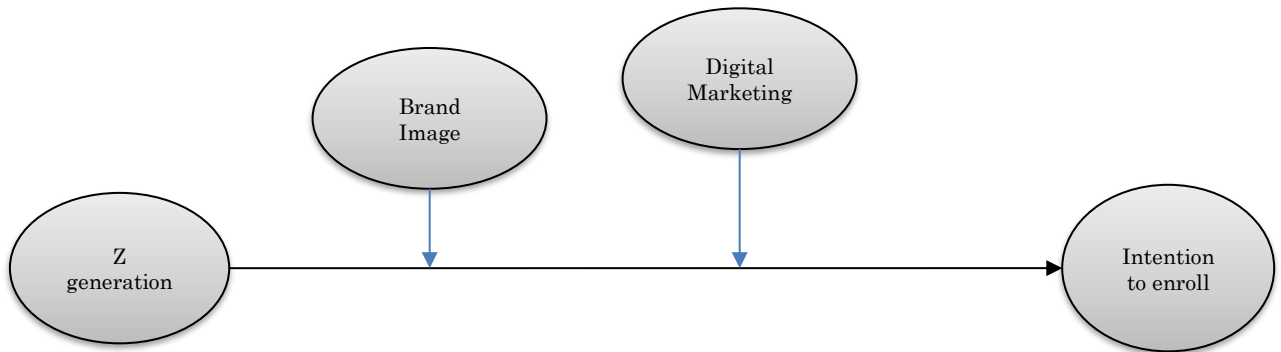


Figure 1. Conceptual Framework

Based on the conceptual framework the researcher hypothesis proposed as follow:

H1: Z Generation has effect Intention to enroll

H2: Brand image moderates the relationship between Generation Z and Intention to enroll, such that brand image will strengthen the relationship between Generation Z and Intention to enroll

H2: Digital marketing moderates the relationship between Generation Z and Intention to enroll, such that digital marketing will strengthen the relationship between Generation Z and Intention to enroll

This study employed a quantitative cross-section analysis of Indonesians' studying intention in private higher education against Generation Z characteristics with brand image and digital marketing as the moderator variables. The conceptual framework of the study draws from the Theory of Planned Behavior (Ajzen, 1991), a decision-making process that is theoretically founded. Data collection used a structured questionnaire in an effort to find the attitude and perception of the responders towards the variables of the study. It is congruent with the recent marketing study of the higher education (Beesoon & Cant, 2023; Škerháková et al., 2022) and enables intensive testing of the formed hypotheses.

The target population was Generation Z (age 1997-2012) prospective and new private higher education students in Indonesia. The sampling is conducted using a purposive sampling method such that the respondents had the desired qualities based on the objectives of the current study. Questionnaires were distributed using digital media (emailing and social media) and direct collection in Indonesia's five largest cities (Jakarta, Surabaya, Bandung, Medan, and Makassar) within a period of two weeks.

Before distributing the fully completed questionnaires, the reliability and understandability of the instrument were examined by a pilot test conducted on a small number of the respondents (n=30). There were 230 questionnaires collected, 212 questionnaires were complete and valid for further analysis according to the minimum sample size suggested by Hair et al. (2020) for the PLS-SEM analysis with the same variable number and complexity of the models. Respondent demographic profiles gave a balanced picture of the gender dimension, age groups, levels of education, and geographic locations in Indonesia.

The research utilized validated scales adapted from higher education marketing literature with all constructs measured on 7-point Likert scales. Generation Z characteristics were assessed through 4 items from (Tejedor et al., 2021) and (Cohen Zilka, 2023), examining digital skills and information-seeking behaviors. Brand image was measured using 4 items from (Chen & Guan, 2023; Nguyen et al., 2021) and (Soysal et al., 2024), digital marketing was evaluated with 4 items adapted from (Raut & Kumar, 2024) and (Pham & Pham, 2021; Zarubina et al., 2024), Intention to enroll was measured through 4 items from (Macías et al., 2023; Sudhana et al., 2023). All scales demonstrated reliability with Cronbach's alpha values above 0.70, meeting recommended thresholds (Troiville et al., 2019).

Data analysis employed SmartPLS 4.0 software through a systematic multi-phase approach optimized for moderate sample sizes and moderation testing (J. Hair et al., 2014). Initial preliminary analyses covered data screening, missing value assessment, outlier detection, and statistical assumption verification. The measurement model evaluation assessed reliability using Cronbach's alpha and composite reliability (threshold: 0.70), convergent validity through AVE (threshold: 0.50), and discriminant validity via Fornell-Larcker criterion and HTMT ratio. Structural model testing examined hypothesized relationships by calculating path coefficients (β) and significance values to assess the direct relationship between Generation Z characteristics and enrollment intention (H_1), while R^2 values determined model predictive power. Moderation analyses for hypotheses H_2 and H_3 utilized the product indicator approach to test how brand image and digital marketing moderate the primary relationship, with significance determined through 5,000 bootstrap resamples.

RESULT AND DISCUSSION

Outer Model Evaluation

The research instrument, a questionnaire that was designed into three distinct components. The initial component contained an elucidation of the research's objective and background to furnish respondents with clear insights. The second segment seeks to gather information on the demographic attributes of the respondents. The third portion comprises the items employed to assess the structures, which have undergone a validation process. The instrument was prepared by incorporating advice from specialists to guarantee the relevance of each statement to the study setting. Measurement utilized a 7-point Likert scale, with 1 representing "strongly disagree" and 7 denoting "strongly agree". Information concerning the measurement items is provided in Table 1.

Table 1 presents the psychometric properties of the measurement scales, demonstrating strong construct reliability and validity across all variables. All factor loadings exceed the recommended threshold of 0.70 (ranging from 0.754 to 0.904), indicating good indicator reliability and confirming that the items appropriately represent their respective constructs. The internal consistency reliability is well-established for all constructs, with Cronbach's Alpha (CA) values ranging from 0.815 to 0.866 and Composite Reliability (CR) values between 0.875 and 0.913, all exceeding the recommended threshold of 0.70. This confirms the scales exhibit strong internal consistency. Convergent validity is supported by Average Variance Extracted (AVE) values ranging from 0.636 to 0.724, all above the recommended threshold of 0.50, indicating that each construct explains more than 50% of the variance in its indicators. This confirms that the items measuring each construct converge well and share a high proportion of variance.

The Z Generation construct (CA=0.815, CR=0.875, AVE=0.636) effectively captures respondents' digital orientation with strong loadings on items related to digital information sources, interactive content preferences, and response speed expectations. The Brand Image construct (CA=0.828, CR=0.885, AVE=0.659) reliably measures perceptions of institutional digital presence and brand consistency. The Digital Marketing construct demonstrates the highest reliability (CA=0.866, CR=0.907, AVE=0.710) with strong loadings on social media effectiveness, personalization, platform presence, and interactive communication. The Intention to Enroll construct (CA=0.815, CR=0.913, AVE=0.724) exhibits the highest convergent validity, with particularly strong loading on the item measuring how digital presence makes institutions more appealing (0.904).

Table 1. Construct measurements, discriminant validity and reliability

Constructs	Codes	Questions	Loading	CA	CR	AVE
Z Generation				0.815	0.875	0.636
	ZOG1	Digital media is the main source of information about universities.	0.800			
	ZOG 2	Visual and interactive content is more engaging in delivering university information.	0.793			
	ZOG 3	The speed of response in online communication is crucial in choosing a college.	0.788			
	ZOG 4		0.809			
Brand mage				0.828	0.885	0.659
	DIM1	Private universities that are active on social media seem more modern and connected	0.825			
	DIM2	The consistency of the college's brand image on digital platforms is important in the assessment.	0.754			
	DIM3	Consistency of the college's brand image on digital platforms creates stronger perceptions	0.836			
	DIM4	Social media as a communication channel allows private universities to get closer to the needs and aspirations of today's students.	0.831			
		Digital Marketing		0.866	0.907	0.710
	DMM1	Advertising private universities on social media is effective in attracting attention	0.856			
	DMM2	Personalized digital marketing content is more interesting to explore	0.814			
	DMM3	The college's presence on various digital platforms increases the accessibility of information.	0.836			
	DMM4	Direct interaction with college representatives through digital media is helpful	0.864			
Intention to enroll				0.815	0.913	0.724
	INO1	Digital marketing/social media strategies influence decisions in choosing private universities.	0.863			
	INO2	Private universities with a strong digital presence are more attractive to consider.	0.810			
	INO3	Private universities with a strong digital presence are more appealing to consider.	0.904			
	INO4	A positive experience with college digital marketing encourages the desire to enroll.	0.822			

Structural Model

Table 2 presents the assessment of discriminant validity using the Fornell-Larcker criterion and multicollinearity through Variance Inflation Factor (VIF) values. All VIF values (0.797-0.851) fall substantially below the conservative threshold of 3.3 (Hair et al., 2012), confirming the absence of problematic multicollinearity. The diagonal elements representing square roots of Average Variance Extracted (AVE) for each construct exceed their corresponding inter-construct correlations, satisfying established discriminant validity requirements. The correlation between Z Generation and Intention to Enroll ($r=0.769$) demonstrates the strongest relationship, theoretically consistent with Generation Z's influence on enrollment decisions, yet remains below their respective AVE square roots. Digital Marketing and Z Generation show a similarly strong association ($r=0.765$), reflecting Generation Z's digital orientation, while Brand Image and Intention to Enroll demonstrate the most modest correlation ($r=0.584$). These results confirm construct distinctiveness while maintaining theoretically expected relationships, providing robust measurement model validation for subsequent structural analysis.

Table 2. VIF Test Results

	Brand Image	Digital Marketing	Intention to Enroll	Z Generation
Brand Image	0.812			
Digital Marketing	0.740	0.843		
Intention to Enroll	0.584	0.732	0.851	
Z Generation	0.720	0.765	0.769	0.797

Table 3. Assessment of Model's Explanatory Power

Endogenous Construct	R^2 -value	R^2 -Adjusted	Strength Category
Intention to Enroll	0.667	0.658	Substantial

The structural model demonstrates substantial explanatory power with an R^2 value of 0.667, indicating that approximately 66.7% of variance in Generation Z's intention to enroll in private higher education institutions is explained by the predictor variables (Z Generation characteristics, Brand Image, and Digital Marketing). The adjusted R^2 value of 0.658 accounts for model complexity and sample size, with the minimal difference (0.009) suggesting a parsimonious, non-overfitted model. According to Hair et al.'s (2019) PLS-SEM thresholds (weak=0.25, moderate=0.50, substantial=0.75), the model's explanatory power falls into the "substantial" category, approaching the upper threshold for effectiveness. This confirms that the theoretical framework effectively captures key determinants of enrollment intentions among Generation Z students in the Indonesian higher education context, providing strong support for the model's theoretical underpinnings and enhancing its practical significance for higher education marketing professionals developing recruitment strategies for Generation Z students.

Table 4. Assessment of Effect Sizes (f^2) on Intention to Enroll

Relationship	f^2 -value	Effect Size Category
Z Generation → Intention to Enroll	0.289	Medium
Digital Marketing → Intention to Enroll	0.197	Medium
Digital Marketing × Z Generation → Intention to Enroll	0.054	Small
Brand Image → Intention to Enroll	0.023	Small
Brand Image × Z Generation → Intention to Enroll	0.016	Small

The f^2 effect size analysis reveals varying impacts of predictors on enrollment intentions, with Z Generation characteristics showing the strongest influence ($f^2=0.289$, medium effect), followed by Digital Marketing ($f^2=0.197$, medium effect). The moderating effect of Digital Marketing on the Z Generation-Intention relationship demonstrates a small but meaningful impact ($f^2=0.054$), while Brand Image exhibits a smaller direct effect ($f^2=0.023$) and the weakest moderating influence ($f^2=0.016$). These findings, based on Cohen, (1988) thresholds (0.02=small, 0.15=medium, 0.35=large), emphasize that Generation Z's inherent characteristics primarily drive enrollment decisions, with digital marketing strategies serving both as a significant direct predictor and as an enhancer of this relationship. Brand image, while contributing to the model, plays a comparatively modest role in influencing Generation Z's higher education choices, suggesting that institutions should prioritize digital marketing initiatives that leverage and amplify Generation Z characteristics when developing recruitment strategies.

Common Method Bias

Prior to examining the structural relationships between constructs, it is essential to evaluate the overall fit of the proposed model to ensure its appropriateness for hypothesis testing. Model fit assessment in PLS-SEM provides valuable insights into how well the theoretical model represents the empirical data patterns. While PLS-SEM is primarily prediction-oriented rather than fit-oriented, examining fit indices helps identify potential misspecifications and validates the model's structural configuration. Table 5 presents several key fit indices for both the saturated model (which assumes all constructs are perfectly correlated) and the estimated model (which reflects the hypothesized structural relationships), allowing for comprehensive assessment of model adequacy.

Table 5. Model Fit Indices

Fit Index	Saturated Model	Estimated Model	Threshold	Assessment
SRMR	0.097	0.097	< 0.08	Marginally acceptable
d_ULS	1.291	1.279	< 0.95	Not optimal
d_G	1.018	1.019	< 0.95	Not optimal
Chi square	911.117	909.226	Lower is better	Comparable between models
NFI	0.659	0.660	> 0.90	Below threshold

The model fit assessment reveals mixed but acceptable results. The SRMR value (0.097) slightly exceeds the conservative threshold of 0.08 (Hu & Bentler, 1999), but remains within acceptable PLS-SEM parameters of 0.10 (Hair et al., 2019). Both distance measures (d_ULS: 1.291/1.279; d_G: 1.018/1.019) exceed recommended thresholds of 0.95, indicating some discrepancy between empirical and model-implied correlations. Chi-square values (911.117/909.226) show consistency in model specification, while NFI values (0.659/0.660) fall below the 0.90 threshold. However, in PLS-SEM research, prediction-oriented metrics take precedence over goodness-of-fit indices. The model's substantial R² value (0.667) and significant path coefficients demonstrate strong predictive capability, which aligns with the research's primary objective of prediction rather than model confirmation. This predictive strength supports the model's validity in this exploratory study of Generation Z behavior in Indonesian higher education, where identifying influential factors is more crucial than confirming established theoretical structures.

Direct effect and indirect effect

The structural model analysis evaluates the hypothesized relationships between constructs after establishing measurement model adequacy. Table 6 presents path coefficients (β), t-values, significance levels, and confidence intervals for all direct and moderating relationships. These statistics provide critical evidence for hypothesis testing and reveal the nature and strength of relationships between Generation Z characteristics, brand image, digital marketing, and intention to enroll.

Table 6. Path Coefficients and Significance Levels

Relationship	Path Coefficient (β)	T-value	P-value	95% Confidence Interval	Result
Z Generation → Intention to Enroll	0.520	5.489	0.000	[0.360, 0.671]	Supported
Digital Marketing → Intention to Enroll	0.539	4.626	0.000	[0.356, 0.739]	Supported
Brand Image → Intention to Enroll	-0.191	1.998	0.023	[-0.353, -0.041]	Supported*
Digital Marketing × Z Generation → Intention to Enroll	0.307	2.630	0.004	[0.107, 0.491]	Supported
Brand Image × Z Generation → Intention to Enroll	-0.159	1.650	0.050	[-0.318, 0.002]	Marginally supported

*Note: The negative coefficient for Brand Image indicates a relationship opposite to the hypothesized direction.

The results demonstrate strong support for the direct influence of Generation Z characteristics on enrollment intentions ($\beta=0.520$, $p<0.001$), confirming that digital nativity and related traits significantly predict higher education choices. Digital marketing emerges as the strongest direct predictor ($\beta=0.539$, $p<0.001$), highlighting the substantial impact of effective digital communication strategies on enrollment decisions. Surprisingly, brand image shows a significant but negative relationship with enrollment intentions ($\beta=-0.191$, $p=0.023$), contrary to expectations, suggesting that Generation Z may respond skeptically to traditional branding approaches in the Indonesian context.

The moderating effect of digital marketing on the relationship between Generation Z characteristics and enrollment intentions is significant and positive ($\beta=0.307$, $p=0.004$), indicating that effective digital marketing enhances the influence of Generation Z traits on enrollment decisions. The confidence interval [0.107, 0.491] excludes zero, providing robust support for this moderation effect. Conversely, the brand image moderation effect is negative and marginally significant ($\beta=-0.159$, $p=0.050$), with a confidence interval [-0.318, 0.002] that barely includes zero at the upper bound, suggesting that traditional brand image elements may attenuate rather than amplify the relationship between Generation Z characteristics and enrollment intentions.

These findings highlight the primacy of digital marketing strategies that align with Generation Z preferences while suggesting a potential paradigm shift in how Indonesian private higher education institutions should approach branding to effectively attract digital natives. The results provide empirical support for a strategic realignment toward authenticity and digital engagement rather than traditional brand reputation elements when targeting Generation Z prospective students.

This study makes a significant contribution to filling the literature gap by providing quantitative empirical evidence from the Indonesian context, which has been limited thus far (Hemsley-Brown & Lowrie, 2010). The utilization of established theoretical frameworks with local empirical validation demonstrates a solid approach to understanding higher education marketing dynamics in emerging markets, particularly given that systematic reviews reveal methodological bias toward statistical analysis over contextual understanding in higher education marketing research. The findings regarding the strong relationship between Generation Z characteristics and enrollment intentions provide important conceptual validation of how digital nativity influences higher education preferences, reinforcing the theoretical argument that digital transformation has fundamentally altered how young generations access and evaluate educational information. However, this assumption requires critical examination given that Tracy Francis, (2018) research across three generations found that computer ownership patterns contradicted assumptions about Generation Z's device dependency, revealing more complex relationships with technology than commonly presumed. The most intriguing yet problematic finding is the negative relationship between brand image and enrollment intentions, which contradicts conventional marketing paradigms and challenges fundamental assumptions in educational marketing literature that institutional brand image always contributes positively to university attractiveness.

This contradiction indicates several possible critical interpretations that require profound reflection, particularly when contextualized within broader research revealing counterintuitive findings about Generation Z behavior. This phenomenon may reflect Indonesian Generation Z's skepticism toward traditional branding practices deemed artificial or inauthentic, where generations raised with digital information access become more critical of branding efforts that appear excessive or insubstantial. The Stone (2019) research supports this interpretation, revealing inherent contradictions in authenticity expectations where Generation Z simultaneously demands genuine content while expecting visual perfection, complications that challenge higher education branding strategies. These results may indicate that in the Indonesian context, students prioritize the quality of digital interactions and direct communication over brand images constructed through conventional media, reflecting a value shift from symbolism to functionality. This interpretation gains credibility when considering that despite being labeled "digital natives," recent studies reveal email remains the preferred communication method for Generation Z students, who maintain traditional communication preferences despite having access to numerous social platforms. Alternatively, this finding may reveal bias in the operationalization of the brand image construct that does not fully capture the nuances of Indonesian Generation Z's perceptions of higher education institutions, particularly since European business school research by Capriotti et al, (2023) & Nicole Muscanell, (2025) demonstrated that excessive focus on brand authenticity can negatively impact enrollment decisions. Although the model demonstrates substantial explanatory power, several methodological limitations require critical attention, including the operationalization of brand image in the Indonesian context that may not fully capture aspects relevant to Generation Z, such as dimensions of authenticity, transparency, and digital responsiveness that are more valued by this demographic cohort.

The generalizability of findings must also be questioned given the homogeneity of respondents in terms of digital access and socio-economic status, which may limit generalizability to the broader Indonesian student population, particularly in areas with limited digital infrastructure. This concern is amplified by research showing that cultural validity issues emerge when Western-developed measurement instruments are applied across cultures without adaptation, with response bias patterns differing significantly between collectivist and individualist cultures. The cross-sectional design cannot capture the dynamics of preference changes that may occur alongside technological evolution and rapid social transformation, while the dominance of digital marketing as the primary predictor of enrollment intentions appears paradoxical given Capriotti et al. (2023) analysis showing strong negative correlations between social media activity levels and interaction rates for European universities. This indicates a paradigm shift in higher education marketing strategies but also raises critical questions about the sustainability of strategies overly dependent on volatile and algorithm-dependent digital platforms, especially when considering that traditional channels like email marketing consistently outperform social media campaigns in conversion effectiveness. The positive moderating effect of digital marketing on the relationship between Generation Z characteristics and enrollment intentions demonstrates that success depends not only on technology adoption but on the ability to integrate technology with deep understanding of generational characteristics, though this must be balanced against evidence that organic search visibility remains more important than paid digital promotion in student research processes.

These findings raise critical questions requiring further investigation, including whether the negative relationship of brand image reflects Generation Z's preference for authentic communication compared to artificial branding, particularly given that Indonesian research by Aryani and Umar (2020) studying senior high school Generation Z students found that family influence remains the primary factor in university major selection, with internal factors outweighing external factors and directly contradicting Western models emphasizing individual autonomy in educational decision-making. The extent to which these findings reflect unique characteristics of Indonesian culture versus global trends in Generation Z behavior requires careful consideration, especially since cross-cultural studies comparing Sri Lankan, Indonesian, and Dutch university students reveal significant cultural response bias on learning orientation scales, with Asian students showing different patterns than Dutch counterparts. This research illustrates the importance of an emic approach in understanding educational marketing phenomena in non-Western contexts, where findings contradictory to Western literature should not be considered anomalies but as evidence of complexity and contextual uniqueness requiring more nuanced theoretical frameworks. These results also challenge the universality of educational marketing theory and emphasize the need for theoretical pluralism in understanding marketing dynamics across various cultural and technological contexts, particularly given Midgley, Aryani and Umar (2020); Oplatka and Hemsley-Brown (2021) framework identifying major challenges to methodological pluralism including paradigm problems, psychological resistance, and cultural barriers. The current research landscape suffers from over-reliance on business marketing models rather than education-specific frameworks, with structural discrimination in research practices favoring Western-centric theories and models that limit understanding of diverse educational marketing dynamics. Ultimately, this research successfully provides valuable empirical contributions, yet the counterintuitive findings regarding brand image require deeper investigation, indicating that understanding of higher education marketing remains in an evolutionary stage, particularly in confronting digital native generations in emerging market contexts, where the success of this research lies not only in confirming existing theories but precisely in its ability to reveal complexities and contradictions that drive the development of more sophisticated and contextually grounded theoretical understanding.

CONCLUSION AND SUGGESTION

This study investigated how Generation Z characteristics, digital marketing strategies, and brand image influence enrollment intentions at Indonesian private higher education institutions. Our findings reveal that Generation Z's digital nativity significantly shapes their higher education choices, with effective digital marketing serving as both a powerful direct predictor and a positive moderator of this relationship. Interestingly, traditional brand image demonstrates a negative relationship with enrollment intentions, challenging conventional assumptions about institutional reputation effects.

The research provides empirical support for a digital-first recruitment approach that authentically engages with Generation Z's preferences for interactive content, multi-platform presence, and rapid communication. The substantial explanatory power of our model ($R^2=0.667$) confirms that these factors effectively capture key determinants of enrollment decisions among Indonesian Generation Z students.

These findings contribute to evolving theories of higher education marketing by demonstrating the changing dynamics of institutional attraction in the digital age, particularly in the Indonesian context. For practitioners, the results offer actionable insights for developing effective recruitment strategies that resonate with digital natives, suggesting a potential shift away from traditional reputation-based approaches toward authentic digital engagement.

As private universities in Indonesia navigate an increasingly competitive recruitment landscape, understanding the unique characteristics and preferences of Generation Z becomes essential for institutional success. This research provides both theoretical advancement and practical guidance for universities seeking to attract the next generation of students in this rapidly evolving digital environment.

Future studies might incorporate additional variables such as financial considerations, family influence, or career orientation that could improve model comprehensiveness while maintaining strong predictive power. Fourth, our study focused primarily on digital aspects of brand image, potentially overlooking other dimensions of institutional reputation. Future research could explore a more multidimensional conceptualization of brand image to better understand which specific aspects generate positive or negative responses among Generation Z students. Fifth, this research focused exclusively on private higher education institutions in Indonesia. The public university sector, with its different admission processes and funding structures, may exhibit different patterns. Comparative studies examining these relationships across both private and public institutions would enhance understanding of how institutional context influences these dynamics.

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