VISUAL REVIEW | Vol. 8, No. 8, 2026 | ISSN 2695-9631

International Visual Culture Review / Revista Internacional de Cultura Visual

https://doi.org/10.62161/revvisual.v18.6501

ADOPTION AND PERCEPTION OF ARTIFICIAL INTELLIGENCE IN ECUADORIAN BROADCASTING

Analysis of benefits, challenges, and professional training needs in the audiovisual sector

HERNÁN YAGUANA
hayaguana@utpl.edu.ec
JUAN PABLO ARROBO-AGILA
parrobo1@utpl.edu.ec
LOURDES QUEZADA
lkquezada@utpl.edu.ec
Universidad Técnica Particular de Loja, Ecuador

KEYWORDS

Artificial intelligence
Broadcasting
Technology adoption
Barriers
Training
Technology perception
Content automation

ABSTRACT

This research examines the adoption of artificial intelligence in Ecuadorian broadcasting through surveys of 100 broadcasters. The results show limited initial adoption, with the main barriers being high costs, poor infrastructure, and lack of awareness of the benefits. The perception is mostly neutral or negative, raising concerns about job losses. Although there is interest in training, more than half lack the time and resources. Applications are concentrated in content generation and automation, while audio and audience analysis are less explored. It is recommended to design accessible training programs, demonstrate the tangible benefits of AI, and create collaborative spaces to facilitate effective adoption in the sector.

RECIBIDO: 02/ 08 / 2026
ACEPTADO: 01/ 11 / 2026

1. From broadcasting to AI

In 1962, Marshall McLuhan predicted an evolution of society towards the "global village": a space in which society would be deeply interconnected thanks to information and communication technologies (ICTs) (McLuhan & Powers, 1995). With the advent of the Internet, this vision became a reality, revolutionising the way in which communication developed worldwide.

The adoption of the Internet and ICTs by the public was relatively rapid compared to other technologies of the past, such as the printing press, which took more than five hundred years to reach the entire world, or the telegraph, which took approximately fifty years.

2020 became a testing year, where the digital evolution of traditional media was consolidated, which were forced into digitalisation due to the social isolation promoted to combat COVID-19 contagions (Solórzano Zambrano et al., 2024). Two years later, a second challenge arrived: the popularisation of Artificial Intelligence.

The evolution of artificial intelligence in media began in the 1990s with experiments such as the virtual singer 'Adam' in South Korea and the weather forecasting system 'Paul' in the US, although its use in radio came to prominence in 2019 when Slovak broadcaster Europa 2 introduced 'Eva', an AI-generated news presenter. From 2023, AI had a greater impact with the launch of RadioGPT, which combines GPT-3 technology with the TopicPulse system to automate the creation of radio content (Furtáková & Janáčková, 2023).

The launch of ChatGPT by OpenAI in November 2022 (Edwards, 2023) marked a significant milestone in technological adoption, rapidly popularising artificial intelligence (AI) tools for a wide range of activities, from writing and image generation to music production (Loreto & Pérez, 2024). This massive and abrupt adoption of AI has been unprecedented, setting a new 'peak' in the technological development of this generation.

Kai-Fu Lee (2018) describes four waves of artificial intelligence (AI) adoption that are transforming industries such as media and entertainment. The first wave is the integration of AI into the internet, where massive data enables personalised experiences; the second is adoption in business, optimising operations and automating processes. The third wave, perception, introduces technologies that interpret sensory data, such as voice recognition and automatic transcription, and the fourth wave, full automation, involves autonomous systems capable of operating without human intervention.

Artificial intelligence has transformed the development of almost all human activities related to automatic tasks and those requiring the analysis of large volumes of information. Artificial Intelligence aims to develop human characteristics such as speech, vision, reasoning, planning and creativity, and in itself has some advantages over human intelligence, such as being easily scalable, it is much more consistent, the rules that define its interpretations minimise errors (Murgai, 2018, p. 259). Although AI cannot replace human wisdom and creativity, it can act as a tool to enhance and complement human capabilities, making content creation more efficient and successful (Harliantara, 2024).

In the field of communication, the influence of AI can be observed in activities ranging from content creation, real-time analytics, to the personalisation of the user experience, minimising costs and time, increasing efficiency, resources and innovation (Rostamian & Kamreh, 2024, pp. 21-22) and can be defined as tools that through data and algorithms can perform actions that require human intelligence, and in the case of the media, through formulas and algorithms can organise information and convert it into coherent content in very short periods of time (Yaguana-Romero et al., 2022, p. 13), 2022, p. 13).

Nowadays, AI tools have been rapidly incorporated into the media to keep up with the competition in a world where innovation is constantly needed. However, the beginning of the use of these tools in content generation dates back to before the AI boom in 2022. Some examples of this early integration are, for example, Quakebot from the Los Angeles Times (2014), Wordsmith from the Associated Press (2014) or Heliograph from The Washington Post among others (Ufarte & Manfredi, 2019, p. 216).

The adoption of AI in media content creation rooms is irrevocable. Munoriyarwa (2023) points out that there are three levels of integration in the media depending on the automation of the news production process (research, production and dissemination). These levels are:

1. Holistic appropriation of AI: Most news production functions have been delegated to AI with limited roles for journalists.
2. Technological appropriation: AI is used in news gathering, but editing and writing is still done by humans.
3. Partial appropriation: AI is used for specific functions at different levels of the news production process, but most of it is still done by humans.

One could even talk about a fourth level, in which there is a total substitution of direct human intervention, where machines go from being a support resource to those in charge of carrying out the task, a 'journalism without human journalists' (Túñez-López et al., 2019, p. 1412), but this is used in specific areas of journalism such as financial, sports or meteorological journalism.

The commonality between these three types of journalism is that they are powered by structured data that allows them to generate reports, summaries and forecasts automatically and in real time. These tools improve efficiency and reduce costs by providing accurate and rapid information. However, they raise challenges regarding the role of the journalist, the quality of content and the deshumanisation of information (Peña-Fernández et al., 2023).

One of the main challenges is the threat to editorial independence, as AI technologies can automate tasks that have traditionally been managed by journalists and editors, posing the risk that editorial decisions could be influenced by algorithms developed by external technology companies. In addition, there is concern about excessive dependence on technological platforms, which could limit the media's ability to maintain control over their creative and editorial processes, compromising their autonomy and information quality (Sánchez Esparza et al., 2024).

Radio stations face modern challenges with competition from digital streaming services, podcasts and on-demand content. To stay relevant and profitable, radio needs to innovate, and artificial intelligence (AI) offers a solution. AI streamlines operations, reduces costs and improves audience engagement by automating tasks such as content scheduling, ad placement and news production. Tools such as voice recognition, predictive analytics and virtual presenters allow radio stations to personalise content, improve advertising strategies and scale their operations efficiently. As radio expands into the digital world, AI can manage social media, strengthen online presence and help stations tap into new revenue streams, making AI an important tool for the future of broadcasting (Furtáková & Janáčková, 2023).

Other uses that have been identified for AI in radio include identifying, tracking and predicting topics of public interest on social networks, generating personalised content, analysing large datasets and developing gender studies. These technologies are also used to detect fake news and combat misinformation, as well as to improve accessibility through automatic subtitling and translation. AI can also enhance the value of archival content through the automatic generation of metadata based on image and sound analysis (Fieiras-Ceide et al., 2025).

In the last two decades, radio has ceased to have a monopoly on audio content, entering into a process of digital convergence. Traditional radio now coexists and competes with new digital platforms such as podcasts, online radio and content aggregators, forming part of a post-broadcasting ecosystem. This new ecosystem involves technological integration that includes the use of artificial intelligence (AI), allowing broadcasters to adapt their production and distribution more efficiently through automating tasks such as content creation, editing and personalisation for different audiences (Avilés Rodilla & Venier, 2023)

In the case of Ecuadorian radio stations, this work shows that the adoption of AI is still at the third level: partial appropriation, where AI is used for specific functions, but most tasks are still done by communication professionals.

According to Miroshnichenko (2018), the media industry, the military industry and the sex industry are the areas with the greatest relationship to the development of AI, as these three aspire to completely replace the human role through algorithms, however, the same author points out that machines lack the 'human touch' that can be given through more subjective parameters

such as criteria, style, creativity and serendipity as everything “new” that an AI can generate, is not spontaneous but the product of cross-referencing data.

> The application of AI technology in the field of radio and television can further release and optimize human resources, maximize the production efficiency of news editing, improve the timeliness of news reports, and assist editors to complete the report content that is difficult for manpower to quickly and comprehensively optimize thereby freeing up more labor costs to do the news that requeres deep excavation and thinking. (Jia, 2022, p. 1)

This replacement of human talent is a concern that is constantly repeated among professionals in different countries such as Spain (Sánchez-García et al., 2023) Kenya (Kioko et al., 2022) and Iran (Rostamian & Kamreh, 2024), however, these studies also highlight that human labour cannot be completely replaced, as in the case of developing regions, news generation can be affected by biases born of the information with which these algorithms have been trained, which may have been taken entirely from developed countries (Europe and North America) creating information that cannot fully capture the cultural biases of each locality.

In fact, the most common errors in AI come from the data it is fed with, so the quality of the data defines the quality of the product generated. In developing countries, the biases that are generated can lead to legal, financial, social and in many cases even political consequences, which has slowed its adoption (Stray, 2019) and has increased the importance of the figure of the journalist, perhaps no longer as a creator, but as a supervisor of content thanks to his or her criteria and knowledge of the reality where the information is developed (Sánchez-García et al., 2023).

UNESCO has developed competency frameworks on Artificial Intelligence (AI) to ensure ethical use, with the aim of preparing society to accept the changes that this technology brings. These frameworks focus on fostering a human-centred approach, promoting the ethical, responsible and safe use of AI, through the development of skills such as critical thinking, understanding the ethics of AI, system design, as well as how to harness AI without losing human agency in the process. These frameworks are essential to ensure that AI contributes positively to society and the environment, while respecting cultural diversity and human rights (UNESCO, 2024b).

Despite these efforts, due to the abrupt massification of AIs, there are still gaps in terms of moral and ethical frameworks of use, with some initiatives such as the recommendations of ethics of artificial intelligence promoted by UNESCO (2024a), but these are still at an early stage which has given rise to different questions regarding what is acceptable in terms of privacy, data collection, bias, relationship to the profession among others that are replicated in different studies globally (Apablaza y Wilches, 2024; Kioko et al., 2022; Rostamian & Kamreh, 2024; Sánchez-García et al., 2023).

Ventura (2021) states that it is necessary to appeal to the interest that the public for whom the information is intended should have in this ethical-quality binomial. “Once again, it should be remembered that it is the citizens who have the right to truthful, complete and plural information” (p. 5).

In Ecuador, the main challenges of using AI in the media are: lack of knowledge and need for training; rigor and reliability of the content generated; ethical implications and trust in the results; integration and acceptance in newsrooms (resistance to change); and economic investments for its use and accessibility options (Apablaza y Wilches, 2024), which coincide with the concerns expressed in this work by radio staff in Ecuador.

However, although there is significant mistrust, it is also necessary to highlight that there are two contradictory attributes that are very important in understanding the current process of adapting AI in communication, which are reflected in communicators around the world: fear and hope. Fear manifests itself through the feeling of loss of control, loss of professional role and loss of privacy, while hope is linked to transcendence, relief from workload and more free time (van Noort, 2024, p. 298).

Although there are debates between those who believe that AI will threaten even the conception of what we consider "work", and those who believe that there is no reason for such a

projection, given that the major problems of work and technology already existed before AI and relate to the dislocation of industry, labour outsourcing and the fragmentation of the productive process (Bustamante, 2020).

Despite everything, AI is seductive, because in the case of users, if it meets high expectations (the higher the expectations, the more satisfying it is to use), the more likely a user will continue to use it (Argan et al., 2022, p. 334). Rejecting AI is not a long-term option because, although there is reluctance on the part of journalists and media managers, its use is becoming easier and more widespread, and audiences, who are constantly changing and have a wealth of personalised content options to consume, demand immediacy. Moving away from this trend can mean a significant competitive loss.

2. Research method

The research was based on a non-experimental quantitative design, using a structured survey to collect data from broadcasters in Ecuador. This approach allowed us to quantify the level of adoption and use of artificial intelligence (AI) in the country's broadcasting sector.

The target population included all broadcasters in Ecuador. Non-probability convenience sampling was used, contacting broadcasters through national associations, professional networks and direct contacts. The final sample consisted of 100 broadcasters who responded to the survey.

A structured questionnaire was designed using Google Forms, containing closed and multiple-choice questions to assess various aspects related to AI adoption. The questionnaire included sections on:

1. Demographics data: Type of media, geographic region, size of the organisation.
2. Adoption of AI: Types of AI technologies implemented, areas of application.
3. Benefits and challenges: Perceptions about the benefits obtained, main barriers faced.
4. Attitudes towards AI: Views on the impact of AI on the future of broadcasting.

2.1. Procedure

- Questionnaire design: The questionnaire was developed in Google Forms, ensuring that all questions were clear and relevant to the research objectives.
- Survey distribution: The survey was distributed electronically via email and social media to contacts in broadcasters' associations and professional networks.
- Data collection: Data were collected over a four-week period. Periodic reminders were sent to increase the response rate.
- Data analysis: The data collected were analysed using the Python descriptive statistical analysis tool Pandas, including frequencies, percentages and measures of central tendency.

2.2. Research objectives and hypotheses

General:

To assess the level of adoption and use of artificial intelligence technologies by broadcasters in Ecuador.

Specific:

- To identify the types of artificial intelligence technologies most commonly used by broadcasters.
- To analyse the perceived benefits of implementing AI in broadcasting processes.
- To examine the challenges and barriers faced by broadcasters when implementing AI technologies.

Hypothesis 1: The adoption of artificial intelligence technologies by broadcasters in Ecuador is at an incipient stage, with a low proportion of widespread adoption.

Hypothesis 2: Broadcasters who have implemented artificial intelligence technologies perceive an increase in operational efficiency and content quality.

Hypothesis 3: There are significant barriers to AI adoption in broadcasting, including high costs, lack of technical knowledge and resistance to change.

3. Results

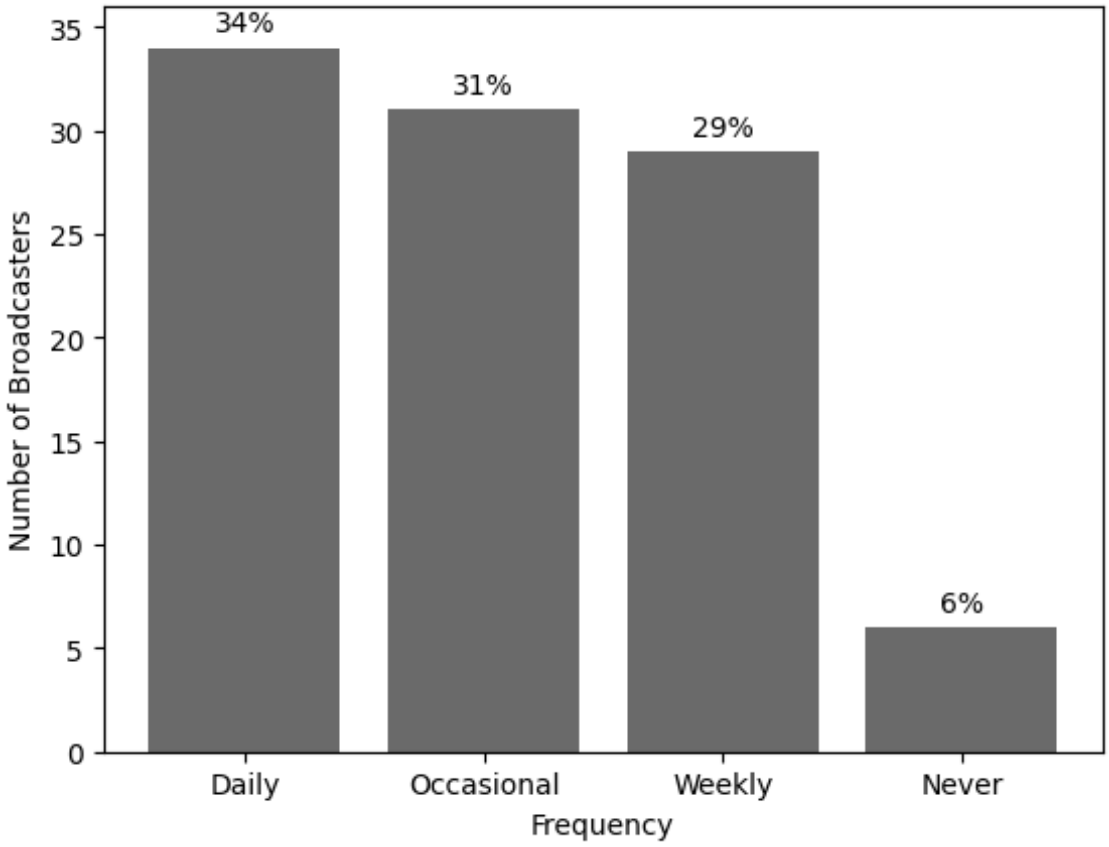
3.1. Frequency of AI use in programming

Figure 1 shows the distribution of the frequency with which broadcasters in Ecuador use artificial intelligence in their programming. The detailed results are as follows:

- Daily (34%): Daily use of AI suggests that a third of broadcasters have substantially integrated these technologies into their daily operations. This group has probably recognised the operational and efficiency benefits that AI can offer, and have overcome initial barriers to adoption.
- Occasional (31%): Occasional use, representing almost a third of the sample, indicates that these broadcasters are in an exploratory phase or partial use of AI. They may be using AI for specific tasks or at times of ad hoc need, reflecting a degree of uncertainty or limitations in the wider implementation.
- Weekly (29%): Weekly use of AI shows an intermediate level of adoption. These broadcasters have probably identified areas where AI can be beneficial, but have not yet achieved full integration into their daily routines.
- Never (6%): The small fraction that does not use AI at all suggests the existence of significant barriers, such as high costs, lack of technical knowledge, or resistance to change.

Analysis of the frequency of AI usage reveals an adoption curve that follows a logical pattern of technology integration. Daily and weekly adoption suggests that there is a growing recognition of the benefits of AI, although there are still significant challenges preventing wider and consistent adoption. To improve adoption, it is critical to address these barriers through training programmes, demonstrations of success stories and financial or technical support.

Figure 1. Frequency of use of AI in radio programming



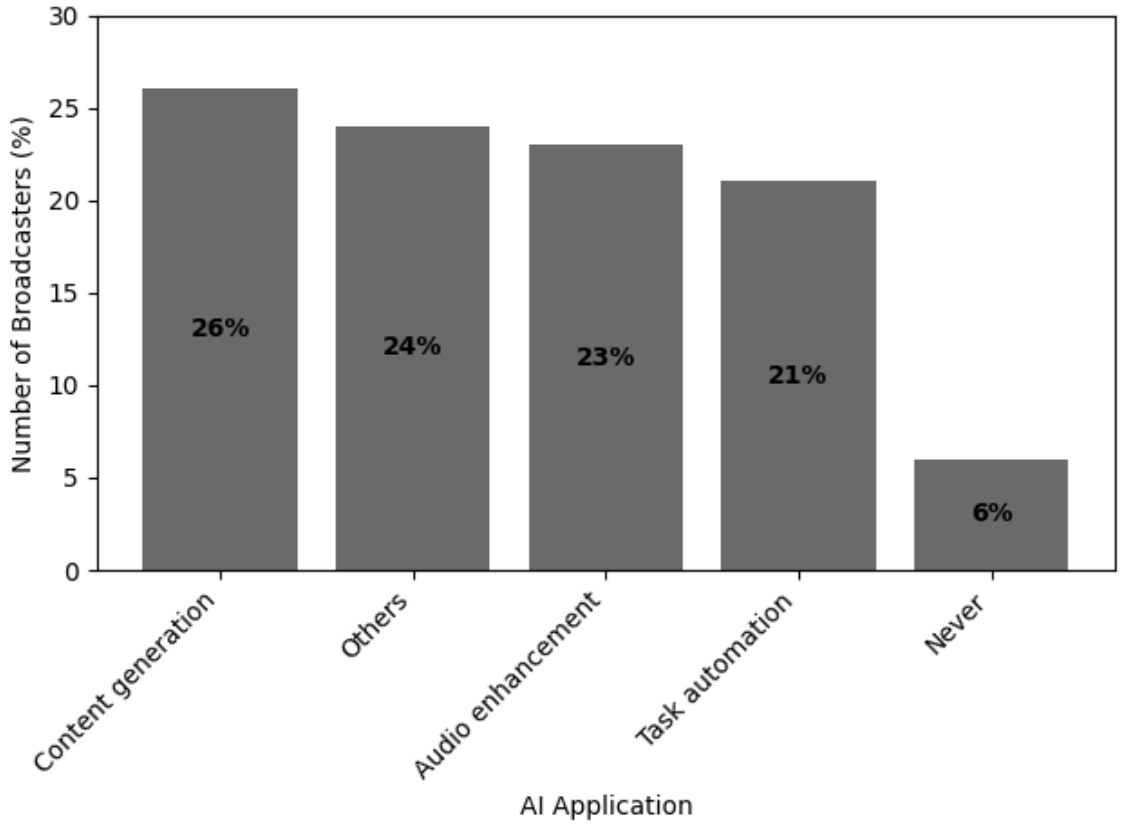
Own elaboration, 2026

3.2. Main applications of AI

Figure 2 shows the main applications of AI identified by broadcasters in Ecuador. The results are as follows:

- Content generation (26%): Content generation is the most common application, indicating that broadcasters see significant value in AI's ability to produce creative and relevant material. This can include the creation of articles, scripts, and other content formats that enrich the broadcast offering.
- Other (24%): The 'Other' category suggests a diversity of applications that broadcasters are exploring, which may include audience analysis, content personalisation, and other technological innovations.
- Audio enhancement (23%): Audio enhancement is less adopted but relevant, reflecting the use of AI to improve the technical quality of broadcasts, such as noise reduction, sound optimisation, and automated mixing.
- Task automation (21%): Task automation shows that broadcasters are using AI to improve operational efficiency, reducing manual workload and allowing employees to focus on more strategic tasks.
- Never (6%): A small percentage did not specify applications of AI, reflecting a lack of adoption or recognition of its potential uses.

Figure 2. Where AI is applied in broadcasting



Own elaboration, 2026

The diversity in AI applications shows a wide range of opportunities that broadcasters are exploring. The prevalence of content generation and task automation suggests that these areas are seen as the most beneficial in terms of return on investment and operational efficiency. However, the significant presence of other applications indicates an expanding field with much potential. To encourage wider adoption, initiatives should focus on demonstrating the specific benefits of each application and provide technical and educational support for effective implementation.

Compared to other media sectors, such as print and television, where AI has proven to be effective in optimising processes and creating automated content, the broadcasting sector in Ecuador is at an early stage of adoption. However, the positive experiences in these sectors can serve as a model for radio, showing that the benefits of AI far outweigh the initial costs and concerns related to its implementation.

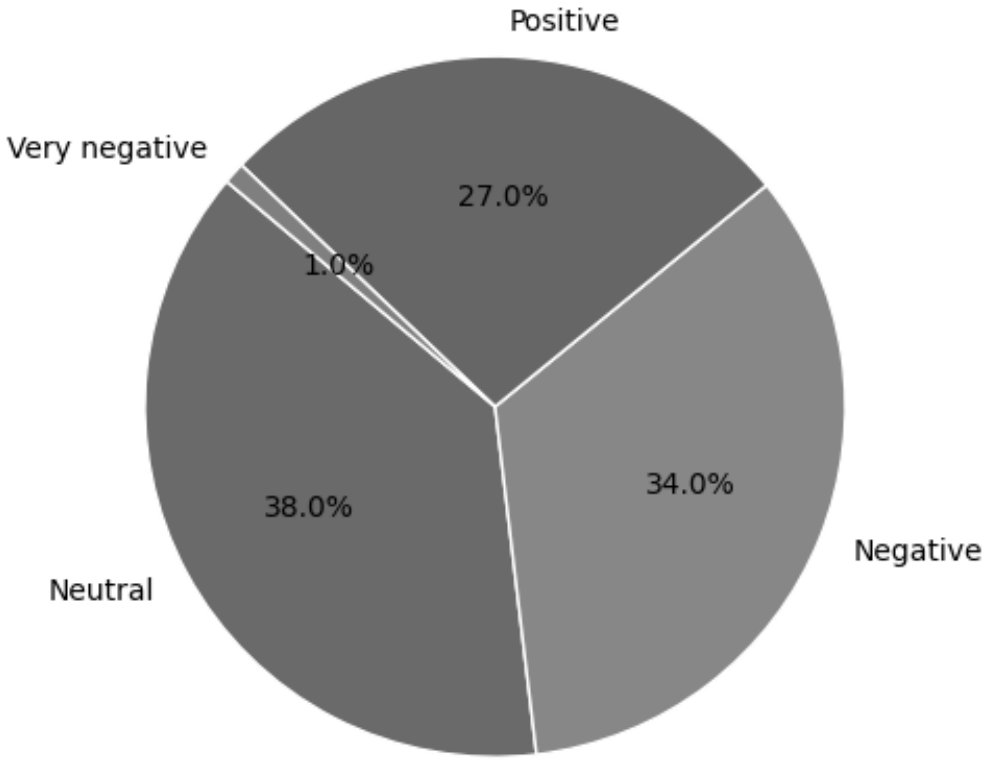
3.3. Percepción sobre el impacto de la IA

Figure 3 illustrates the perception of the impact of broadcasters in Ecuador. The results are as follows:

- Neutral (38%): The majority of broadcasters have a neutral perception of the impact of AI. This may indicate that, while they recognise certain benefits, they also see limitations or have not observed significant changes in their operations.
- Negative (34%): A considerable negative perception suggests that there are concerns about possible adverse effects of AI, such as loss of employment, high cost of implementation, or technical problems that may arise.
- Positive (27%): A smaller proportion of broadcasters have a positive view, highlighting the benefits they have experienced, such as improvements in efficiency, quality of content, and operational processes.
- Negative (1%): A tiny fraction with an additional negative perception, which reinforces the existence of challenges and resistance.

The predominantly neutral or negative perception indicates that there is still much work to be done to change the narrative around AI in broadcasting. It is crucial to identify and address the concerns that generate these perceptions by providing clear evidence of the benefits, sharing success stories and creating a supportive environment for AI adoption. Initiatives should include positive case studies, training workshops, and technical advice to help broadcasters understand and leverage the benefits of AI.

Figure 3. What is the perception of the impact of AI?

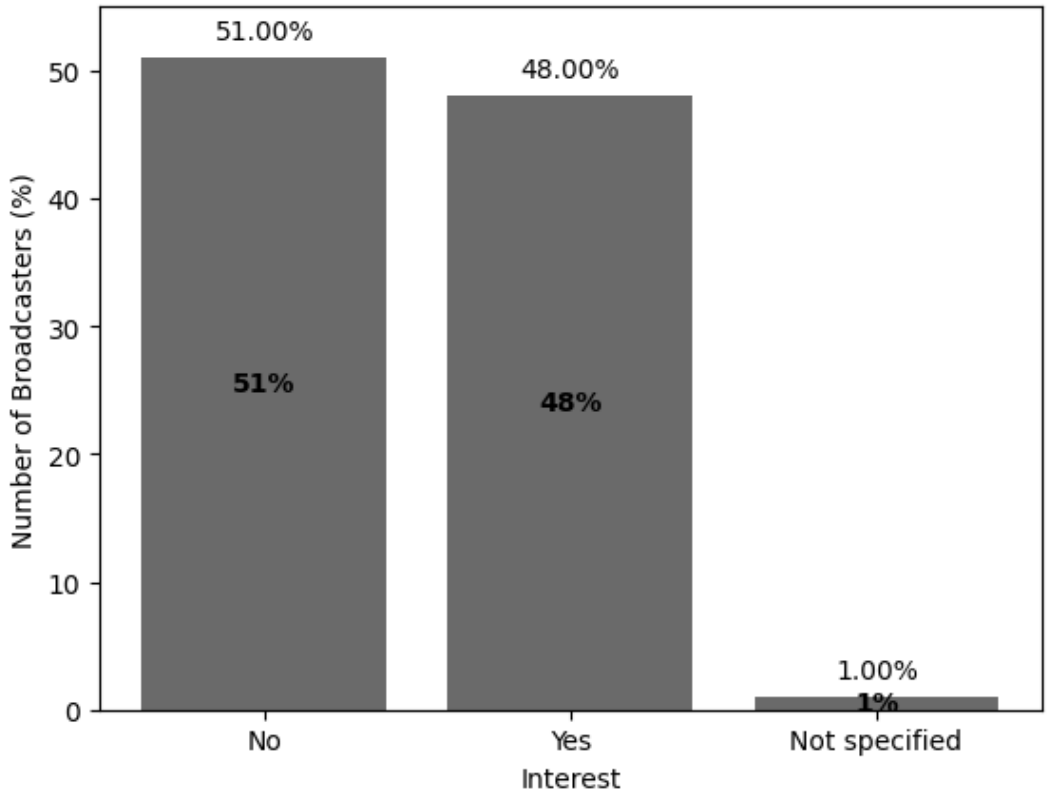


Own elaboration, 2026

While AI is perceived as a threat to employment in the broadcasting sector, it can also create new job opportunities, especially in areas such as data management and interactive digital content creation. Rather than completely replacing workers, AI can complement their roles, allowing professionals to focus on more creative and strategic tasks.

3.4. Training interest

Figure 4. AI training for broadcasters



Own elaboration, 2026

Yes (48%): Almost half of the broadcasters show interest in training, indicating a willingness to learn and adapt to new technologies. This is a positive sign, as it suggests an openness to change and continuous improvement.

No (51%): A slightly higher proportion show no interest, which could be due to various barriers such as lack of time, resources, or a perception that AI is not relevant to their current operations.

no (1%): A minimal fraction with specific disinterest.

The considerable interest in training reflects a clear opportunity to implement educational programmes on AI. However, the disinterest of more than half of broadcasters indicates that there are barriers that need to be overcome. These may include the perception of AI as complex or unnecessary, lack of resources for training, or fear of change. To encourage a major adoption, it is essential to design accessible and relevant training programmes that address these barriers and clearly demonstrate the practical benefits of AI in broadcasting.

On the issue of economic barriers, it is important to note that the high costs identified as a barrier to AI adoption in the broadcasting sector could be mitigated through technology subsidy policies or strategic alliances between local broadcasters. measures would allow smaller broadcasters to access advanced technologies without overburdening their budgets, enabling wider and more equitable adoption. In this way, the technological gap could be reduced and a positive impact could be generated on the digitalisation of the sector.

4. Discussion of the results

The incipient adoption of artificial intelligence in the Ecuadorian radio sector reflects a pattern of technological integration characteristic of the Latin American context, where structural limitations shape the pace of digital transformation. The data reveals a fragmented distribution in use frequency: while 34% of broadcasters have incorporated these technologies as routine,

31% have occasional use, indicating experimentation without institutional commitment. This heterogeneity suggests that the mostly Ecuadorian radios are in the third level of technological appropriation described by Munoriyarwa et at. (2023), where AI complements specific functions without replacing fundamental journalistic processes. The gap between early adopters and technological laggards can be attributed to different organizational factors: financial capacity, audience size, geographic location, and institutional culture toward innovation (González, 2024).

The predominant applications identified, content generation (26%) and task automation (21%), reveal a pragmatic focus on operational efficiency rather than creative experimentation. This prioritization is consistent with the competitive pressures faced by traditional radio stations versus digital platforms, podcasts, and streaming services (Avilés Rodilla and Venture, 2021). Broadcasters seek to optimize limited resources by using tools that reduce production time and expand capabilities without increasing staffing levels. The lower adoption of audio enhancements (23%) and audience analysis is a strategic paradox, considering that these applications could offer differentiated competitive advantages in content personalization and in-depth knowledge of listener behavior (Fieiras-Ceide et al., 2025). This underutilization suggests a lack of awareness of AI analytical potential or a lack of technical skills to implement more sophisticated solutions (Rostamian & Kamreh, 2024).

The mostly neutral (38%) or negative (34%) perception of the impact of AI contrasts significantly with the optimistic technological discourse prevalent in developed media ecosystems. This mistrust reflects legitimate tensions linked to the Ecuadorian labor context: fear of professional displacement, uncertainty about returns on investment, and previous experiences of frustrated technological implementations (van Noort, 2024). Concerns about job losses resonate particularly strongly in a sector where job stability is already precarious and union structures are weak (Bustamante, 2020). The negative perception can also be interpreted as cultural resistance to technologies perceived as external, developed in Anglo-Saxon contexts with different business logics (Kioko et al., 2022; Sánchez-García et al., 2023). Only 27% with a positive view represent the segment that has experienced tangible benefits: reduction of repetitive tasks, acceleration of editorial processes, or improvement in the technical quality of the final product (Jia, 2022; Harliantara, 2024).

The economic barriers identified go beyond a simple lack of financial resources to acquire licenses or technological equipment. They represent systemic limitations of the Ecuadorian media ecosystem: dependence on traditional advertising models in decline, absence of public policies for sectoral technological development, and an infrastructural digital divide between urban and rural regions (Apablaza and Wilches, 2024). Implementation costs include not only initial investment in software and hardware, but also recurring expenses for maintenance, updates, ongoing training, and specialized technical support. For small and medium-sized broadcasters, these investments are prohibitive without specific financing schemes, strategic alliances, or technology grant programs that democratize access (Solórzano Zambrano et al., 2024). The lack of basic technological infrastructure, stable connectivity, adequate computer equipment, and cloud storage is an unresolved prerequisite in large areas of the country (Avilés Rodilla & Venier, 2023).

The divided opinion on training (48% in favor, 51% against) reveals structural tensions in the Ecuadorian radio sector regarding continuing professional development. Those who express interest recognize the inevitability of digital transformation and seek tools to maintain professional relevance in a changing labor market (UNESCO, 2024b). The majority's lack of interest, however, reflects multidimensional barriers: pressure from intensive work routines that make it difficult to devote time to training, lack of institutional incentives for professional development, and the perception that the skills acquired will not translate into salary increases or job stability (Sánchez-García et al., 2023). It also highlights a pedagogical problem: the AI training available to journalists often adopts technocentric approaches that are disconnected from the operational realities of local radio stations, favoring sophisticated tools over solutions that can be applied with limited resources (Apablaza & Wilches, 2024). Training initiatives must be contextualized to the specific needs of the Ecuadorian radio sector, considering its budgetary and time constraints.

The diversity in use frequency and applications reflects a stratified Ecuadorian radio ecosystem, where stations with radically different technological capabilities and resources coexist. Metropolitan stations with national reach, with corporate structures, and massive audiences can invest in integrated AI platforms that optimize production, multichannel distribution, and predictive trend analysis (Furtáková & Janáčková, 2023). Community and regional radio stations, with minimal budgets and small teams, have limited access to free text generation tools and are unable to implement more complex solutions. This fragmentation reproduces and amplifies pre-existing inequalities in the media field, where technological advantages translate into cumulative competitive advantages: better content attracts more audiences, generates more

advertising revenue, and allows for greater technological investment (Avilés Rodilla & Venier, 2023). Breaking this cycle requires interventions that level the playing field in terms of technological access.

The documented resistance to change transcends individualistic psychological explanations, rooted in organizational dynamics and institutional trajectories of broadcasters. Many Ecuadorian radio stations operate with traditional hierarchical structures in which technological decisions are concentrated in the hands of managers with limited training in digital innovation, whereas the professionals who would operate these tools daily do not have a voice in decision-making processes (Apablaza & Wilches, 2024). The absence of an organizational culture oriented toward experimentation and continuous learning turns every technological implementation into a traumatic event rather than an iterative process of improvement (Bustamante, 2020). In addition, previous negative experiences with technologies that promised to revolutionize the sector but proved inadequate or unsustainable generate well-founded skepticism (Stray, 2019). Overcoming this resistance requires comprehensive organizational strategies that include committed leadership, transparent communication about benefits and challenges, active team participation in implementation design, and celebration of incremental progress (Peña-Fernández et al., 2023).

5. Conclusions

Research has revealed that the adoption of artificial intelligence (AI) technologies among broadcasters in Ecuador is at an early stage, with limited integration into the daily operations of broadcasters. This finding confirms the hypothesis that the broadcasting sector has not yet significantly incorporated AI into its processes. The barriers identified include high implementation costs, technical complexity and lack of resources dedicated to training and technology upgrades. In addition, there is a latent concern about the possible displacement of employees due to task automation. Although some initial benefits are perceived, such as improved operational efficiency and quality of content generated, these are not sufficient to motivate wider adoption. to change and lack of adequate technical knowledge are important obstacles that need to be addressed through supportive policies and targeted training programmes. These should be designed to clearly and tangibly demonstrate the potential benefits of AI, and thus facilitate its integration into the sector.

Perceptions about the impact of AI among broadcasters in Ecuador are mostly neutral or negative, validating the hypothesis that there are significant barriers to adoption. The results indicate that 38% of respondents have a neutral perception, while 34% have a negative perception, with only 27% viewing AI positively. Negative perceptions relate to concerns about job loss, high implementation costs and technical problems. This mixed view prevents many broadcasters from investing in AI technologies, as the benefits are not evident enough to overcome perceived barriers. Concerns about complexity and lack of technical knowledge also contribute to this perception. To change this narrative, it is essential to tangibly demonstrate the benefits of AI through case studies, testimonials and practical demonstrations that show how AI can improve efficiency and content quality without necessarily replacing existing employees.

Despite the mixed perceptions, there is considerable interest in AI training, suggesting an openness to change among a significant proportion of broadcasters. However, this interest is not universal, with 51% of respondents showing no interest in training, mainly due to lack of time and resources, as well as a perception that AI is not relevant to their current operations. This finding confirms the hypothesis that there are significant barriers to AI adoption, including lack of technical knowledge and resistance to change. To overcome these barriers, it is essential to design accessible and relevant training programmes that fit the broadcasters' time and resource constraints. Furthermore, it is crucial to demonstrate how AI can be effectively integrated into their daily operations, providing tangible benefits that justify the investment in time and resources needed for training.

The diversity in AI applications and frequency of use among broadcasters in Ecuador reflects a mixed picture, with a significant fraction of broadcasters using these technologies on a daily or weekly basis, while others do not use them at all. The most common applications include content generation and task automation, which are seen as beneficial in terms of return on investment and operational efficiency. However, audio enhancement and audience analysis are areas where AI implementation is still limited. This pattern of adoption confirms the hypothesis that AI can

offer significant benefits, but there are barriers to its wider adoption. To encourage wider adoption, it is essential to address these barriers by demonstrating specific benefits, providing technical and educational support, and creating a collaborative environment that allows broadcasters to share knowledge and experience. This could include creating strategic alliances with technology providers and promoting policies that incentivise AI adoption.

References

Apablaza-Campos, A. & Wilches Tinjacá, J.A. (Eds.) (2024) Inteligencia artificial para la generación de contenidos en Iberoamérica: experiencias editoriales en medios de comunicación. Data Factory, Institución Universitaria Politécnico Grancolombiano & Iniciación Científica. https://doi.org/10.15765/librosic.v5i60

Argan, M., Dinç, H., Kaya, S. y Tokay, M. (2023). Inteligencia Artificial (IA) en Publicidad: Comprensión y Esquematización del Comportamiento de los Usuarios de Redes Sociales. ADCAIJ: Advances in Distributed Computing and Artificial Intelligence Journal, 11 (3), 331–348. https://doi.org/10.14201/adcaij.28331

Avilés Rodilla, C., & Venier, E. (2024). Rádio e inteligência artificial: uma sistematização e caracterização das aplicações e dos desempenhos. Revista Latinoamericana De Ciencias De La Comunicación, 22(44). https://doi.org/10.55738/alaic.v22i44.1042

Bustamante, M. (2020). Un robot en la redacción: el impacto de la automatización en las rutinas de trabajo de los periodistas. Los casos de TN, Clarín y Olé. https://n9.cl/zoftg

Edwards, B. (2023, noviembre 30). Año uno de ChatGPT: Así ha cambiado el mundo desde la llegada del chatbot de OpenAI. WIRED. https://n9.cl/0vkue

González Gutiérrez, E. A. (2024). La Convergencia Digital en la Radio Pública y Universitaria en México. Ciencia Latina Revista Científica Multidisciplinar, 8(1), 6972-6989. https://doi.org/10.37811/cl_rcm.v8i1.10054

Fieiras-Ceide, C; Túñez-López, J y Fernández-Lombao, T. (2025). De la frecuencia al algoritmo: implementación de IA en las emisoras de radio de España [From frequency to algorithm: Implementing AI in Spanish radio stations]. Revista Latina de Comunicación Social, 83, 1-22. https://www.doi.org/10.4185/RLCS-2025-2457

Furtáková, L., & Janáčková, Ľ. (2023). AI in radio: The game changer you did not hear coming. En M. Prostináková, M. Martovič, & M. Solík (Eds.), Marketing Identity: AI - The Future of Today (p. 95). UCMFMK. https://n9.cl/5vho5

Harliantara. (2024). Artificial Intelligent Opportunities for Creativity and Innovation of Future Radio Translators. Syntax Transformation Journal, 5(6), 851-861. https://jurnal.syntaxtransformation.co.id/index.php/jst/index

Jia, Z. (2022). Analysis methods for the planning and dissemination mode of radio and television assisted by artificial intelligence technology. Mathematical Problems in Engineering, 2022, Article ID 7538692, 1–11. https://doi.org/10.1155/2022/7538692

Kioko, PM, Booker, N., Chege, N. y Kimweli, P. (2022). La adopción de la inteligencia artificial en las redacciones de Kenia: un estudio de múltiples casos. Revista Científica Europea, ESJ , 18 (22), 278. https://doi.org/10.19044/esj.2022.v18n22p278

Lee, K.-F. (2020). Superpotencias de la inteligencia artificial: China, Silicon Valley y el nuevo orden mundial (M. Vaquero Granados, Trad.). Deusto.

Loreto-Amoretti, M., Pérez Valero, M., & YUYAY, L. (2024). Artificial intelligence for music production (IAMP): Pedagogy and teaching through innovative technological strategies. Estrategias, Metodologías & Didácticas, 3(1), 66-87. https://dialnet.unirioja.es/servlet/articulo?codigo=9526635

McLuhan, M., & Powers, B. (1995). La Aldea Global (3.a ed.). Gedisa Editorial.

Miroshnichenko, A. (2018). AI to Bypass Creativity. Will Robots Replace Journalists? (The Answer Is “Yes”). Information, 9(7), 183. https://doi.org/10.3390/info9070183

Munoriyarwa, A., Chiumbu, S. y Motsaathebe, G. (2023). Prácticas de inteligencia artificial en la producción informativa cotidiana: El caso de las redacciones tradicionales de Sudáfrica.

Journalism Practice, 17 (7), 1374–1392. https://doi.org/10.1080/17512786.2021.1984976

Murgai, A. (2018). Transforming digital marketing with artificial intelligence. International Journal of Latest Technology in Engineering, Management & Applied Science, 7(4), 259-262. https://www.ijltemas.in

Peña-Fernández, S., Meso-Ayerdi, K., Larrondo-Ureta, A., & Dí-az-Noci, J. (2023). Without journalists, there is no journalism: The social dimension of generative artificial intelligence in the media. Profesional de la información, 32(2), Article 2. https://doi.org/10.3145/epi.2023.mar.27

Rostamian, S., & Kamreh, M. M. (2024). AI in Broadcast Media Management: Opportunities and Challenges. AI and Tech in Behavioral and Social Sciences, 2(3), 21-28. https://doi.org/10.61838/kman.aitech.2.3.3

Sánchez Esparza, M., Palella Stracuzzi, S., & Fernández Fernández, Ángel. (2024). Implementación de herramientas de Inteligencia Artificial en la detección de vídeos falsos y deepfake: Caso Radio Televisión Española (RTVE). REVISIÓN VISUAL. Revista Internacional de Cultura Visual Revista Internacional De Cultura Visual, 16 (4), 213–225. https://doi.org/10.62161/revvisual.v16.5303. https://doi.org/10.62161/revvisual.v16.5303

Sánchez-García, P., Merayo-Álvarez, N., Calvo-Barbero, C., & Diez-Gracia, A. (2023). Spanish technological development of artificial intelligence applied to journalism: Companies and tools for documentation, production and distribution of information. Profesional de la información, 32(2), 1-17.

Solórzano Zambrano, AA, Vélez Álava, N., & Zambrano Santos Zita, L. del R. (2024). Medios tradicionales y convergencia digital. Universidad Ciencia Y Tecnología, 28 (123), 72-81. https://doi.org/10.47460/uct.v28i123.806

Stray, J. (2019). Making Artificial Intelligence Work for Investigative Journalism. Digital Journalism, 7(8), 1076-1097. https://doi.org/10.1080/21670811.2019.1630289

Túñez-López, M., Toural-Bran, C., & Valdiviezo-Abad, C. (2019). Automatización, bots y algoritmos en la redacción de noticias. Impacto y calidad del periodismo artificial. Revista Latina De Comunicación Social, (74), 1411–1433. https://doi.org/10.4185/RLCS-2019-1391

Ufarte Ruiz, M. J., & Manfredi Sánchez, J. L. (2019). Algoritmos y bots aplicados al periodismo. El caso de Narrativa Inteligencia Artificial: estructura, producción y calidad informativa. Doxa Comunicación. Revista Interdisciplinar De Estudios De Comunicación Y Ciencias Sociales, 29, 213-233. https://doi.org/10.31921/doxacom.n29a11

UNESCO. (2024a). Ética de la inteligencia artificial. Inteligencia Artificial. https://www.unesco.org/es/artificial-intelligence/recommendation-ethics

UNESCO. (2024b, septiembre 16). Qué debe saber acerca de los nuevos marcos de competencias en materia de IA de la UNESCO para estudiantes y docentes. UNESCO. https://www.unesco.org/es/articles/que-debe-saber-acerca-de-los-nuevos-marcos-de-competencias-en-materia-de-ia-de-la-unesco-para

Van Noort, C. (2024). On the use of pride, hope and fear in China's international artificial intelligence narratives on CGTN. AI & Society, 39, 295-307. https://doi.org/10.1007/s00146-022-01393-3

Ventura, P. (2021). Algoritmos en las redacciones: Retos y recomendaciones para dotar a la inteligencia artificial de los valores éticos del periodismo. Fundación Consell de la información de Catalunia. Barcelona-España.

Yaguana-Romero, H., Arrobo-Agila, J., & Jaramillo, A. (2022). La inteligencia artificial en la narrativa sonora. Estudio de caso. Anàlisi, 66, 9-23. https://doi.org/10.5565/rev/analisi.3476