



Higher Education in Advertising in the Era of Generative AI: A Paradigm Shift

Mónica Puntí Brun

University of Girona. Spain.

monica.punti@udg.edu



Maria Alice de Faria Nogueira

School of Communication - Federal University of Rio de Janeiro (ECO-UFRJ). Brazil.

mariaalice.nogueira@eco.ufrj.br



Silvia Espinosa-Mirabet

University of Girona. Spain.

silvia.espinosam@udg.edu



Ramon Martin-Guart¹

University of Girona. Spain.

ramon.martin@upf.edu



Sandro Torres de Azevedo

School of Communication - Federal University of Rio de Janeiro (ECO-UFRJ). Brazil.

sandro.torres@eco.ufrj.br



Jordi Serra Simón

University of Girona. Spain.

jordi.serras@udg.edu



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¹Ramon Martin-Guart is the co-author in charge of correspondence.

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ABSTRACT

Introduction: The emergence of generative artificial intelligence has the potential to profoundly transform advertising practices, redefining the technical skills and ethical frameworks required of future professionals. This article explores how educational institutions in Spain and Brazil are incorporating AI training into their Advertising and Public Relations programs. **Methodology:** Twenty-six interviews with study coordinators from public universities in Brazil and Spain were combined. In Spain, the 13 coordinators from public universities offering these studies according to the Ministry of Science, Innovation, and Universities were interviewed, and in Brazil, the 13 interviews were conducted with coordinators from the main federal universities rated 4 or 5 out of 5 according to the prestigious ENADE (National Student Performance Exam) ranking of the Anísio Teixeira National Institute for Educational Studies and Research (INEP, in Spanish), as per the Ministry of Education. A content analysis of 457 teaching guides was also carried out, focusing on competencies, tools linked to AI, and its ethical and legislative dimensions. **Results:** The main findings highlight that the integration of AI tools into Advertising and Public Relations degrees is driven by individual faculty initiatives, resulting in a diversity of implementation methods, especially in subjects such as graphic design and advertising photography. Although some universities have made significant progress, teacher training and the inclusion of AI in curricula present major challenges. **Conclusions:** The article highlights the need for broader media, information, and digital literacy.

Keywords: Generative artificial intelligence; advertising; higher education; ethics; comprehensive skills; digital competence; AI literacy.

1. INTRODUCTION

The impact of artificial intelligence (AI) on contemporary society is undeniable, and its influence continues to grow (Delcker et al., 2024). While new initiatives to transform teaching, learning, and research are being tested and evaluated in academia, students are independently adopting generative AI tools. AI significantly improves the quality and outcomes of education in areas such as personalized learning, the automation of administrative tasks, and the analysis of large volumes of data (Torres et al., 2024). As educational systems incorporate these technologies, a crucial question arises: To what extent are educational institutions effectively preparing students for an increasingly AI-influenced job market?

One sector significantly impacted by AI is the "creative economy" a term coined by Howkins (2001) to describe an economic model that transforms creativity and ideas into assets. Thus, ideas become intellectual property and generate wealth. In a context of global competition and unexpected economic challenges, the creative economy is emerging as an engine of sustainable growth. It is capable of producing qualitative changes in the manufacturing and service sectors and improving the quality of life and image of the communities in which it develops (Dubina et al., 2012; Evans, 2009; Flew, 2011; O'Connor, 2009; Sung, 2015). Artificial intelligence tools are currently a central element of this transformation. They can generate original content in milliseconds by synthesizing text, images, music, and other elements from enormous databases. These tools are redefining the role of human creativity by expanding its possibilities and methodologies for collaboration with technology (Espinosa-Mirabet et al., 2024; Islas et al., 2024; Routray, 2024).

In the field of advertising, AI has transformed data analysis and the management of "big data" (Barrio Andrés, 2022; Mackay-Castro et al., 2023; Malthouse & Li, 2017; Martínez Martínez et al., 2022; Nogueira, 2019). These technologies enable the processing of large volumes of data on consumer behavior, preferences, and purchasing patterns. This improves the ability to segment target audiences, personalize messages, and enhance the relevance and effectiveness of advertising campaigns (Barrio Andrés, 2022; Calle García et al., 2024; Micaletto-Belda et al., 2023).

Another key application of AI in advertising is content creation and ad optimization (Gao et al., 2023). These tools automate the generation of advertising content and facilitate the co-creation of ads with the participation of the target audience (Ezzat, 2024). This approach has given rise to the phenomenon of "adprosumers," a term combining "advertising," "producer," and "consumer." The term emerged as an evolution of the concept of "prosumer," which was introduced by Toffler (1980) to describe individuals who produce and consume content simultaneously. "Adprosumers" consume, generate, evaluate, and share advertising content, becoming active agents in brand campaigns and the co-creation of promotional messages. This phenomenon reflects a transformation in the traditional dynamics of commercial communication, in which the public assumes a creative and critical role. They contribute to the authenticity and relevance of advertising messages (Islas et al., 2018; Martínez-Sala et al., 2018; Ritzer & Jurgenson, 2010; Ritzer et al., 2012; Ritzer, 2015; Túñez-López, 2021; Túñez-López et al., 2021). Furthermore, chatbots and virtual assistants improve interaction with consumers by establishing more personalized relationships between brands and users (Micaletto-Belda et al., 2023). Thus, they help agencies produce content more quickly and efficiently.

Another key aspect is predictive analytics, facilitated by AI, which allows for the anticipation of market trends and changes in consumer behavior (Mackay-Castro et al., 2023). This enables agencies to plan campaigns with greater precision and adjust strategies based on data-driven predictions (Calle García et al., 2024).

The AI-driven transformation of the advertising sector encompasses every stage of the advertising campaign process, from obtaining insights to planning, executing, and evaluating campaigns (Tahoun & Taher, 2023; Qin & Jiang, 2019). The market requires professionals who possess advanced technological skills as well as cultural and creative abilities and a strong understanding of the ethical and legal implications of using these technologies (Martín-Guart, 2014; Paniagua-Iglesias et al., 2024).

This research's main objective (MO) is to analyze and compare how advertising and public relations curricula in Brazil and Spain integrate AI training. Both countries have similar advertising markets in terms of investment and contribution to their respective GDPs. According to InfoAdex (2024), advertising investment in Spain in 2023 was €12,701 billion, representing 0.85% of GDP. In Brazil, advertising investment reached US\$16 billion (€15 billion), representing 0.7% of Brazilian GDP during the same period (Adlatina, 2024).

1.1. Use of AI in Teaching Advertising and Public Relations

Since 2016, research on the use of AI in higher education has increased considerably. In this context, three approaches to education stand out: teaching for AI, teaching about AI, and teaching with AI (Crompton & Burke, 2023; European Digital Education Hub, 2023). In Advertising and Public Relations programs, the most relevant approaches are teaching about AI and teaching with AI. Technological advances in higher education have necessitated rethinking curricula to align with the evolving demands of the labor market, which seeks hybrid, multidisciplinary profiles (Álvarez-Flores et al., 2018; Cuenca-Fontbona et al., 2022; Sánchez-Sánchez et al., 2016). Traditionally focused on creativity, brand management, and communication strategy, Advertising studies now need to include digital and technological skills to meet market demands (Álvarez-Flores et al., 2018; Fernández-Gómez & Feijoo-Fernández, 2022; Perlado-Lamo-de-Espinosa et al., 2019). This requires developing strategic, creative, and communication skills while reinforcing digital competencies as a central focus (Pérez-Escoda et al., 2019).

Baladrón-Pazos et al. (2022) identify a generalist approach with significant emphasis on interdisciplinary content; the most relevant specialized areas are creativity and digital advertising. Along these lines, Pellicer Jordá (2024) argues that combining traditional knowledge with emerging skills is essential to meet current industry demands. Regarding the use of AI in advertising, recent research highlights its educational potential. For instance, a study of Coca-Cola's "Masterpiece" ad, created with AI assistance, showed that it improves students' attitudes toward advertising and has significant educational value (Çavuş & Yılmaz, 2024). Additionally, Jiménez Sánchez (2024) asserts that tools such as ChatGPT and image generation applications facilitate every stage of the advertising rhetorical process. This author emphasizes that:

It is important to emphasize that AI is meant to assist in acquiring theoretical and practical knowledge, not replace it. In other words, teachers should first ensure that students learn each topic independently and individually. Only after mastering the subject matter should they use AI to observe its suggestions and strive to improve upon them. (Jiménez Sánchez, 2024, p. 6)

A study by the University of Valladolid revealed that 82% of students use AI tools and consider them a complement to their education (Martín García et al., 2024). The students also called for greater institutional oversight of AI use to guarantee fair assessments. According to Flores-Vivar and García-Peñalvo (2023), literacy in this field is paramount. They state that "AI knowledge involves designing and developing an algorithmic literacy plan, which should be included in the training programs of any field of knowledge" (p. 43). The United Nations Educational, Scientific and Cultural Organization (UNESCO) has established guidelines promoting media, information, and digital literacy, focusing on the ethical use of AI in education (Wilson et al., 2011; UNESCO, 2021, 2022, 2023). It is crucial that future professionals be trained not only in the technical aspects of AI, but also in its ethical and legal implications. Privacy, data protection, intellectual property, and algorithmic bias are key challenges for the advertising sector (Acquisti et al., 2016; Guerrero-Solé, 2024; Gutiérrez-Martín et al., 2022; Kumar & Suthar, 2024; Li, 2019; Sáenz de Jubera, 2023). This approach aligns with the Beijing Consensus, which promotes integrating AI into education to improve learning quality and equity, and advocates for critically and responsibly using advanced technologies (Chibás Ortiz et al., 2022; UNESCO, 2019).

2. OBJECTIVES

Three objectives (OB) are proposed, hierarchically ordered as follows:

1. (OB1) To analyze the degree to which AI is integrated into current and future teaching plans.
2. (OB2) To identify tools and methodologies for integrating AI into teaching and training staff.
3. (OB3) To examine connections between educational institutions and the advertising industry to adapt curricula.

3. METHODOLOGY

This study combines qualitative and quantitative methods, structured in four phases that include:

1. Literature review of existing research.
2. Semi-structured interviews with coordinators of 26 Advertising and Public Relations degree programs in Spain and Brazil.
3. Content analysis of these programs' curricula to identify whether and how AI training content is incorporated, as determined by a review of 457 course guides.
4. A study of higher education legislation in both countries that regulates Advertising and Public Relations degrees to understand how regulations may favor or hinder the inclusion of AI in university programs.

Initially, the study focused on the professional advertising sector. In March 2024, interviews were conducted with 25 creatives and CEOs of advertising agencies in Rio de Janeiro and Catalonia (Espinosa-Mirabet et al., 2024). The sample included small agencies with fewer than 20 employees, medium agencies with 40-70 employees, and large agencies with more than 100 employees. The findings revealed substantial differences between the two countries regarding the skills students should acquire. While Brazil focuses on a more general and critical education, Spain prioritizes technological skills related to generative AI.

The second phase aimed to explore how universities in Spain and Brazil incorporate generative AI into their advertising and public relations degrees. To this end, 26 academic coordinators were interviewed, and a content analysis of course syllabi was conducted to identify tools and subjects that incorporate AI.

First, a comprehensive literature review was conducted to evaluate the impact of AI on the advertising industry and how educational trends are addressing this phenomenon. This review enabled the establishment of a theoretical framework and the identification of gaps in current university education.

Second, a total of 26 academic program coordinators were interviewed (see Table 1). The interviews were recorded via the Teams platform with the participants' prior authorization and consent to use the recordings for academic and research purposes. To preserve anonymity and confidentiality, coded, sequential identifiers were used, such as CE1 (Coordinator Spain 1) and CB1 (Coordinator Brazil 1). Thirteen coordinators from public universities in Spain offering these programs, as listed by the Ministry of Science, Innovation and Universities (2024), were interviewed. Thirteen interviews were also conducted with coordinators from the main federal universities rated 4 or 5 out of 5 according to the prestigious ENADE ranking by the Anísio Teixeira National Institute of Educational Studies and Research (INEP) in 2025, as per the Ministry of Education.

To collect qualitative data, coordinators of Advertising and Public Relations degree programs were contacted via email. Fifteen public universities were selected in Spain and Brazil. Thirteen of the universities, seven from each country, agreed to participate in the study. The interviews were structured into three thematic sections aligned with the research objectives: the current state and potential of artificial intelligence (AI), AI preparation and implementation strategies, and future perspectives. The first section included questions such as: "What is the current role of AI in your university's degree program?" "What advantages does AI bring to teaching this degree?" and "What are the main challenges you have encountered in incorporating AI into the curriculum?"

The second section focused on questions such as: "How do faculty members prepare to use AI tools in their classes?" and "What specific tools are used, and how are decisions made about which ones to incorporate?" The third section explored the future of AI implementation with questions such as: "What plans do you have to expand the use of AI in the degree program?" and "Do you think curricula for Advertising and Public Relations degrees should be redesigned to incorporate artificial intelligence?"

Table 1. *Universities Included in the Research.*

Public Universities in Spain (n=13)	Federal Universities in Brazil (n=13)
Autonomous University of Barcelona (UAB)	Federal University of Bahia (UFRB)
Complutense University of Madrid (UCM)	Federal University of Pampa (UNIPAMPA)
University of Alicante (UA)	Federal University of Rio de Janeiro (UFRJ)
University of Cádiz (UCA)	Federal University of Rio Grande do Norte (UFRN)
University of Girona (UdG)	Federal University of Rio Grande do Sul (UFRGS)
University of Malaga (UMA)	Federal University of Goiás (UFG)
University of Murcia (UM)	Federal University of Santa Maria (UFSM)
University of Seville (US)	Federal University of Sergipe (UFS)
University of Valladolid (UVa)	Federal University of Pará (UFPA)
University of the Basque Country/ Euskal Herriko University (UPV/EHU)	National University of Brasília (UnB)
Jaume I University of Castellón (UJI)	Federal University of Pernambuco (UFPE)
Pompeu Fabra University (UPF)	Federal University of Ceará (UFC)
Rey Juan Carlos University (URJC)	Federal University of Minas Gerais (UFMG)

Source: Elaborated by the authors (n=26).

Third, a content analysis was conducted on the 457 teaching guides for Advertising and Public Relations degrees from universities that indicated having AI in their programs. In total, 9 universities were identified:

1. Seven Spanish universities, which represented the content analysis of 367 teaching guides.
2. Two Brazilian universities, with the extraction of 90 teaching guides.

Data collection through official university portals, including course details, was carried out in December 2024. The analysis followed a coding pattern (Krippendorff, 1997) that considers:

1. Duration of the degree (number of semesters)
2. Type of subject (compulsory or optional)
3. Duration of the subject (semester or year)
4. Total credits
5. Course in which it is taught
6. Faculty involved

Additionally, the objectives, competencies, resources, tools, assessment methods, and teaching methodologies, including lectures, case studies, and project-based learning, were evaluated for all subjects. Finally, the higher education regulations of Brazil and Spain were reviewed, especially those related to the design of Advertising and Public Relations degrees.

4. RESULTS

4.1. Regulations Governing Degrees in Advertising and Public Relations and AI

The Spanish government's guide, published by the National Institute of Educational Technologies and Teacher Training² in 2024, adopts the European Digital Education Hub's (2023) approach to promoting AI literacy. This approach empowers students to act critically and ethically in an AI-driven environment. Higher education in Spain is regulated by Royal Decree 822/2021, which outlines the organization of bachelor's, master's, and doctoral degree programs. Bachelor's degrees typically require 240 ECTS credits, though some programs require 300 or 360 credits. Creating a degree requires submitting a curriculum for verification by the Council of Universities and evaluation by quality assurance agencies. For Advertising and Public Relations degrees, the National Agency for Quality Assessment and Accreditation (ANECA, 2005) provide the most specific guidelines, recommending that curricula be reviewed and adapted to the current professional context. ANECA evaluates and accredits university degrees to ensure they comply with the standards of the European Higher Education Area (EHEA). This process includes initial verification, monitoring through the MONITOR program, and periodic accreditation through ACREDITA. These steps ensure continuous improvement through internal and external evaluations (ANECA, 2024, n.d.).

In Brazil, educational regulation is the responsibility of the state and is based on Decree 7.690/2012. This decree assigns responsibility for higher education courses to the Ministry of Education (MEC) and the Secretariat for the Regulation of Higher Education (SERES). According to the National Curriculum Guidelines (National Council of Education/Chamber of Higher Education³, 2002), degrees in Advertising and Public Relations last 4 years and comprise 2,700 hours. The Anísio Teixeira National Institute of Educational Studies and Research, which is linked to the Ministry of Education and Science (MEC), manages the National System for the Evaluation of Higher Education (SINAES). The National Student Performance Examination (ENADE), one of SINAES's evaluations, measures students' learning and competencies according to curricular guidelines, including the ability to adapt to the job market and understand interdisciplinary topics (INEP, 2021).

Current legislation in both countries does not address the implementation of AI in higher education, and its use in academia is still in its early stages. In May 2024, the European Union approved the world's first AI law, which regulates the development and use of AI to ensure safety, transparency, traceability, non-discrimination, respect for the environment, and human oversight to prevent harmful outcomes. The law prohibits practices such as the cognitive manipulation of vulnerable individuals, social scoring, and real-time biometric identification systems (European Parliament⁴, 2024).

Brazil's AI legislation, approved by the Federal Senate in December 2024, still requires ratification by the National Congress. Based on European regulations, the legislation classifies AI systems by risk level and establishes stricter regulations for systems that have a significant impact on human life and fundamental rights (Agência Senado, 2024). The legislation includes provisions regarding the use of AI in student selection, academic progression, and employment decisions, including hiring, evaluation, promotion, and dismissal of employees in Brazilian academia. The use of AI to generate or alter synthetic content, including text, images, videos, and audio, is also regulated. This regulation requires the inclusion of identifiers to ensure the content's originality and authenticity (Agência Senado, 2024).

² Instituto Nacional de Tecnologías Educativas y de Formación del Profesorado

³ Conselho Nacional de Educação/Câmara de Educação Superior

⁴ Parlamento Europeo

Although some universities have begun integrating AI into their programs, its implementation remains limited and uneven across countries and institutions. A gap persists between market needs and current academic training. Furthermore, not all universities deem the full integration of AI into the curriculum necessary, and not all advertising agency leaders prioritize technological skills over cultural, creative, and ethical ones. This topic will be discussed below.

4.2. Current Situation and AI Implementation Strategies

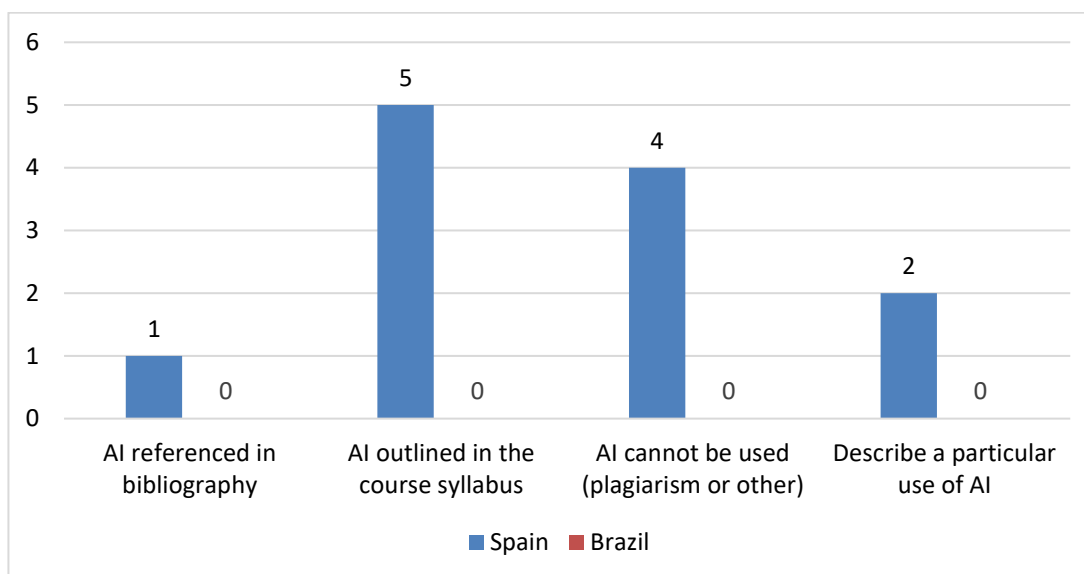
Only four Spanish universities explicitly include artificial intelligence (AI)-related subjects in their curricula, while none in Brazil do so. This is due to AI's recent integration into academia and the infrequent revision of curricula: every five years in Spain and according to internal policies in Brazil. Nevertheless, 77% of the universities studied use AI in one or more subjects, thanks to individual faculty initiatives, either experimentally or in specific activities. Specifically, seven of the thirteen public universities have incorporated AI, while all Brazilian universities use it, though there is some resistance from senior professors.

In Spain, the integration of AI into advertising and public relations degrees varies. Half of the universities that use AI incorporate it into subjects such as graphic design or advertising photography. The coordinators argue that "the future of the profession is heading in that direction" (CE12, personal communication, December 12, 2024). Twenty-five percent incorporate it across various subjects, and another 25% use it as a complement. Five of the universities that do not yet integrate AI are considering doing so in the future, while one rejects it, arguing that AI could "diminish students' creative capacities" (CE4, personal communication, December 5, 2024).

In Brazil, 2 universities offer AI-related subjects, though the term does not appear in official documents. Coordinators state that AI is present in the curricula through individual faculty member initiatives. Instead, it is referred to under general terms such as "technologies" or "new technologies." The discrepancy between teaching practice and documentation reflects the difficulty of updating curricula rapidly due to the speed of technological advancements. Most federal universities are reviewing pedagogical projects dating back to the early 2000s. As previously mentioned, artificial intelligence (AI) is introduced by professors in two ways: as a tool in practical subjects or as a technological and social phenomenon worthy of study in theoretical disciplines. Furthermore, teachers use AI to create and organize class materials in a personal rather than didactic manner. As one coordinator explains: "We don't have a specific digital subject, but we can incorporate AI into interdisciplinary work, workshops, lectures, and projects. This approach allows students to take the lead while providing guidance and bringing theory into practice" (CB1, personal communication, November 19, 2024).

The comparative analysis reveals that, of the 7 universities that have incorporated AI, only 5 explicitly include it in their course syllabi. None of the universities in Brazil do so. This discrepancy highlights a clear mismatch between official documentation and actual practices. Figure 1 illustrates the presence of AI in the curricula of both countries. In Spain, 12 courses mention AI in their syllabi. Of these, 5 mention AI as part of the syllabus, and 4 establish restrictions on its use. In Brazil, however, no official reference to AI was found in the analyzed curricula.

Figure 1. Presence of AI in Teaching Guides.



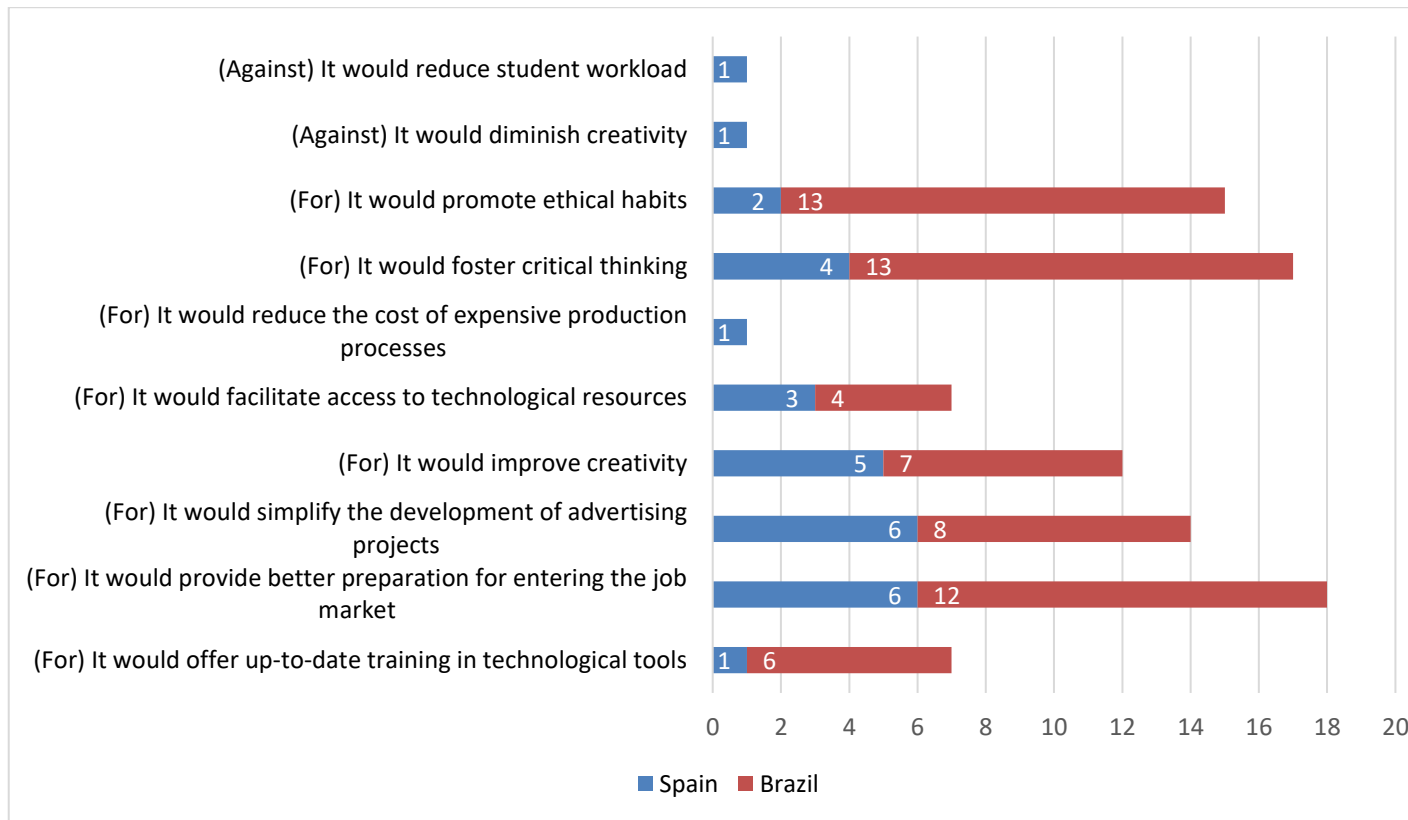
Source: Elaborated by the authors (number of subjects that incorporate AI in their teaching guides).

AI has been incorporated into the following subjects: Social Media, Digital Identity and Virtual Environments, Digital Design and Technology, Ethics and Professional Conduct, and Communication Theories. "Each professor integrates AI based on their needs and new developments presented in AI working groups, which include most of the degree program's professors" (CE5, personal communication, December 9, 2024).

When asked if it would be important to add AI subjects to the degree program, the study coordinators do not give a unanimous answer. Most of those interviewed believe that AI content should be added across the curriculum in a cross-cutting and progressive manner. However, not all agree on proposing new subjects. "We want to train professionals who can understand the changes that AI is bringing to the field" (CE12, personal communication, December 12, 2024). Professional development in communication degrees is crucial. One coordinator stated, "Agencies have incorporated artificial intelligence as part of their work and don't see it as much of a threat as it has sometimes been viewed from the university. Rather, they see it as an opportunity" (CE3, personal communication, December 18, 2024).

Figure 2 summarizes the main reasons given by the coordinators interviewed for deciding whether to incorporate AI into their curricula. Favorable assessments predominate; coordinators emphasize that AI better prepares students for the job market, strengthens critical thinking, and promotes ethical technology use. However, some coordinators expressed reservations, fearing that AI could reduce students' academic workload or diminish their creativity. Other coordinators argue the opposite, maintaining that AI acts as a catalyst for new ideas and stimulates students' creative abilities.

Figure 2. Reasons for including or not including AI according to the coordinators.



Source: Elaborated by the authors (number of times each item is repeated).

According to the interviewees, AI improves teaching quality by simplifying creative processes, automating tasks, and providing access to costly resources. While human creativity remains essential, AI can enhance student creativity in specific subjects. "Students are the ones who have to do the creative work, and they use artificial intelligence for sketches, illustrations, etc." (CE7, personal communication, November 26, 2024). AI also improves presentations by creating more visual documents, streamlining work, saving time, optimizing productivity, and generating ideas. For teachers, AI is a valuable tool for research and data analysis.

In 12 Spanish and 13 Brazilian universities (96% of the sample), integrating AI into academic programs is considered crucial, though opinions diverge. Those opposed to its implementation believe it could diminish student creativity. "Although AI can streamline work, I don't consider that a positive" (CE4, personal communication, December 5, 2024).

Those interviewed in both Spain and Brazil agree on the need for critical reflection on the use of AI. They emphasize that "it is a digital revolution that cannot be ignored" (CE5, personal communication, December 9, 2024) and that it can simplify the development of advertising projects, improve creativity, and facilitate access to resources:

AI can help spark an idea, but it doesn't create the idea itself. Students modify, complement, develop, and enrich their ideas based on the suggestions provided by AI. Thus, AI is a tool that can enhance human creativity. (CE11, personal communication, December 20, 2024).

Subjects related to the creative process, such as copywriting, graphic design, audiovisual production, and photography, make the most use of AI. The most frequently used AI tools are text and image generators. In Brazil, ChatGPT, Gemini, and MidJourney stand out, while in Spain, Leonardo, Copilot, Canva, Freepik, DreamStudio, and Wix Logo Maker are also popular. Brazilian universities have agreements to use the Adobe suite, including Firefly. The choice of tools depends on each subject's needs, focusing on improving practices and enhancing creativity.

However, in Brazil, almost all of the coordinators commented that federal universities lack resources, which limits the use of tools to free versions or student mobile applications. This restriction limits creative possibilities. In both Brazil and Spain, the need for additional resources was identified, including funding for software licenses, technical support, and teacher training. These resources are considered essential for effectively implementing AI.

Regarding the implementation of AI in degree programs, however, there is no consensus among the interviewees. Two main approaches were proposed: integrating AI across various subjects or creating specific subjects to address this technology. Those who oppose incorporating more subjects argue that students should be taught how to apply AI in specific areas or subjects (CE7, personal communication, November 26, 2024). Others are planning to modify the curriculum to include subjects on technological innovation or generative models in advertising (CE12, personal communication, December 12, 2024).

The following stand out as essential skills that universities consider important to develop in students:

1. Digital competence, which encompasses the effective use of AI tools.
2. Creativity, understood as the ability to enhance human creativity through AI.
3. Critical thinking, related to evaluating information generated by AI and making informed decisions.

Furthermore, skills such as discerning between reality and falsehood, verifying information, and fostering curiosity, attention, and inquisitiveness are mentioned. Also included is the development of professional competencies, such as the practical application of AI. In Brazil, all the coordinators discuss ethical competencies, which involve understanding the use of AI, its causes, and the biases that affect creative possibilities: "The discipline should focus on the reflective and critical, ethical aspects, considering the use of AI, but not in an unlimited way," explains one of the interviewees from Brazil (CB3, personal communication, October 21, 2024). The interviewee adds: "The challenge is understanding the platform's limitations and critically reviewing what is delivered." Another interviewee (CB9, personal communication, December 13, 2024) summarizes it in four types of competencies:

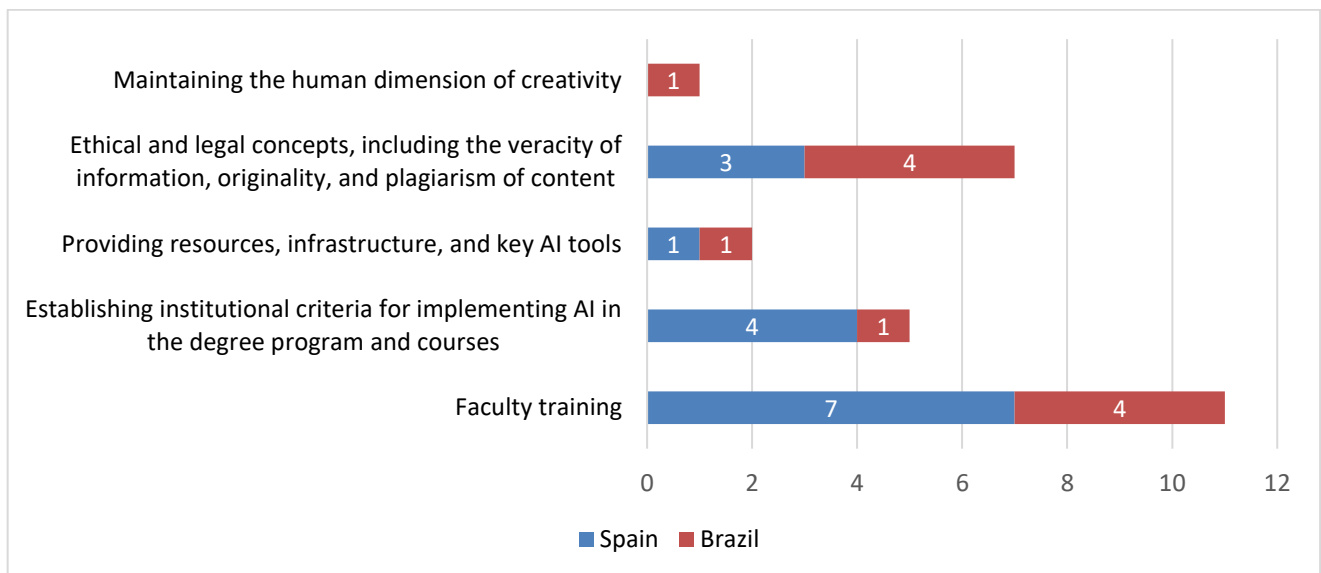
1. Techniques, to learn about and use the available tools.
2. Sensitive, balancing technical skill with humanity and emotion.
3. Criticisms are necessary to reflect on biases, corporate interests, and the ethical use of tools.
4. Cultural, to connect AI with cultural phenomena and contexts, given that the starting point ("prompt") arises from cultural phenomena and contexts.

To implement AI, universities are adopting various strategies. One strategy is offering training to professors on using AI in their teaching. The goal is to help professors integrate AI into their classes. In addition to incorporating AI into their curricula, Brazilian coordinators organize conferences with professionals from the advertising and technology sectors to raise awareness of AI use in agencies and its ethical implications.

4.3. Future of AI Implementation

Implementing AI in Advertising and Public Relations curricula presents challenges and opportunities, with notable differences depending on the country (Figure 3). The main challenges include training professors through ongoing courses to effectively integrate AI into the classroom. Some faculty members also resist change, perceiving AI as a threat to their traditional methods. Additionally, ethical concerns have been raised, including the transfer of power to private corporations and issues related to plagiarism, authorship, and the accuracy of information. Another major obstacle is the lack of infrastructure and financial resources in certain educational centers.

Figure 3. Challenges and opportunities in incorporating AI into teaching plans.



Source: Elaborated by the authors (number of times each item is repeated).

In order to stay up-to-date, the universities interviewed are developing plans to incorporate AI into their degree programs. One Spanish university is planning to include new electives or mandatory courses on AI (CE12, personal communication, December 12, 2024), while another is adapting its programs to integrate AI as a concept and working tool (CE11, personal communication, December 20, 2024). In Brazil, the planned changes are being considered at different levels, from creating a new vice rectorate for technology and innovation that will define and establish new AI policies (CB10, personal communication, October 28, 2025) to updating curricula and creating elective courses that specifically address the topic (CB2, personal communication, December 21, 2024).

In both countries, there is a consensus on the need for gradual integration to encourage students to develop critical and creative thinking skills. Creativity is prioritized in automated environments using methods that combine technology with traditional and playful approaches to problem solving. Students should also develop the ability to identify the beneficial and harmful uses of AI and foster critical and creative thinking. These skills are essential for students to use AI effectively and ethically in their future professional lives.

The coordinators in both Spain and Brazil suggest promoting the university's digital sovereignty by developing open-source tools and collaborating closely with the faculties of Computer Science and Science. They also recommend creating forums where professionals and professors can regularly review and update the curricula.

5. DISCUSSION

Although it is not reflected in official teaching guidelines, AI is present in half of the Advertising and Public Relations degree programs at Spanish public universities and in all the programs in Brazil. Its implementation stems from the individual initiatives of faculty members who are convinced of its educational potential. This "bottom-up" approach explains the diversity of approaches and levels of integration observed in different curricula.

The most common generative AI tools in Brazil and Spain are ChatGPT, Gemini, MidJourney, Leonardo, Copilot, and Firefly. These tools are mainly used in Graphic Design, Photography, and Copywriting courses, where they function as creative stimuli and sources of inspiration (OB2). These tools collaborate with students to enrich the idea generation process without replacing human judgment and sensitivity. In response to this growing use, some universities have begun designing specific AI courses and revising their curricula to integrate artificial intelligence content across disciplines.

However, these efforts are progressing slowly due to resistance to change and a lack of specialized training for faculty. Implementing training courses and professional development programs is therefore a priority to ensure training in the legal and ethical aspects of adopting these technologies (Paniagua-Iglesias et al., 2024), in accordance with international guidelines, such as those of UNESCO. Previous research has highlighted the importance of updating teaching plans to incorporate skills that respond to the new demands of the job market (Álvarez-Flores et al., 2018; Cuenca-Fontbona et al., 2022). Thus, Pellicer Jordá (2024) emphasizes combining traditional knowledge with new skills as a key strategy for meeting the sector's current demands.

The current situation shows uneven acceptance. Significant differences in the speed and depth of implementation have been identified (OB1). While some universities have made considerable progress by integrating AI into specific courses and offering continuous training to faculty, others are still in the initial stages or have not begun yet. However, there is a general recognition of AI's relevance and its future potential to improve education (OB3). Students will be able to simplify routine tasks, access expensive resources, and enhance their creative process with new stimuli. Finally, there is a consensus that the educational process should remain centered on human creativity. As Espinosa-Mirabet et al. (2024) point out, creativity is an irreplaceable human domain since no AI tool can replace human judgment and intuition.

6. CONCLUSIONS

This study's findings reveal that the integration of artificial intelligence into Advertising and Public Relations degree programs' curricula is progressing gradually but unevenly. This integration is driven more by individual faculty members' initiative than institutional guidelines. This trend is evident in both Spanish and Brazilian universities. This underscores the urgent need to design a clear curricular framework that ensures consistent and coherent adoption of AI in these programs.

Interdisciplinarity and close collaboration between professors and industry professionals are also essential for keeping curricula up to date. To this end, creating institutional observatories that monitor AI usage in the classroom, encouraging applied research on teaching methodologies that integrate AI critically and creatively, and organizing discussion forums among researchers, faculty, and professionals will facilitate collective reflection on the limits, risks, and opportunities presented by these technologies.

Notably, generative AI presents technical, curricular, pedagogical, and ethical challenges that vary by region. In Brazil, for example, there is greater concern about ethical and legal issues and the use of AI in creative fields. In Spain, coordinators are less concerned about the creative sphere, but they demand greater training for faculty to

function in the new classroom environment that AI will create. This is because AI's impact on creativity is ambivalent; it can act as a catalyst for ideas but also foster excessive dependence if not managed properly. Therefore, integrating it is essential from a critical perspective, preserving the centrality of human thought and fostering authentic creativity rooted in reflection, culture, and professional ethics.

For this study, only degree program coordinators were interviewed to obtain a general perspective on AI's presence in teaching plans. Future phases of the study will address this limitation by incorporating the opinions of faculty and students to obtain a more complete and nuanced view of the implementation process and its pedagogical and motivational effects. Furthermore, comparative studies with advertising agencies have highlighted the need to combine technological skills with a solid cultural, legal, and ethical framework. This reinforces the recommendation to promote applied research on teaching methodologies that integrate AI in a critical and creative way.

Despite identified obstacles such as resistance to change, a lack of teacher training, and ethical concerns, there is almost unanimous consensus on the transformative potential of AI in education. This potential is especially evident in its ability to improve creative processes, automate tasks, and provide access to previously inaccessible resources due to time or budget constraints. Three lines of action are proposed to turn this potential into tangible results: first, implement training workshops for teachers that combine technical, ethical, and pedagogical skills; second, include AI in teaching guidelines through curriculum reforms; and third, form strategic alliances with advertising sector stakeholders to develop practical case studies aligned with professional demands.

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Authors' Contributions:

Conceptualization: Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia. **Software:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia; Martín-Guart, Ramón; Torres de Azevedo, Sandro; Serra Simón, Jordi. **Validation:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia. **Formal analysis:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia; Martín-Guart, Ramón; Torres de Azevedo, Sandro; Serra Simón, Jordi. **Data curation:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Martín-Guart, Ramón. **Drafting and preparation of the original manuscript:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria. **Drafting, revision, and editing:** Espinosa-Mirabet, Silvia; Martín-Guart, Ramón. **Visualization:** Puntí Brun, Mónica; Martín-Guart, Ramón. **Supervision:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia. **Project management:** Martín-Guart, Ramón. **All authors have read and accepted the published version of the manuscript:** Puntí Brun, Mónica; Nogueira, Maria Alice de Faria; Espinosa-Mirabet, Silvia; Martín-Guart, Ramón; Torres de Azevedo, Sandro; Serra Simón, Jordi.

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AUTHOR(S):

Mónica Puntí Brun

University of Girona (UdG).

Mónica Puntí is a professor in the Bachelor's program in Advertising and Public Relations at the University of Girona. She holds a journalism degree and a documentation degree from the Autonomous University of Barcelona, as well as a Master's degree in Information and Knowledge Society from the Open University of Catalonia. Her primary research areas are digital communication and advertising, journalistic ethics and professional conduct, fake news and disinformation, and the use of artificial intelligence in advertising. She has also worked in press offices and in corporate communications and social media.

monica.punti@udg.edu

Índice H: 3

Orcid ID: <https://orcid.org/0000-0001-7101-1151>

Google Scholar: <https://scholar.google.es/citations?hl=es&user=VvW17YYAAAAJ>

Maria Alice de Faria Nogueira

School of Communication, Federal University of Rio de Janeiro (ECO-UFRJ)

Maria Alice de Faria Nogueira is a professor at the School of Communication at the Federal University of Rio de Janeiro in Brazil. She holds a degree in Advertising and Journalism from PUC-Rio; an MBA from EPGE/FGV-RJ; a Doctorate in History, Politics, and Culture from CPDOC-FGV RJ; and a Master's in Social Communication from PUC Rio. She participates in the MTTM (Mobilities, Theory, Themes, and Methods) and ReC (The Rhetoric of Consumption) research groups. Maria Alice also coordinates PUBCOMTEC, a research group that studies the use of artificial intelligence in contemporary advertising practice, its ethical implications, and professional training in the field.

mariaalice.nogueira@eco.ufrj.br

Índice H: 3

Orcid ID: <https://orcid.org/0000-0003-2133-3931>

Google Scholar: <https://scholar.google.es/citations?user=WNB5B9UAAAAJ&hl=es&oi=ao>

Silvia Espinosa-Mirabet

University of Girona (UdG).

Espinosa-Mirabet is a tenured professor in the Bachelor's Degree in Advertising and Public Relations program at the University of Girona. She holds a degree in Information Sciences, a Master's degree in Communication Management, and a Doctorate in Audiovisual Communication and Advertising from the Autonomous University of Barcelona. Her research interests include radio, podcasting, communication, and artificial intelligence in advertising. She is a researcher in the Targetslab-GREP consortium (SGR 01589) and participates in competitive projects funded by the Spanish Ministry of Science and Innovation. She is also a member of the Radio Observatory in Catalonia. Espinosa-Mirabet is also the co-principal investigator of the UdG's Wana Wake cooperation project in Kigoma, Tanzania (2022–2025). She has professional experience working as a journalist for El País and Cadena Ser, among other media outlets.

silvia.espinosam@udg.edu

Índice H: 6

Orcid ID: <https://orcid.org/0000-0002-8304-5882>

Google Scholar: <https://scholar.google.es/citations?hl=es&user=QAnOjblAAAAJ>

Ramon Martin-Guart⁵

University of Girona (UdG)

Martín-Guart is a professor in the Bachelor's Degree in Advertising and Public Relations program at the University of Girona. He holds a degree in Advertising and Public Relations from the Autonomous University of Barcelona, an MBA from ESADE, and a Doctorate in Communication from Pompeu Fabra University. He is a member of the POMAC (Power, Media, Global Cultures) research group at the University of Girona and the CAS (Communication, Advertising & Society) research group at Pompeu Fabra University. He also collaborates with the GREC research group at Ramon Llull University on a project about interactive television advertising. His research focuses on advertising effectiveness, digitalization, audience measurement, and AI in advertising. He has professional experience working at leading advertising agencies such as Ogilvy, Mindshare, Universal McCann, and Havas.

ramon.martin@udg.edu

Índice H: 7

Orcid ID: <https://orcid.org/0000-0003-2357-8844>

Google Scholar: <https://scholar.google.es/citations?hl=es&user=rFkj79wAAAAJ>

ResearchGate: <https://www.researchgate.net/profile/Ramon-Martin-Guart>

Sandro Torres de Azevedo

School of Communication, Federal University of Rio de Janeiro (ECO-UFRJ)

Sandro Torres de Azevedo is a professor at ECO-UFRJ. He is also a professor in the Graduate Program in Information and Communication in Health (PPGICS) at the Oswaldo Cruz Foundation's Institute of Scientific and Technological Communication and Information in Health (ICICT/FIOCRUZ). Torres de Azevedo holds a degree in Social Communication and Advertising from IACS/UFF, a Master's degree in Communication and Culture from PPGCOM/UFRJ, and a Ph.D. in Language Studies from PPGEL/UFF. Torres de Azevedo leads two research groups: Advertising, Health, and Society (Pessoa-UFRJ/CNPq) and Rhetoric of Consumption (ReC-UFF/CNPq). His research focuses on the relationships between advertising, health, society, semiotics, discourse, consumption, and technology.

sandro.torres@eco.ufrj.br

Índice H: 5

Orcid ID: <https://orcid.org/0000-0002-1813-2779>

Google Scholar: <https://scholar.google.es/citations?hl=es&user=eg3aMVwAAAAJ>

Jordi Serra Simón

University of Girona (UdG).

Jordi Serra Simón is a professor in the Bachelor's Degree in Advertising and Public Relations program at the University of Girona. He holds a Doctorate in Audiovisual Communication and Advertising from the Autonomous University of Barcelona. He also holds a postgraduate degree in digital marketing from the University of Girona. His main areas of research are education, digitalization, and the study of perceived quality in advertising. Professor Serra Simón directs the "Entre Subjectes" lecture series, which features presentations by leading professionals in marketing and advertising. Additionally, he has professional experience managing inbound marketing and SEO projects.

jordi.serras@udg.edu

Índice H: 1

Orcid ID: <https://orcid.org/0000-0001-9047-1516>

Google Scholar: <https://scholar.google.es/citations?hl=es&user=cmTvayUAAAAJ>

⁵Ramon Martin-Guart is the co-author in charge of correspondence.



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