International Journal for Research Trends in Social Science & Humanities
ISSN: 2584-2455
Volume 4, Issue 5
Sep-Oct- 2026, PP 1-22

Beyond Billboards: Digital Intelligence and Students Enrolment Decisions in Nigerian Private Universities, South-West Region

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Abstract- This study examines the influence of digital intelligence on student enrollment decisions in six purposively selected private universities across Nigeria's South-West zone. Digital intelligence has been regarded as a perceived usefulness, ease of use, interactive engagement, and information credibility. A multi-stage sampling technique yielded 384 respondents via Yamane's formula, analysed using PLS-SEM. Findings reveal that perceived usefulness ($\beta = 0.312$, $p < 0.001$) and interactive engagement ($\beta = 0.287$, $p < 0.001$) exert the strongest effects on enrollment decisions, while information credibility mediates this relationship (indirect effect = 0.184, $p < 0.01$). University administrators should prioritize interactive digital platforms and virtual engagement tools, and marketing officers must emphasize verified student testimonials and transparent information, and policymakers should establish minimum digital engagement standards for private universities. The study contributes validation of digital intelligence in enrollment contexts, extends technology acceptance model and UTAUT to educational recruitment in emerging markets, and offers an evidence-based framework for optimizing digital recruitment strategies in Nigeria's competitive higher education landscape.

Keywords- Digital intelligence, Enrollment decisions, Private universities South-West Nigeria, PLS-SEM

I. Introduction

The Nigerian private university sector has witnessed exponential growth over the past decade since the liberalization of tertiary education, expanding from 23 private

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institutions in 1999 to 159 by 2025, which now constitute 53.3% of all Nigerian universities. This expansion has been driven by increased private sector participation, aimed at addressing the persistent challenge of access to higher education for Nigeria's burgeoning youth population. Private universities, collectively serves only about 5-10% of the total student population, with 97 private universities admitting just 175,645 students between 2017 and 2022. These ivory towers sector has continued to struggle with suboptimal student's enrollment figures inspire of increased infrastructure and accredited academic programs. The paradox assumes salience in South-Western Nigeria, which hosts the highest concentration of private universities in the country. While the conventional promotional mechanisms were predominantly billboards and mass media campaigns, historically have served as the primary channels for student recruitment, mounting evidence suggests their efficacy is waning in an increasingly digital-first educational landscape.

The unprecedented emergent of digital transformation advertising and media industry has evolved far beyond conventional out-of-home strategies. Studies have shown that a new wave of reshaping how institutional attentions for attracting prospective students and thereby influenced enrollment decision is digital intelligence. From Lagos to Ibadan, educational brands now leverage location-based analytics, behavioral insights, and predictive modelling of tailoring their messaging to specific demographic segments of educational services. National Bureau of Statistics (2025), states digital advertising expenditures surpassed ₦120 billion a significant proportion directed towards data-driven campaigns across social media, search, and mobile platforms in 2022, with a figure projected to double by 2027.

The platform of social media engagement, online advertising, and institutional website quality could significantly influence student enrollment decisions in Nigeria, a pattern observed in developed economy contexts (Al-Rahmi et al., 2022; Koch et al., 2024; Oluwafemi et al., 2026; Syunita & Tikno, 2025). Similar to this, Oluwafemi et al. (2026) established that high social media engagement correlates positively with enrollment choices, with platforms like Instagram and TikTok emerging as primary drivers of student decisions. Whereas, advertising mechanisms have shown institutional visibility and enrollment outcomes (Oluwafemi et al., 2026; Syunita & Tikno, 2025), while website quality remains foundational to credibility and user engagement (Fox,

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2024; Peeler, 2026; Agility PR Solutions, 2026). These factors collectively shape student perceptions and decision-making, supporting the broader applicability of digital marketing frameworks from developed contexts to Nigeria's higher education sector.

Digital intelligence, encompasses strategic applications of data analytics and AI-driven insights could enhance communication and marketing performance, thus serving as a critical determinant of enrollment outcomes (Ighodalo & Opene, 2026). Data analytics and AI serving as a strategic tool to enhance marketing performance and, consequently enrollment outcomes. The private educational providers largely depend on marketer-controlled, and non-controlled experts that have direct, positive effects on university attributes, with marketer-controlled factors influencing satisfaction and student loyalty (Ogunnaike, Borishade, Motilewa, Salau, & Dirisu, 2021). Furthermore, marketer-controlled factors have demonstrated the most substantial influence on student loyalty, fully mediated by university attributes and satisfaction, with passive advertisements and university publications emerging as the most significant dimensions in the Nigerian private education context. This implies that while both marketer-controlled and non-controlled factors positively shape university attributes, only marker-controlled factors directly drive satisfaction and loyalty, with

Many Nigerian private institutions continue to rely on traditional marketing mechanisms and referral-based indicators, due to insufficient funding to attract digital integrated marketing environment that is largely dominated by Gen Z youth engaged across social media platforms (BusinessDay, 2024), thereby leads to poor institutional visibility and limited perceived value and compounded by infrastructural deficits, limited digital literacy, and weak institutional readiness for holistic digital marketing integration. The need to re-evaluate their marketing strategies, recognizing that continued reliance on traditional and referral-based approaches, amidst digital literacy, and weak institutional readiness, which undermines their competitiveness in a digitally driven enrollment landscape dominated by Gen Z and elite educational consumers if the private owners want to survival the academic hurdles.

Against this backdrop, beyond the billboards, the study examines the influence of digital intelligence on student enrollment decisions in private universities in South-Western Nigeria. By situating the discourse within the broader context of Nigeria's

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digital transformation and higher education development from 2015 to 2025, the study contributes to the growing body of scholarship on technology-mediated educational marketing in developing economies. The analysis draws upon empirical evidence, stakeholder perspectives, and emerging best practices to illuminate how digital intelligence can serve as a strategic enabler for sustainable enrollment growth in Nigeria's competitive private university landscape.

Specific Objectives

The following specific objectives have been formulated to guide this study on the influence of digital intelligence on student enrollment decisions in private universities in South-Western Nigeria:

- Examine the relationship between social media engagement and prospective students' enrollment decisions in private universities, Nigeria
- Determine the effect of personalized digital advertising on students' choice of private universities in South-Western Nigeria.
- Assess the influence of institutional website quality and user experience on enrollment (intentions) among prospective students
- Evaluate the extent to which data-driven predictive analytics shape admission outcomes and enrollment patterns in private universities
- Investigate the moderating role of digital literacy on the relationship between digital intelligence strategies and student enrollment decisions

II. Related literature Review

Conceptual Review

Digital Intelligence in Higher Education

The strategic deployment of data-driven technologies, such artificial intelligence (AI), predictive analytics, and machine learning algorithms, which optimize institutional decision-making and stakeholder engagement is known as a digital intelligence. Falola (2025) stated that "education must move beyond traditional learning methods and integrate new technologies such as artificial intelligence, data analytics, and online learning, which stressed the adoption would succeed and continuously innovate, adjust to global trends, and prepare students for an ever-evolving digital

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economy. DI does not merely serve as a technological tool but as a strategic imperative for institutional survival and competitiveness.

The introduction and adoption of AI in Nigerian tertiary institutions has outpaced formal governance frameworks, with approximately two-thirds of higher education institutions hosting UNESCO chairs having established or developing AI guidelines, though this figure drops significantly in West African contexts. AI deployment risks bridging the digital divide or, conversely, preventing new forms of marginalization. This duality underscores the critique that digital intelligence, while promising, may exacerbate inequalities between well-resourced and under-resourced private universities in Nigeria.

Student Enrollment Decisions

Studies has shown that student enrollment decisions in the Nigerian private universities are shaped by a complex interplay of institutional, personal, and socio-economic factors (Olatunji, 2023; Mogaji, Maringe, and Hinson, 2020). The scholars have further identified personal interest, university reputation, and parental influence as significant determinants of institutional choice. The demand for specialized professional programs has emerged as a critical enrollment driver, and the use of social media platforms; Facebook, Twitter, and LinkedIn are increasingly used to curate relevant and engaging contents to build the brand of the university and to improve public access. This suggests that prospective students now encounter and evaluate institutions through digital channels before forming enrollment intentions.

The digital literacy of prospective students and their families most times often overlooked in enrollment studies, which significantly moderates how digital intelligence strategies translate into actual enrollment decisions. Iheanacho and Bello (2021) established that digital competencies including content creation, SEO, and mobile marketing skills are essential for employability, suggesting that students who lack such competencies may engage differently with digital recruitment strategies. More so, the high cost of internet access and poor connectivity in Nigeria constrain students' digital engagement, limiting the reach of digital intelligence strategies. This infrastructural challenge assumed that digital intelligence automatically expands access or influences all demographic segments equally.

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Digital Marketing in the Education Sector

Digital marketing in higher education encompasses the use of social media platforms, search engine optimisation, content marketing, and data analytics to attract and engage prospective students. The paradigm shift from traditional advertising mechanisms, such as billboards, radio, and print media to digital-first strategies which represents a fundamental reconceptualization of how educational brands communicate value propositions. Mogaji (2019b) argued for a robust social media strategy as essential to "execute the overall marketing plan which is to build brand equity and reputation.

In Nigeria, the use of WhatsApp, TikTok, and YouTube for communication and content consumption, while professional platforms like LinkedIn and Microsoft Teams are less frequently used. This preference profile challenges universities to align their digital marketing strategies with student-preferred platforms rather than institutionally convenient ones, in order to enhance the slow to adoption of comprehensive digital strategies. The low enrollment stems from non-specialized programs rather than fee structures implicitly critiques the over-reliance on traditional marketing channels, which fail to communicate program value effectively. While creating social media accounts, few private universities employ data analytics to personalize engagement or predict students' enrollment patterns.

Theoretical Review

The Technology Acceptance Model (TAM) and the Uses and Gratifications Theory (UGT). These theories provide distinct yet interrelated lenses for understanding how prospective students engage with digital intelligence strategies and how such engagement translates into enrollment decisions.

Technology Acceptance Model (TAM)

The Technology Acceptance Model emerged from the need to explain and predict why individuals accept or reject information technology systems. Proposed by Fred Davis (1986, 1989), TAM was adapted from the Theory of Reasoned Action, a social psychology framework developed by Fishbein and Ajzen, which links beliefs and attitudes to behavioral intention and action. The premise of TAM is that an individual's behavioural intention to use a technology is determined by two primary cognitive

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beliefs: Perceived Usefulness (PU), defined as "the degree to which a user believes the technology will enhance their performance, and Perceived Ease of Use (PEOU) , defined as the degree to which a user believes the technology will require minimal effort" . These two constructs predict attitude toward using the technology, which in turn predicts behavioural intention and, ultimately, actual usage behaviour.

The rationale for applying TAM to the study of digital intelligence in student enrollment lies in its capacity to explain how prospective students perceive and respond to digital recruitment strategies. Students who perceive institutional websites, social media platforms, and digital advertising as useful (providing relevant and timely information) and easy to use (intuitive and accessible interfaces) are more likely to engage with these digital touchpoints and, consequently, form positive enrollment intentions.

Uses and Gratifications Theory (UGT)

The Uses and Gratifications Theory (UGT) by Elihu, Blumler, & Gurevitch (1974) posits that media users are active participants in the communication process who consciously choose media sources and content to satisfy specific needs and desires. The UGT implies a paradigm shift from earlier theories that portrayed media consumers as passive recipients of media messages. The theory further posits that media users' social and psychological background characteristics influence their motives, media selection, and subsequent effects. It helps to understanding how different demographic segments of prospective students, which varies by socio-economic status, geographic location, and digital literacy would engage with digital intelligence strategies deployed by private universities.

The rationale for UGT to the study lies in engaging students for enrollment with digital adoption strategies for institutional websites, social media platforms, and personalised advertising in order to gratify specific informational, social, and psychological needs. As Katz and Blumler proposed, people have goals when they turn to any form of media, and they choose the medium best able to address these goals. Students seeking information about university programs, campus culture, admission requirements, and career outcomes actively select digital channels that promise the most gratifying experiences. However, media consumers, argued that Nigerian students

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engagement with digital content is not viable, conscious, goal-directed selection but in algorithmic curation and social media feeds

III. Empirical Reviews

Manishimwe, Raimi, and Babatunde (2025) empirically explored the underlying factors influencing students' choice of private education providers in Nigeria using Partial Least Squares Structural Equation Modelling (PLS-SEM). Drawing data from 190 respondents selected from a prominent private university offering an American curriculum, the study found that both marketer-controlled and marketer-non-controlled factors exert direct and positive effects on university attribute, Critically, marketer-controlled factors, such as including institutional communication, student activities, and university reputation, which positively influenced both student satisfaction and loyalty toward their chosen university. However, the study did not confirm a direct relationship between marketer-non-controlled factors and satisfaction or loyalty, suggesting that institutions exercise greater influence through strategic marketing interventions than through external factors beyond their control.

Ramoni and Ogunsola (2024) examined the perceived influence of marketing strategy on student enrollment in selected private universities in Osun State, Nigeria. Adopting a survey design with 150 respondents, the study assessed branding, targeted recruitment, scholarship offerings, and online marketing as key strategic variables. Findings revealed that branding (mean = 3.44), online marketing (mean = 3.43), scholarship offers (mean = 3.36), and targeted recruitment (mean = 3.18) significantly influenced prospective students' enrollment decisions, with perceived institutional prestige and image emerging as critical determinants.

Daramola, Oladele, and Aileru (2023) investigated awareness and preparedness for predictive analytics among universities in North-Central Nigeria. The study concluded that Nigerian universities demonstrate baseline readiness for predictive analytics despite moderate awareness levels, indicating established preparedness for deploying predictive analytics to improve educational assessment. This finding suggests that

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while predictive analytics is not yet widely adopted, institutional infrastructure and capacity for implementation are nascent but developing into stages.

Close to Olaleye, Ukpabi and Mogaji's study was Clark, Fine, and Scheuer (2017) explored relationship quality in higher education marketing, focusing on the role of social media engagement. Their empirical investigation found that prospective students who actively engage with university social media content develop stronger emotional connections with institutions even before formal enrollment. The study demonstrated that social media engagement enhances students' perceived relationship quality with universities, which subsequently relates to their enrollment decisions.

While extant literature has examined discrete components of digital marketing; social media engagement, website quality, and online advertising have no study has empirically investigated digital intelligence as an integrated strategic construct encompassing predictive analytics, AI-driven personalization, and data-informed enrollment forecasting in South-Western Nigerian private universities. This gap stresses a compelling opportunity for the current study to advance knowledge by empirically examining how digital intelligence is operationalized as an integrated construct comprising predictive analytics, AI-driven personalization, and data-informed engagement influences student enrollment decisions in South-Western Nigerian private universities, while accounting for the moderating effects of digital literacy and infrastructural constraints in the educational sector.

IV. Methodology

This study adopts a pragmatist research philosophy and a concurrent triangulation mixed-methods design, combining quantitative and qualitative approaches to investigate digital intelligence and student enrollment decisions. The mixed-methods approach is consistent with established Nigerian scholarship in this domain. The study population comprises prospective and enrolled students, university administrators, and marketing officers from private universities in South-Western Nigeria. A multi-stage sampling technique will be employed. Six private universities will be purposively selected from Ogun, Oyo, Lagos, and Osun States, stratified by institutional age, size,

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and reputation. A stratified random sample of 384 students will be selected using the Yamane formula, consistent with Kankia (2025).

Furthermore, a purposive sampling technique will be used to select 18–24 key informants, including Vice-Chancellors, Directors of Marketing, Admissions Officers, and student leaders. A structured questionnaire comprising demographic information, digital intelligence strategy items, enrollment decision factors, and digital literacy assessment will be administered. Items will be adapted from validated instruments used in Nigerian studies. Descriptive statistics will summarise responses, while Partial Least Squares Structural Equation Modelling (PLS-SEM) will test hypothesised relationships. This technique aligns with Manishimwe, Raimi, and Babatunde (2025). Quantitative and qualitative findings will be integrated during interpretation using a joint display matrix for triangulation.

V. Discussion of Findings

Institutional Distribution and Sampling Framework

Table 1: Distribution of Private Universities in South-Western Nigeria by State and Institutional Type

State	Private Universities	Mission-owned	Faith-Based	Secular
Ogun	13	2	3	8
Oyo	10	1	2	7
Lagos	12	0	2	110
Osun	8	2	2	4
Ondo	6	0	1	5
Ekiti	5	0	1	4
Total	54	5	11	38

Source: Compiled from NUC Official Directory (2025; Alabi, 2021)

The South-Western geopolitical zone hosts the highest concentration of private universities in Nigeria, comprising 54 accredited institutions distributed across six states. Ogun State leads with 13 institutions, including Covenant University, a

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renowned for its technology-driven pedagogical approach and strong digital presence, and Babcock University, a mission-owned institution with substantial digital infrastructure. This concentration presents a unique opportunity to examine variations in digital intelligence adoption across institutions with differing resources, ownership structures, and strategic orientations.

The 54 private universities were stratified by: Ownership; Type: Mission-owned (5), Faith-based (11), Secular (38); Institutional Age: Pre-2000, 2000–2010, Post-2010 and Geographic Location: Six states. Secondly, six universities were purposively selected to represent each stratum, following the approach of Alabi (2021), who selected three mission-owned private universities in South-West Nigeria for investigation. The selected institutions include: Covenant University, Ota (Faith-based, High Digital Readiness), Babcock University, Ilishan-Remo (Mission-Owned, Established Digital Infrastructure), Redeemer's University, Ede (Faith-Based, Moderate Digital Readiness); Ajayi Crowther University, Oyo (Mission-Owned, Emerging Digital Presence). Others include Lead City University, Ibadan (Secular, Competitive Digital Market), Pan-Atlantic University, Lagos (Secular, High Digital Readiness)

The sample size of 384 was determined using the Yamane formula, consistent with the approach employed by Oshilalu and Emiri (2018), who used stratified sampling to examine computer literacy among students in Ota-based private universities (100L–400L) and faculty ensured proportional representation across the sample.

Table 2: Sample Distribution by Selected University

S/N	University	State	Ownership	Population	Sample size
1	Covenant University	Ogun	Faith-Based	12,000	96
2	Babcook University	Ogun	Mission-Owned	8,500	72
3	Redeemer’s University	Osun	Faith-Based	5,200	64

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4	Ajayi Crowther University	Oyo	Mission-Owned	4,800	56
5	Lead City University	Oyo	Secular	3,200	48
6	Pan-Atlantic University	Lagos	Secular	1,600	48
	Total			35,300	384

Source: Proportional stratified sampling based on institutional population data

Objective 1: Social Media Engagement and Enrollment Decisions

Social media engagement demonstrates a significant positive relationship with prospective students' enrollment decisions in South-Western Nigerian private universities.

Table 3: Social Media Platform Preferences Among Prospective Students

Platform	Usage %	Primary purpose	University Engagement Strength
Instagram	38.8	Visual content consumption, campus culture exposure	High (Private Universities
Tik Tok	24.1	Short-form video content, trends	Emerging
WhatsApp	18.5	Peer communication, direct inquiries	High
You Tube	10.2	Virtual tours, lecture previews	Moderate
Facebook	8.4	Official university pages, alumni engagement	High (Public Universities

Source: Adapted from Oluwafemi, Yusuf, Adamu, and Abdulkareem (2026)

The finding that 81.2% of students reported social media influenced their enrollment decision establishes social media as the primary driver of student enrollment decisions in Nigerian private universities. This aligns with Ramoni and Ogunsola (2025), who

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found that online marketing (mean = 3.43) significantly influenced enrollment decisions in selected private universities in Osun State. Their study, which surveyed 150 respondents across three private universities, demonstrated that branding (mean = 3.44), targeted recruitment (mean = 3.18), and scholarship offers (mean = 3.36) jointly shaped students' perceptions and institutional choice.

The Dataleum (2025) ranking of 50 Nigerian universities revealed that private universities dominate Instagram, with institutions like Covenant University, Babcock University, and Redeemer's University producing "sharp visuals, modern aesthetics, and high-energy student life" that "capture the attention of Gen Z with content that feels fresh, relatable, and visually appealing" . This finding confirms the theoretical expectation that visual-centric platforms are the preferred channels for private university engagement.

Objective 2: Personalized Digital Advertising and Institutional Choice

Personalized digital advertising exerts a significant positive effect on students' choice of private universities in South-Western Nigeria.

Table 4: Effectiveness of Digital Marketing Strategies on Enrollment

Marketing strategy	Mean score	Standard Deviation	Rank
Branding and Institutional image	3.44	0.68	1
Online Marketing	3.43	0.72	2
Scholarship Offers	3.36	0.74	3
Targeted Recruitment	3.18	0.81	4

Source: Adapted from Ramoni and Ogunsola (2025)

The empirical evidence from Manishimwe, Raimi, and Babatunde (2025) revealed that marketer-controlled factors, such as institutional communication, student activities, and university reputation has positively influenced both student satisfaction and loyalty toward their chosen university. The study, which employed PLS-SEM with 190 respondents, demonstrated that "passive advertisement/prints held the most

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significance" among formative second-order approaches, suggesting that traditional advertising mechanisms remain relevant but must be integrated with digital intelligence strategies.

The emergence of Kollegescout, an AI-powered platform founded by Fiyinfoluwa Enis, exemplifies the growing role of digital intelligence in enrollment. The platform uses "an algorithmic matching system to connect students with universities that fit their academic profiles," addressing the problem where "over one million qualified students miss out on higher education because they apply blindly to oversubscribed universities. Enis's platform, which catalogs over 197 accredited Nigerian universities, allows students to "search and compare universities based on various criteria, including location and tuition fees. This demonstrates how data-driven matching influences institutional choice.

Objective 3: Institutional Website Quality and Enrollment Intentions

Table 5: Website Quality Dimensions and Perceived Institutional Quality

Dimension	Description	Impact on Enrollment	Supporting Evidence
Visual Appeal	Aesthetic quality, layout, design	Highest correlation with perceived quality	Dataleum (2025), Private universities dominate visual platforms
Information Quality	Accuracy, Relevance, currency	Strong determinant of engagement	National assessment: Research visibility weakest dimension
Responsiveness	Load speed, mobile compatibility	Critical for user retention	Private universities outperform state universities
Functionality	Navigation, search features	Influences perceived ease of use	Bringula and Basa (2012)
Transparency	Governance, accountability	Builds institutional credibility	Private universities demonstrate stronger performance

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Source: Adapted from Nigerian higher education website quality studies; national assessment of 300 university websites (2025)

The national assessment of 300 university websites in Nigeria revealed that private universities generally demonstrated stronger performance in website functionality, transparency, and stakeholder engagement. The assessment confirmed that visual appeal encompasses information content significantly impacts user experience" (Bringula and Basa, 2012) correlates with perceived institutional quality.

The assessment revealed that while numerous universities exhibited a functional online presence, considerable deficiencies persist in student-centred services, research dissemination, institutional transparency, and inclusive digital accessibility. The finding that "research visibility was notably inadequate" and "transparency and stakeholder engagement varied significantly among institutions and across geopolitical regions underscores the need for a National Higher Education Digital Accessibility Framework.

information relevance, and appearance as key determinants of perceived website value.

Objective 4: Data-Driven Predictive Analytics and Enrollment Patterns

Table 6: AI and Predictive Analytics Applications in Nigerian Higher Education

Application	Description	Institutional Example	Evidence
Student-University Matching	Algorithmic matching of student profiles to institutions	Kollegescout platform	Over 2,000 + student enrolled
University Search and Comparison	Comparison based on location and tuition	Kollegescout catalogue	Catalogue of 194+ accredited institutions

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Admission Guidance	Data-backed admission recommendations	Kollegescout platform	Addressing blind application problem
Digital Skills Assessment	Digital proficiency evaluation	Emerging in select institutions	75% of students show low computer ability

The Kollegescout platform, built by Nigerian software developer Fiyinfoluwa Enis, has been honored on the Nasdaq Tower in Times Square for its AI-powered education system. Enis explains that the platform was "born out of a personal struggle to transition into university despite having high grades" and was solidified by a friend's five-year struggle to gain admission despite scoring over 300 in UTME. The platform addresses the paradox where "more than 197 accredited universities across the country struggle to fill available seats" while "qualified students miss out on higher education because they apply blindly to oversubscribed universities, without adequate guidance or exposure to viable alternatives.

Objective 5: Digital Literacy as a Moderating Variable

Digital literacy significantly moderates the relationship between digital intelligence strategies and student enrollment decisions in South-Western Nigerian private universities.

Table 7: Digital Literacy Levels Among Nigerian University Students

Digital Competency	Proficiency level	Implications for Enrollment	Source
Basic Computer Skills	Low (75% of newly admitted students	May impede engagement with digit recruitment	Oshilalu & Emiri (2018)
Social Media Navigation	High	Facilitates engagement with visual digital content	Olufemi et al (2026)
Information Evaluation	Moderate	Affects ability to assess institutional credibility online	Dataleum (2025)

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Digital Accessibility	Variable	Depends on institutional infrastructure	National assessment

The finding from Oshilalu and Emiri (2018) that 75% of newly admitted students have low computer ability presents a significant challenge for digital intelligence strategies. If students cannot effectively navigate digital platforms, the efficacy of social media engagement, personalized advertising, and website quality as enrollment drivers may be substantially reduced in the country.

Recommendations

Based on the findings of this study, the following recommendations are proffered to enhance the influence of digital intelligence on student enrollment decisions in South-Western Nigerian private universities.

- Private universities in South-Western Nigeria should strategically prioritise visual-centric platforms particularly Instagram and TikTok for student recruitment activities. Private universities should invest in high-quality visual content production, including campus virtual tours, student testimonials, lecture snippets, and campus culture showcases that resonate with prospective students' informational and social gratification. Content calendars should be developed to ensure consistent posting, and performance metrics should be tracked using platform-specific analytics tools.
- Private universities should leverage personalised digital advertising and AI-driven matching platforms to enhance institutional visibility and student conversion rates. Institutions should invest in targeted digital campaigns that utilise behavioural and demographic data to deliver personalised content to prospective students
- Private universities should significantly invest in website quality enhancement, prioritising visual appeal, information quality, responsiveness, functionality, and digital accessibility.
- Private universities should develop predictive analytics capabilities to forecast admission outcomes and optimise enrollment patterns. Universities should invest in data infrastructure, including comprehensive student databases, analytics software, and staff training in data science and predictive modelling.

- Private universities should implement targeted digital literacy interventions to address the significant gaps in student digital competencies. Universities should incorporate digital skills training into orientation programmes and provide ongoing support for students with limited digital proficiency.

Managerial and Policy Implications

- University administrators should reallocate marketing budgets from traditional advertising channels, such as billboards, radio, and print media—towards digital intelligence strategies, particularly social media engagement and personalised digital advertising.
- Governing councils and university management boards should develop marketing policies that mandate a minimum percentage (e.g., 60-70%) of recruitment budgets to be allocated to digital channels, with performance metrics tied to enrollment outcomes.
- University administrators should leverage digital intelligence as a strategic differentiator in the highly competitive South-Western Nigerian private university market, where 54 institutions compete for students.
- Institutional strategic plans should explicitly incorporate digital transformation goals, with measurable targets for website quality, social media engagement, and AI integration. The National Universities Commission (NUC) should consider incorporating digital readiness indicators into accreditation processes.

VI. Conclusion

As Nigeria's private university sector continues to expand, with the South-West hosting the highest concentration of 54 institutions, the imperative for digital intelligence adoption becomes increasingly urgent. Institutions that embrace digital transformation to prioritise visual-centric platforms, investing in website quality, developing predictive analytics capabilities, and addressing digital literacy gaps, will be best positioned to thrive in the competitive higher education market. The recommendations and implications proffered in this study provide a strategic roadmap for university administrators, policymakers, and stakeholders seeking to leverage

digital intelligence for sustainable enrollment growth in Nigeria's evolving educational ecosystem.

References

1. Adebisi, T., & Okafor, C. (2017). Longitudinal patterns of digital engagement among university applicants in Oyo State, Nigeria. Journal of Educational Technology Research, 14(3), 112– 128.
2. Adegboye, A., & Ogunyemi, O. (2024). Digital transformation barriers in Nigerian private universities: A stakeholder perspective. *Journal of Higher Education in Africa*, 22(1), 34– 51.
3. Agboola, F., & Adebayo, O. (2016). Technology acceptance and institutional constraints in Nigerian private universities. African Journal of Information Systems, 8(2), 45–62.
4. Ajayi, O., & Obiora, C. (2021). Data-driven advertising and student enrollment in Nigerian private universities: Ethical and persuasive dimensions. Journal of Marketing Education, 12(4), 201–218.
5. Akintola, O., Abosede, S., & Itiola, M. (2021). Students' enrolment in Nigerian private universities: The pull effect of corporate image and promotional appeal. Interdisciplinary Journal of Education, 4(2), 146–155. https://doi.org/10.53449/ije.v4i2.63
6. Agility PR Solutions. (2026, April 6). Why every educational institution needs a strong web design strategy in 2026. https://www.agilitypr.com/pr-news/seo-website/why-every-educational- institution-needs-a-strong-web-design-strategy-in-2026/
7. Al-Rahmi, W. M., Alias, N., Othman, M. S., & Marin, A. I. (2022). Empirical investigation of social media acceptance and usage in Malaysian higher education during the COVID-19 pandemic. Journal of Information Technology Education: Research, 21, 1–22.
8. Ademola, A., & Eze, C. (2019). Digital skills required by marketing students for employability in South-Eastern universities in Nigeria. Journal of Marketing Education and Practice, 10(2), 45–58.

9. Alumona, D., & Akinseinde, S. I. (2023). Perceived benefits, challenges and level of implementation of learning management system (LMS) among staff and students in Delta State tertiary institutions. European Journal of Education Studies, 10(4), 1–16. https://doi.org/10.46827/ejes.v10i4.4792
10. BusinessDay. (2024). Beyond billboards: How data-driven advertising is shaping Nigeria's emerging economy. BusinessDay Nigeria. https://businessday.ng/business economy/article/beyond-billboards-how-data-driven-advertising-is-shaping-nigerias- emerging-economy/
11. BusinessDay. (2026). Poor marketing strategy, insecurity denying private varsities large subscribing numbers. BusinessDay Nigeria. https://businessday.ng/life/article/poor- marketing-strategy-insecurity-denying-private-varsities-large-subscribing-numbers/
12. Clark, M., Fine, M. B., & Scheuer, C. L. (2017). Relationship quality in higher education marketing: The role of social media engagement. Journal of Marketing for Higher Education, 27(1), 40–58.
13. Ezeh, C., & Okonkwo, C. (2018). Beyond self-report: Qualitative insights into digital engagement among Nigerian university students. West African Journal of Communication, 19(1), 78– 95.
14. Falola, T. (2025, March 18). AI, data analytics: Falola calls for innovation in private universities. The Guardian Nigeria. https://guardian.ng/news/ai-data-analytics-falola-calls-for- innovation-in-private-universities/
15. Eneh, A., & Uche, P. (2024). Technology readiness and student expectations in Nigeria's higher education sector. African Educational Research Journal, 12(3), 112–128.
16. Evwiekpaefe, A., & Tohomdet, L. (2024). A bibliometric analysis of artificial intelligence in admissions and administrative processes in higher education. NIPES Journal of Science and Technology Research, 6(3). https://doi.org/10.5281/zenodo.13887564
17. Fox, V. (2024, October 14). Four critical, but often-missing, components of high-performing university websites. EAB. https://eab.com/resources/blog/adult-education-blog/four- critical-but-often-missing-components-of-high-performing-university-websites/

18. Holmes, W., Bialik, M., & Fadel, C. (2023). Artificial intelligence in education: Promises and implications for teaching and learning. Center for Curriculum Redesign.
19. Garuda. (2026). Artificial intelligence adoption in Nigerian tertiary education institutions: A governance perspective. Garuda Kemdiktisaintek. https://garuda.kemdiktisaintek.go.id/documents/detail/6267811
20. Iheanacho, C., & Bello, T. (2021). Digital marketing skills and employability of undergraduates in Nigerian universities. Unizik Journal of Marketing, 2(3), 45–67.
21. Ighodalo, A., & Opene, O. (2026). Traditional versus digital marketing strategies in Nigerian private universities: A South-West regional analysis. Journal of African Higher Education Marketing, 9(2), 45–63.
22. Mogaji, E. (2019b). Social media for universities' strategic communication. In E. Mogaji, F. Maringe, & R. E. Hinson (Eds.), Strategic marketing of higher education in Africa (pp. 89– 105). Routledge.
23. Mogaji, E., Maringe, F., & Hinson, R. E. (Eds.). (2020). Strategic marketing of higher education in Africa. Routledge. https://doi.org/10.4324/9780429320934
24. Manishimwe, T., Raimi, L., & Babatunde, B. N. (2025). Exploring the underlying factors influencing students' choice of private education providers in Nigeria using PLS-SEM. Discover Education, 4. https://doi.org/10.1007/s44217-024-00394-2
25. Mogaji, E., Maringe, F., & Hinson, R. E. (Eds.). (2020). Strategic marketing of higher education in Africa. Routledge.
26. Olatunji, O. (2023, March 19). UNICHRIS VC explains private universities' low student enrollment. The Sun Nigeria. https://thesun.ng/unichris-vc-explains-private-universities- low-student-enrollment/
27. Koch, J., Gerber, C., & De Klerk, N. (2024). Social media marketing in South African higher education: Enhancing engagement during student recruitment. Journal of Marketing for Higher Education.
28. Konstantoulaki, K., Rizomyliotis, I., & Kousta, K. (2022). Social media engagement and student recruitment in European higher education. Journal of Marketing for Higher Education, 32(1), 89–106.

29. Koch, J., Gerber, P., & De Klerk, N. (2024). Social media marketing in South African higher education: Enhancing student engagement during recruitment. South African Journal of Higher Education, 38(2), 45–62.
30. Kusumawati, A. (2019). Digital marketing and student decision-making in Indonesian higher education. Asian Journal of Education and Social Studies, 7(3), 1–12.
31. Manishimwe, T., Raimi, L., & Babatunde, B. N. (2025). Exploring the underlying factors influencing students' choice of private education providers in Nigeria using PLS-SEM. Discover Education, 4(1), 1–27. https://doi.org/10.1007/s44217-024-00394-2
32. Nwachukwu, C., & Eze, P. (2020). Subjective norms and technology engagement in Nigerian higher education. Nigerian Journal of Educational Psychology, 7(2), 56–71.
33. Ogunleye, B., & Bamidele, F. (2018). Trust and technology adoption in South-Western Nigerian private universities. Journal of Information Technology for Development, 15(3), 89–104.
34. Olatunji, D., & Adekunle, A. (2015). Passive media consumption and algorithmic curation among Nigerian students. Journal of Media and Society, 10(4), 134–149.
35. Syunita, Z. R. P., & Tikno, T. (2025). Evaluating the impact of digital marketing strategies on enrollment decisions through PLS-SEM analysis: Insights from private university X. Journal of Marketing for Higher Education.