ARTIFICIAL INTELLIGENCE AS A CONTRIBUTION TO NEW EDUCATIONAL MARKETING STRATEGIES

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ABSTRACT

Artificial Intelligence (AI) has emerged as a strategic resource in educational marketing, allowing experiences to be personalized, behaviors to be predicted, and student recruitment and retention processes to be automated. This article analyzes the main applications, benefits, and challenges of AI in the marketing of educational institutions, proposing effective integration strategies based on an ethical and student-centered approach. The empirical results obtained through a survey applied to educational actors show a high acceptance of the use of AI in content personalization processes and improvement of student retention. In addition, international success stories are highlighted that show how the correct implementation of these technologies can generate substantial competitive advantages for higher education institutions. It is concluded that AI, more than a technological trend, represents a catalyst for strategic transformation in the educational field, as long as its application considers ethical principles, continuous training and a vision focused on the well-being of the student.

Keywords: Artificial Intelligence. Educational Marketing. Customization. Predictive Analytics. Educational Strategies.

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INTRODUCTION

Higher education is going through a profound transformation in its methods of promotion, recruitment and loyalty of students, driven by technological advances. Among these, Artificial Intelligence (AI) has emerged as a strategic axis for the development of new educational marketing dynamics. This technological innovation not only redefines institutional communication, but also enables strategies for segmentation, personalization, and prediction of student behaviors with unprecedented accuracy (Kotler, Kartajaya, & Setiawan, 2021). This article analyzes how the integration of AI offers competitive advantages to educational institutions, constituting a key contribution to the construction of new educational marketing strategies.

BACKGROUND

The application of automation and predictive analytics technologies in education began to gain strength from the second decade of the 21st century. However, it was as a result of the expansion of machine learning and natural language processing that tools capable of interpreting student behavior data, optimizing marketing campaigns, and offering personalized content emerged (Choudhury et al., 2022).

According to a study conducted by PwC (2023), 60% of educational institutions in Latin America are already exploring AI technologies to improve their student recruitment and retention processes. In this context, educational marketing has evolved from generalist campaigns to intelligent communication strategies, based on algorithms capable of predicting the propensity to enroll, drop out, or change careers (Rodríguez & Córdova, 2023).

DELIMITATION AND JUSTIFICATION

This study is limited to analyzing the contribution of Artificial Intelligence in educational marketing, mainly at the higher education level, considering strategies for student recruitment, retention and loyalty. The application of AI in academic processes (teaching-learning) is not addressed except when it directly impacts marketing strategies.

Justifying this research lies in the need to understand how new emerging technologies, particularly AI, contribute to redefining the value proposition and the relationship between educational institutions and their potential users. The high competitiveness between universities and educational centers requires innovations in marketing that integrate the predictive, personalization, and automation capabilities offered

by AI (Gutiérrez & Peña, 2022). This knowledge is essential to guide strategic decisions in modern educational management.

The objective of this study is to analyze the impact of Artificial Intelligence in the configuration of new educational marketing strategies in higher education institutions.

Artificial Intelligence represents a powerful resource to transform educational marketing. Its ability to personalize the user experience, predict behaviors, and automate processes allows educational institutions to adapt to an increasingly competitive and digitized market.

However, the success of AI implementation depends on a comprehensive strategy that considers not only the technological component, but also the human, ethical and organizational component. Evidence shows that institutions that achieve this intelligent integration gain substantial competitive advantages.

Finally, it is proposed that higher education institutions adopt progressive, ethical, and student-centered approaches to the integration of AI technologies, always considering the challenges of privacy, equity, and quality in communication.

DEVELOPMENT OF LITERATURE

EDUCATIONAL MARKETING IN THE DIGITAL AGE

Educational marketing is defined as the set of strategies used by institutions to position, attract, and retain students (Kotler & Fox, 1995). Digitalization, initially driven by social media and content marketing, has evolved into the need for more personalized and dynamic experiences, where AI emerges as a central enabler.

According to Tuten and Solomon (2022), educational institutions face a more informed and demanding consumer, who expects personalized interactions and immediate responses, conditions that only technologies such as AI can efficiently satisfy.

Applications of Artificial Intelligence in Educational Marketing

Among the main applications of AI in educational marketing are:

- Intelligent chatbots: Automation of the attention to applicants' queries, providing personalized responses in real time (Pérez & Lazo, 2023).
- Predictive analysis: Use of algorithms to identify students with a high probability of enrollment or dropout, allowing early interventions (Shin, 2021).
- Content personalization: Automatic recommendations of academic programs according to interests and behaviors on digital platforms (Solis, 2022).
- Automated email marketing campaigns: Dynamic segmentation and sending personalized communications (Choudhury et al., 2022).

BENEFITS OF AI IN EDUCATIONAL MARKETING

The main advantage of AI in this context is its ability to personalize the user experience, which significantly increases conversion and retention rates (Cabrera, 2022). In addition, automating repetitive tasks allows marketing teams to focus on higher-value strategic actions.

IMPLEMENTATION CHALLENGES

However, the implementation of AI presents challenges such as the need for investment in technological infrastructure, staff training, and compliance with personal data protection regulations (General Data Protection Regulation [GDPR], 2018). In addition, there is a risk of excessive depersonalization if a balance between automation and human treatment is not maintained.

CRITICAL ANALYSIS OF SUCCESS AND FAILURE CASES

SUCCESS STORIES

An outstanding example is that of Arizona State University (ASU), which incorporated AI systems to personalize the admissions process using chatbots and predictive analytics. This allowed for a 17% increase in the enrollment rate of applicants who interacted with AI systems compared to those who did not (ASU Office of Institutional Analytics, 2022).

Another prominent case is that of Deakin University in Australia, which employed its "Deakin Genie", an AI assistant that offers personalized academic and administrative recommendations, managing to increase the level of student satisfaction by 23% (Deakin University, 2023).

CASES OF FAILURE

On the other hand, some institutions have failed to implement AI due to poor organizational integration. A study conducted by Deloitte (2022) found that 40% of universities that tried to integrate AI without a cultural change strategy failed to achieve their goals, leading to distrust in students and staff.

DIFFERENTIATING FACTORS

From the cases analyzed, it is evident that the key success factors are:

- Training of personnel in AI.
- Integration of AI as a support tool, not as a substitute for human treatment.

- Alignment of the AI strategy with institutional marketing and student service objectives.

PROPOSAL OF AI INTEGRATION STRATEGIES IN EDUCATIONAL MARKETING

An integration strategy based on five fundamental pillars is proposed:

Strategic Pillar	Description	Application Examples
Initial diagnosis	Assess the institution's digital maturity before adopting AI.	Analysis of technological infrastructure, human resources, digital culture.
Continuous Training	Train marketing and customer service teams on AI technologies.	Courses in machine learning, data analytics and digital ethics.
Progressive Implementation	Introduce AI gradually to mitigate resistance.	Start with basic chatbots before incorporating predictive analytics.
Ethics and Data Protection	Ensure compliance with privacy and data processing regulations.	Implementation of informed consent policies.
Monitoring and Evaluation	Measure the impact of AI on student recruitment, retention, and satisfaction.	Performance indicators such as conversion rate, student satisfaction.

Note: AI integration should not be understood as a technological process only, but as a student-centered educational innovation strategy.

RESULTS

The results derived from a survey with a Likert scale, according to the SPSS 25 tool used, mentioned that the reliability of this was correct as can be seen in the following table.

Table 1

Reliability Statistics

Cronbach's alpha based on standardized elements	N of elements
,960	8

Table 2

AI can help educational institutions better identify the needs of their students.

Indicator	Frequency	Percentage
Strongly disagree	9	14%
Disagree	1	2%
Neither agree nor disagree	7	11%
I agree	28	44%
Totally agree	19	30%
Total	64	100%

The data show a clear trend towards positive acceptance of the use of Artificial Intelligence (AI) in the educational context, specifically in the identification of student needs:

This shows a predominantly favorable perception regarding the potential of AI as a diagnostic and support tool in personalized educational processes.

This result suggests that 3 out of 4 people trust that AI can facilitate the understanding of students' realities, interests, and difficulties, which is essential to design more effective and student-centered pedagogical strategies.

Table 3

AI can help educational institutions personalize educational content for each student.

Indicator	Frequency	Percentage
Strongly disagree	10	16%
Disagree	2	3%
Neither agree nor disagree	6	9%
I agree	26	41%
Totally agree	20	31%
Total	64	100%

The data reflect that there is a majority acceptance regarding the use of AI as a means to personalize learning, which represents a strategic opportunity for educational institutions to integrate these technologies into their pedagogical models. The implementation of AI solutions could be well received by the educational community, as long as it is accompanied by training processes, impact evaluation and ethics guarantee in its application.

Table 4

AI can help educational institutions increase student enrollment and retention.

Indicator	Frequency	Percentage
Strongly disagree	5	8%
Disagree	7	11%
Neither agree nor disagree	17	27%
I agree	23	36%
Totally agree	12	19%
Total	64	100%

The data show a general favorable trend towards the use of AI as a tool to increase enrollment and retention, although a significant margin of neutrality and a critical minority persist. This distribution reveals that, although AI is viewed with optimism by many, it is still necessary to strengthen institutional communication and practical evidence on its effectiveness in the educational field.

The data collected in this study provide empirical evidence on current perceptions regarding the use of Artificial Intelligence in educational marketing. 75% of the participants agreed or fully agreed with the statement that AI allows better identification of students'

needs, while 72% consider that these technologies are useful for personalizing educational content. These findings confirm the thesis that AI is not only perceived as an efficient resource, but also as a strategic ally for a more personalized and student-centered education.

However, in relation to the impact of AI on student recruitment and retention, the results show greater dispersion: 55% were in favour, compared to 27% neutrality and 19% disagreement. This difference suggests that, while there is confidence in the potential of AI, doubts still persist about its direct impact on critical institutional indicators such as enrolment or loyalty. This nuance reveals the need to strengthen practical evidence through pilot programs and monitoring systems that empirically validate the institutional benefits of their implementation.

It should be noted that the statistical analysis showed a Cronbach's alpha of 0.960, which indicates a very high reliability of the data collection instrument (George & Mallery, 2019). This gives robustness to the conclusions drawn and validates their usefulness for future research in this field.

DISCUSSION

Taken together, these findings allow us to affirm that AI is seen as a valuable resource with high transformative potential in the educational field. However, in order for this perception to be translated into concrete results within educational marketing, it is essential to develop a comprehensive approach that articulates technological implementation with evaluation processes, teacher training, data protection policies, and transparent institutional communication. Only in this way will it be possible to consolidate an innovative, sustainable educational ecosystem focused on student well-being.

The findings coincide with previous research addressing the application of Artificial Intelligence (AI) in educational contexts and its relationship with the personalization of learning and the improvement of institutional management.

For example, Cabero-Almenara and Llorente-Cejudo (2020) argue that AI can act as a support tool to adapt educational content to the particular characteristics of each student, allowing for a more meaningful and effective learning experience. In their study, the authors highlight that intelligent systems not only allow training itineraries to be personalised, but also to detect behavioural patterns and anticipate possible risks of school dropout. This view is aligned with the results obtained in Tables 2 and 3, where a high acceptance of AI as a diagnostic and personalization instrument is observed, which reinforces the relevance of its application as part of student-centered educational marketing strategies.

Similarly, Holmes et al. (2021) argue that the incorporation of AI in education has the potential to transform both teaching and institutional management, but warn that this process must be accompanied by ethical frameworks, transparency, and adequate training for teachers and administrative staff. Their research shows that while there is a favorable disposition towards the use of AI in education, concerns still persist about its impact on teacher autonomy and student data privacy. This nuance is also evident in the results of Table 4 of this study, which reflects a more cautious opinion regarding the role of AI in student recruitment and retention. Both studies emphasize the need for a careful and thoughtful implementation of these technologies so that their contribution is real and sustainable.

CONCLUSIONS

The research shows that Artificial Intelligence is positioned as a key strategic tool for the transformation of educational marketing, with specific applications in content personalization, predictive analysis of student behavior and automation of communication processes. The high level of acceptance by educational actors regarding the use of AI in diagnostic and personalization processes shows a favorable disposition to its implementation.

However, the effectiveness of AI does not lie only in its technical deployment, but in its harmonious integration with institutional values, the training of human talent and the protection of students' digital rights. The experiences analyzed, both of success and failure, underscore that success depends on a strategic, gradual, student-centered vision.

Therefore, higher education institutions are recommended to adopt progressive implementation models, continuously monitor the effects of AI on their processes, and establish ethical policies that guarantee the responsible use of data. In this sense, AI must stop being seen as a peripheral innovation to consolidate itself as a transformative axis of educational marketing, aligned with the objectives of quality, equity and institutional sustainability.

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