



REVIEW OF ARTIFICIAL INTELLIGENCE IN EDUCATION

DOI: <https://doi.org/10.37497/rev.artif.intell.educ.v7ii.1361>



Received: 15 June 2026

Revised: 27 July 2026

Accepted: 13 August 2026

e-ISSN: 2965-4688

Corresponding Author: Thiago Silveira Ramalho – Email: tsramalho@usp.br

How to cite this article: Pereira, S. A., de Sousa Pinto, B. C., Marroco, D. de J., de Matos de Sousa, E. A., & Ramalho, T. S. (2026). Impact of Artificial Intelligence in the Area of Journalistic Communication: The Case of the Band Vale Group. *Review of Artificial Intelligence in Education*, 7(i), e01361. <https://doi.org/10.37497/rev.artif.intell.educ.v7ii.1361>

ARTICLE

IMPACT OF ARTIFICIAL INTELLIGENCE IN THE AREA OF JOURNALISTIC COMMUNICATION: THE CASE OF THE BAND VALE GROUP

Impacto da Inteligência Artificial na Área da Comunicação Jornalística: O Caso do Grupo Band Vale

Sheila Alexandra Pereira

Universidade Virtual do Estado de São Paulo (UNIVESP), São Paulo (Brazil)
Email: sheilaalexandrap@gmail.com

Bianca Camili de Sousa Pinto

Universidade Virtual do Estado de São Paulo (UNIVESP), São Paulo (Brazil)
Email: 2207128@aluno.univesp.br

Débora de Jesus Marroco

Universidade Virtual do Estado de São Paulo (UNIVESP), São Paulo (Brazil)
Email: 23224678@aluno.univesp.br

Eduarda Aparecida de Matos de Sousa

Universidade Virtual do Estado de São Paulo (UNIVESP), São Paulo (Brazil)
Email: 2204372@aluno.univesp.br

Thiago Silveira Ramalho

Universidade de São Paulo (USP), São Paulo (Brazil)
Email: tsramalho@usp.br

ABSTRACT | Objective: To analyze the impact of artificial intelligence (AI) on the journalistic communication processes of Grupo Band Vale, considering its effects on production routines, operational efficiency, editorial quality, and professional practice. **Methods:** A single-case study was conducted, focusing on the organizational and productive structure of the Band Vale Group's writing sector. Data were collected through a technical visit, two semi-structured interviews with managers, and a questionnaire completed by 12 professionals from the group's newsroom. The first interview was with the journalist and executive content editor of Grupo Band Vale, and the second, with the company's radio coordinator. **Results:** The imprecision of the algorithmic tools inherent to generative systems requires the centrality of the human factor as a quality filter and as an ethical safeguard. Half of the professionals indicated the suggestion of agendas and brainstorming as the stage in which AI is most useful, followed by transcription of audio and interviews and grammar review. Regarding the impact on agility, seven professionals stated that the tool significantly increases the speed of delivery, while five of them recognized that this gain could compromise quality. **Discussion:** The results indicated that AI acts as a catalyst for operational efficiency, although it raises critical questions about its maintenance considering journalistic ethics and professional retraining. In this way, it is concluded, in the context of the Band Vale Group, that AI does not replace human capital. However, it redefines the skills necessary for contemporary communication, requiring a balance between technological agility and human editorial discernment. **Implications for Theory and Practice:** The study provides empirical





evidence on AI adoption in regional journalism and proposes an adaptation of the TPACK model entitled *Artificial Intelligence Journalist Knowledge* (AIJK), with implications for journalism education. **Originality and Value:** The research empirically examines AI adoption at Grupo Band Vale, contributing to understanding digital transformation within a prominent Brazilian regional communication conglomerate.

Keywords | Artificial intelligence; Social communication; Technological innovation; Productive routines; Bandeirantes Communication Group. TPACK

RESUMO | Objetivo: Analisar o impacto da inteligência artificial (IA) nos processos de comunicação jornalística do Grupo Band Vale, considerando seus efeitos sobre rotinas produtivas, eficiência operacional, qualidade editorial e atuação profissional. **Métodos de pesquisa:** Foi realizado um estudo de caso único, focado na estrutura organizacional e produtiva do Grupo Band Vale. Os dados foram coletados por meio de uma visita técnica, de duas entrevistas semiestruturadas com gestores e da aplicação de um questionário respondido por 12 profissionais da Redação do grupo. A primeira entrevista foi com o jornalista e editor executivo de conteúdo do Grupo Band Vale, e a segunda, com o coordenador de rádios da empresa. **Resultados:** A imprecisão inerente às ferramentas algorítmicas dos sistemas generativos exige a centralidade do fator humano como filtro de qualidade e como salvaguarda ética. Metade dos profissionais indicou as sugestões de agenda e de brainstorming como as etapas em que a IA é mais útil, seguidas pela transcrição de áudios, entrevistas e revisão gramatical. Quanto ao impacto na agilidade, sete profissionais afirmaram que a ferramenta aumenta significativamente a velocidade de entrega, enquanto cinco reconheceram que esse ganho pode comprometer a qualidade. **Discussão:** Os resultados indicaram que a IA atua como um catalisador da eficiência operacional, embora desperte reflexões críticas sobre sua manutenção à luz da ética jornalística e da requalificação profissional. Desta forma, conclui-se, no contexto do Grupo Band Vale, que a IA não substitui o capital humano, mas redefine as competências necessárias à comunicação contemporânea, exigindo um equilíbrio entre a agilidade tecnológica e o discernimento editorial humano. **Implicações para a Teoria e a Prática:** O estudo oferece evidências sobre a adoção da IA no jornalismo regional e propõe uma adaptação do modelo TPACK denominada *Artificial Intelligence Journalist Knowledge* (AIJK), com implicações para a formação em Jornalismo. **Originalidade e Valor:** A pesquisa examina empiricamente a adoção da IA no Grupo Band Vale, contribuindo para a compreensão da transformação digital em um relevante conglomerado regional de comunicação brasileiro.

Palavras-chave | Inteligência artificial; Comunicação social; Inovação tecnológica; Rotinas produtivas; Grupo Bandeirantes de Comunicação; TPACK.

INTRODUCTION

In a context of intense digital transformation, Artificial Intelligence (AI) emerges as one of the most relevant technologies today. In the media, its use has intensified, contributing to the automation of processes, the production of content and the personalization of information. The European Commission (2021, p. 14) stresses that AI should «be as technology-neutral as possible and future-proof, taking into account rapid technological developments». Thus, the Organization for Economic Co-operation and Development (OECD) defines an AI system as «a machine-based system that can make predictions, recommendations, or decisions that influence real or virtual environments» (OECD, 2023, p. 7).

In a complementary way, the European Union (2024, p. 46) establishes that AI systems are capable of «inferring [...] results [...] indifferent organizational contexts». In the field of Administration, AI has been incorporated as a strategic tool, contributing to process optimization and supporting decision-making, especially in dynamic and data-driven organizational environments. Given this



scenario, this study is justified by the growing application of AI in work and business processes, as well as in communication, which needs to adapt to digital transformations and new market demands. In this context, agility, data analysis, and efficiency in content production become essential factors for organizational competitiveness (Perides et al., 2020).

Therefore, the objective is to analyze the impact of artificial intelligence in the communication area of the Band Vale Group. For this, investigative visits, interviews, and application of forms were carried out, based on a qualitative approach. The work contributes to academia and organizations, as it highlights the relevance in the corporate environment and the need to understand the practical impacts of these transformations on production routines, especially in the context of digital transformation and process automation (Lima et al., 2025). In this way, there is a reduction in fixed costs and an increase in margin, anticipating trends with quick responses to market changes; there is greater technical precision, and it collaborates with the work environment, avoiding wear and tear in the organizational sphere.

It is unwise to ignore that the development of communication technologies has made automated journalism possible. According to Diakopoulos (2019), the revolution promotes a type of hybridization in the outlets, as it is necessary to reconcile technological agility with editorial management. The main problem that arises from this revolution is remaining at the forefront without increasing the chances of spreading fake news, as the lack of human control can be detrimental to news content, since errors can propagate in the digital environment without human intervention. Thus, this study aims to analyze techniques capable of integrating technologies into human management.

LITERATURE REVIEW

Important ethical challenges accompany the incorporation of Artificial Intelligence into journalism. As journalism is guided by principles of social responsibility and commitment to information, the use of automated systems requires ongoing attention to the impacts on professional practice. According to Forja-Pena et al. (2024), the growing presence of algorithms in information production represents a central element for reflection on the preservation of the fundamental values of journalism. Aspects related to the authorship of automated content and the limitations of systems in interpreting specific sociocultural contexts make human supervision indispensable throughout the production flow (Thurman et al., 2017; Tsamados et al., 2020).

In the context of journalistic production, sources of information remain essential elements for the construction of news. Cascais (2001) defines the informative source as any element capable of providing relevant data for the investigation and dissemination of facts of public interest. Without sources, journalistic activity would be limited only to events witnessed directly by professionals. In this sense, Fontcuberta (1999) points out that the existence of sources sustains the very functioning of the means of communication. In addition, the relationship of trust built between journalist and source is a determining factor for the credibility of the information made available to the public (Fidalgo, 2000). By transforming events into journalistic products, communication professionals mobilize technical knowledge, narrative choices, and their own language styles,



building approaches capable of differentiating their productions from those of other outlets (Canavilhas, 2023).

Thäsler-Kordonouri *et al.* (2024) highlight that the review of content produced with automated support should prioritize greater textual clarity, simplification of excessively technical information, and construction of narratives that are more accessible to the public. This process highlights the importance of human interpretation to qualify the content produced (Martínez-Navarro, 2024). Journalistic credibility remains directly related to the ability of professionals to exercise qualified editorial judgment on content produced or supported by automated systems. According to Fernandes (2025), technology expands production possibilities, but does not replace fundamental values of journalistic practice, such as social responsibility, ethics, and critical thinking. In this scenario, professionals capable of reconciling technological mastery and creative capacity tend to develop relevant differentials in a job market increasingly driven by digital transformation (Geloneze, 2024).

Among the main challenges related to the advancement of AI in journalism is the potential for disinformation to expand. Technologies capable of generating synthetic texts, images, and audio with a high degree of realism increase the complexity of verification processes and increase the risks associated with the circulation of false content. So-called deepfakes and automated mechanisms for generating fake news represent relevant challenges to informational credibility. International cases have already shown that the inappropriate or non-transparent use of these technologies can significantly compromise the editorial reputation of the organizations involved (Barbosa & Caldas, 2025).

Diakopoulos (2019) highlights that one of the main risks associated with automation without editorial control is the possibility of errors being reproduced on a large scale before being identified and corrected. In regional journalism, this scenario can become even more sensitive due to structural limitations, such as reduced teams and limited resources for verifying information. In the case of Grupo Band Vale, which operates in a regional context marked by its own cultural characteristics, maintaining public trust requires consistent protocols for reviewing, validating, and monitoring content produced with the support of AI.

Given this scenario, the elaboration of institutional guidelines for the ethical use of AI is no longer just a normative measure and becomes a fundamental strategy for preserving editorial credibility. Laia *et al.* (2024) highlight that the main challenge of contemporary journalism is not limited to the technical mastery of digital tools, but also involves adapting mediation, verification, and knowledge-construction practices to increasingly complex informational environments. In this context, organizations that establish clear parameters about the limits of automation tend to strengthen their institutional reputation and demonstrate greater commitment to quality, transparency, and accountability in information production.

METHODOLOGY

The qualitative approach is adequate because it allows an in-depth understanding of phenomena through an interpretative and contextualized analysis. The research is characterized



as exploratory, since it seeks to expand the understanding of the use of AI in the organizational context analyzed. This classification is appropriate when there is a need for theoretical deepening on phenomena that are still little explored (Flick, 2009). The method chosen is the single case study, focused on the organizational and productive structure of the Band Vale Group, to analyze how the use of AI has changed the way of working and the company's operational gains. The case study is indicated for detailed investigations of contemporary phenomena in their real context (Yin, 2015).

Access to the research field was facilitated by one of the researchers, who works professionally at Grupo Band Vale, which enabled the obtaining of institutional authorization to carry out the study. This proximity contributed to direct contact with the sectors analyzed and to the collection of relevant information. It is noteworthy that the interviewees' participation was voluntary and formalized through the signing of the Informed Consent Form (ICF), which ensures compliance with ethical research guidelines and the awareness of those involved regarding the objective of the study.

The universe of this research is delimited to the communication ecosystem of the Band Vale Group, focusing specifically on the dynamics of production and technological integration. The study sample is composed of professionals who work in three strategic centers, selected for their direct relevance to the flow of information and innovation of the station: TV Band Vale: comprising the staff of producers of journalistic programs and interviews; FM Radios (*Stereo Vale* 103.9; *Nativa FM* 97.5; *Band Vale FM* 102.9): focusing on the observation of the interaction between virtual agents (AI) and listeners; and *Integrated Newsroom*: covering journalists and producers responsible for managing and converging the flow of news. Therefore, convenience sampling was used.

Data collection was carried out through field observation and semi-structured interviews, according to the methodological planning detailed in the monitoring matrix (Chart 2). The technical visit, held on March 17, 2026 and lasting 90 minutes, allowed initial contact with the organizational environment and enabled direct observation of work routines and interactions between professionals. During the visit, it was possible to observe the announcers' performance on the radio stations, including their interactions with listeners and the communication particularities adopted by each program, according to its target audience. A visit to the television studio was also carried out, in which technical aspects of the production were analyzed, such as lighting, camera operation, and backstage organization.

In addition, information was collected from professionals responsible for directing, image editing, and script. The professionals presented practical examples of using AI as a tool to optimize time, increase agility in content production, and reduce operating costs. About observation, it is characterized as participant observation in the case of the researcher, who works in the organization, and as non-participant observation for the other members of the group, who followed the activities without direct interference in the processes, ensuring the reliability of the data collected for later analysis (Flick, 2009).

The Band employee, based on her professional experience, elaborated the interview questions together with the group. The formulation of the questions was preceded by consultations with technical articles, ensuring the theoretical basis of the questionnaire. As qualitative collection



instruments, three semi-structured interview scripts were elaborated, with the objective of understanding, in depth, the internal processes and the impact of new technologies on the employees' routine. The form remained available for responses for 5 days, from 05/05/2026 to 05/10/2026, allowing all team members to participate in the survey voluntarily. At the end of the collection period, 12 responses were obtained, which served as the basis for the data analysis and the conclusions of this study.

The first interview was conducted on March 23, 2026, lasting 17 minutes and 40 seconds, with Cláudio Nicolini, journalist and executive content editor at Grupo Band Vale. The interviewee has more than 30 years of experience in communication, with a degree in Journalism and an MBA in Marketing and People Management, and has worked in different roles throughout his professional career, such as producer, reporter, editor, and presenter. The choice of the interviewee is justified by his strategic position in the organization, which allows him a broad view of the production processes and technological transformations in the communication environment. During the interview, technological changes in journalism and the insertion of AI in newsrooms were addressed. Nicolini pointed out that technology influences both production formats and content distribution. Regarding AI, he emphasized its role as an ethical and organizational support tool, reiterating that human review is indispensable to credibility.

Continuing, on March 24, 2026, the second interview was conducted with Eduardo Prado, popularly known as Dudu Prado, radio coordinator of Grupo Band Vale, a professional with more than 28 years of experience. Its choice is justified by its strategic position in the coordination of broadcasters and creative processes. During the dialogue, the stages of radio production integrated with AI were discussed, such as text creation and artificial voiceover. The interviewee showed that the tool optimizes time and expands possibilities, but it does not replace sensitivity or human connection with the public.

After completing this qualitative phase, the group structured a questionnaire on *Google Forms* to map the perception of the professionals of the Band Vale Group Newsroom. The elaboration of this form was based on the findings of the interviews with the managers, which allowed a broader and more diversified data collection from the collaborators. The data analysis was conducted using thematic analysis, whose central axes emerged both from the construction of the interview script and from the theoretical framework consulted. The central theme identified was technological change, which acts as a guiding thread to understand the digital transition at Grupo Band Vale.

Based on this macro-theme and the data collected through *Google Forms* and interviews, the analysis was organized into strategic axes that reflect participants' main perceptions about the adoption of AI in the organizational environment. In this way, the analysis sought to integrate technical and human views on the transition to automated journalism, offering subsidies to identify methods that mitigate the risks of disinformation. The thematic axes identified and their respective descriptions are presented in Table 1.



Table 1. Synthesis of the thematic axes used in the data analysis.

Theme	Description
Identification of the profile and frequency of use of AI	Segmentation of participants by area of expertise and frequency of use of Artificial Intelligence tools, to understand possible differences in perception according to the function performed.
Organizational culture and receptivity to innovation	Investigation of the acceptance of AI-based technologies considering the stages of the journalistic process in which they are perceived as most useful and the degree of concern with the automation of professional activities.
Productive agility and editorial rigor	Analysis of the impacts of AI on the speed of production and dissemination of content, compared to the preservation of the quality, credibility and ethical principles of journalism.
Risks, leadership and regional strategic vision	Assessing the perceived risks to regional journalism, including the preservation of local identity and leaders' ability to drive technological transformation strategically.

Source: Research Data (2026).

DISCUSSION OF THE RESULTS

After completing the data collection, it was found that the Band Vale Group uses Artificial Intelligence tools in different stages of its production processes. Among the main applications identified are optimizing news delivery, programming support, content qualification based on audience engagement, and reducing operating costs. Such practices cover areas such as Writing, Technical Production, *Marketing*, and *Social Media*.

The survey participants are distributed across different areas of activity of the Band Vale Group. Five respondents work in Journalism (Writing/Reporting), while the other five belong to Technical Production (Editing, Radio and TV). The remaining two are linked to *Marketing* and *Social Media activities*. This distribution allows you to analyze perceptions of AI use from different professional perspectives in the organization. Regarding the frequency of AI tool use, nine participants use them daily in their activities. In addition, two stated that they used them occasionally, and one rarely. None of the respondents stated that they had never used AI tools. The results show the significant presence of these technologies in employees' productive routines, indicating a high degree of familiarity with AI-based solutions.

The use of AI in the preparation of agendas

In the interview with Claudio Nicolini, executive content editor at Grupo Band Vale, it was clear that AI is mainly used to support text organization and the synthesis of long documents. He cited, for example, using this technology to extract summaries and key information from police reports, a process that, according to him, saves real time in a newsroom where minutes make a difference in reach on digital platforms. For Nicolini, the tool helps close texts more agilely because it already delivers a structure with a beginning, middle, and end. Thus, it will save the time it would take the collaborator to write and review simultaneously.

This use is in line with what Geloneze (2024) and Zandomênico (2023) describe, who point to AI as a resource capable of accelerating the identification of trends and the organization of information in newsrooms with increasingly reduced teams. The search for speed and productivity



in the contemporary media environment reflects the structural downsizing of newsrooms in the last two decades. This scenario requires professionals to produce more content in less time, turning AI into a strategic logistics support tool. As Davenport & Ronanki (2018) and Geloneze (2024) point out, automation directly optimizes real-world processes.

In the interviewee's view, AI accelerates the completion of textual routines by structuring materials in an agile and cohesive way, clearly organizing the beginning, middle, and end of the narrative, faster than the manual process of simultaneous writing and revision. This hybrid agency dynamic corroborates the perspective of Laia et al. (2024), who advocate possible alliances between humans and automated technologies to expand production capacity beyond conventional limits. However, this productive acceleration brings with it the imminent risk of standardization and loss of journalistic identity.

Respondents clarify that blind trust in algorithms results in texts with repetitive and predictable formats, which labels automated generation as «too mechanical». This technical homogenization compromises the attractiveness of the product for readers, viewers, and listeners, including in the radio ecosystem, whose dynamism requires even more constant tuning and very specific language (Silva, 2024). In the academic literature, Thäsler-Kordonouri et al. (2024) already warned about stylistic limitations and less effective word choices in automated writing. In addition, Branco Neto (2024) discusses the risks of reducing our own analytical capacity by passively accepting machine standardization, which validates the journalist's perception that texts generated purely by AI carry vices that are easily identifiable by the public and by professionals who receive releases.

However, the applicability of AI transcends the textual sphere and redesigns the entire production and aesthetic chain of the sound medium. The testimonies reveal that algorithmic tools are integrated from the initial conception to the materialization and finalization of the audio, reaching voice cloning to expand the range of voiceover options and even the creation of programs 100% produced and presented by synthetic avatars. This advanced technical change dialogues directly with the transformations in the radio ecosystem described by Silva (2024), in which the search for the «perfect frequency» involves technological hybridization.

It was found that half of the respondents (six professionals) checked the option «Suggestion of agendas and brainstorming», in this sense it is possible infer that there is a preference in the use of AI as an auxiliary member, since the alternative proposes indirect modes of participation, serving as a stimulus to an idea *a posteriori*, this stimulus, when coming from the human mind, is commonly called insight. This stimulus to insight reinforces the need for the human being to feel in total control of that that he performs. The second most voted was «Transcription of audio and interviews» (three professionals). So, it can be classified as an auxiliary activity to increase productivity, since it avoids the rework of watching the same content repeatedly to generate a journalistic summary, which saves time. How has the communication sector been affected by technological advances?

At the same time, Canavilhas (2023) points out that mutations in digital journalism demand new multiplatform skills, while Thurman et al. (2017) highlight the practical impact on reporters who deal directly with writing systems and automated content generation in their daily routines. Finally, the imprecision of the algorithmic tools inherent to generative systems requires the centrality of the human factor as a quality filter and as an ethical safeguard. Another use of AI is for grammar



review (two respondents). Only one respondent uses AI to analyze large volumes of data (Data Journalism). Regarding the impact on agility, seven professionals stated that the tool significantly increases delivery speed, while five recognized that this gain can compromise quality.

This tension between speed and quality was directly addressed by Nicolini, who warned of the risk of AI-generated texts becoming repetitive and predictable. For him, an experienced professional can quickly identify when a text has been produced by AI, precisely because of the pattern that repeats itself regardless of the subject. Thasler-Kordonouri et al. (2024) describe exactly this problem by pointing out the stylistic limitations of AI-generated texts. Laia et al. (2024) reinforce that the gain in speed does not replace the critical thinking that characterizes quality and credible journalism.

Interactive artificial intelligence

Dudu Prado, artistic coordinator of Grupo Band Vale's radio stations, reported in the interview that the organization already has a radio program produced and presented entirely by AI. The production has two human professionals responsible for curating sources and setting up the program. According to Dudu Prado, the tool delivers a conversational, in-depth audio from the material gathered by the team, expanding production capacity without dispensing with the human work of selection and contextualization. The coordinator also pointed out that processes that previously took between 30 and 40 minutes for audio mastering are now completed in seconds, and that the organization uses specific AI tools for each stage: text generation, voiceover, audio editing, and audience data analysis. This segmented adoption model is consistent with what Davenport & Ronanki (2018) identified as the most efficient form of technological integration, in which each tool is applied to the task for which it was designed.

At the same time, Dudu Prado was emphatic in stating that the dynamism and charisma of radio are human attributes. For him, AI expands the repertoire available to announcers and producers. However, it does not directly create an emotional connection with the listener, which depends on who is behind the microphone. Silva (2024) corroborates this perspective by arguing that the sound experience still provides a level of bonding that completely automated systems do not achieve. The challenge, according to the interviewee, is to make the audience consume AI-produced content without perceiving it as artificial, which requires editorial skill and human sensitivity in conducting the process.

Productive automation and artificial intelligence

The majority opinion of journalists is that AI is recognized most of the time; however, five respondents still believe that AI-produced content is rarely or almost impossible to distinguish. In this sense, the evolution of AI efficiency leads to a prognosis of the replacement of workers by this new technology, both in works of mere representativeness, such as the transcription of a text, and in highly complex works, of a technical and critical nature, such as the re-edition of an informative or opinion text.



The concern with job replacement was evaluated by the interviewees on a scale of 1 to 5 and presented an average of 3.17. Most responses (eight) were 3, indicating a moderate attention posture to the theme. The other two participants scored a 4, and one scored a 5, while only another one said they had no concerns. This balance suggests that professionals see automation as a transformation that requires adaptation, without the panic that sometimes accompanies debates about the loss of workspace due to AI in the labor market.

The results reinforce respondents' perception that AI does not represent a direct threat to the journalistic profession, but rather a challenge to adapt to new technologies. In this sense, Nicolini says: «So, will AI replace the journalist? No. Will AI work together with the journalist and help? Go. The journalist who does not work with AI in a short time is out. Because it manages to be agile in a lot of things.» The statement shows the understanding that technology should be seen as a support tool, capable of optimizing processes and increasing productivity, without replacing the professional's role. This view is also shared by Dudu Prado, who points out that the risk is not in the AI itself, but in the difference in qualification between professionals. For the interviewee, those who master the use of these tools will be more prepared to meet the demands of a market in constant transformation.

The academic literature supports the interviewees' perceptions. According to Barbosa & Caldas (2025), about 49% of journalists have already identified concrete changes in their work routines due to the use of AI. This data demonstrates that technological transformations already have a significant impact on the daily life of the profession and reinforces the need for continuous training, allowing journalists to use these resources strategically and in line with the contemporary demands of the journalistic field. The participants evaluated the greatest risk of AI for regional journalism (such as that of the Paraíba Valley - Vale do Paraíba). Five respondents stated that the loss of identity and local accent can directly affect viewers' ability to belong, as they will not find their daily life and reality in the content broadcast by the station, resulting in a decrease in the audience.

Another five professionals concerned about «the increase in the dissemination of deepfakes and fake news» demonstrate journalism professionals' awareness of the social function of their activity. Far beyond the audience, there is the quality and veracity of the content. Reflection ratified by Nicolini: «... it is necessary to revise. In order not to compromise, it is necessary to revise. It brings agility, but in order not to compromise the quality of the information, the journalist has to be there.» Two of them believe that the risk of artificial intelligence for regional journalism lies in the lack of transparency regarding the use of AI tools.

The data collected demonstrate unanimity regarding the growing relevance of AI in journalistic activity and in the existence of the conglomerate as a whole. Nicolini brings a historical-analytical approach: «And today we need more and more to be produced in less time. This is natural in newsrooms, and the downsizing of newsrooms in the last 20 years has demonstrated this.» Prado adds: «There are many people who still do not use it, but it is already a reality. It has turned speed into the amount of content you have access to, and speed is the main thing.» In the speeches, we also noticed a correlation between the use of AI and performance requirements going forward. Regarding the adoption of AI as a strategic decision, nine professionals agreed with reservations,



pointing out the need for caution, and three considered it indispensable. We can conclude that there is a fear, perhaps motivated by the lack of mastery of AI techniques and tools.

All the answers assessed that the organization's leaders are in the process of learning, without any participant indicating that they are fully prepared. In this sense, the journalism market is developing along with technologies, requiring continuous improvement and new skills, essential to the exercise of the profession in current times.

Ethical guidelines in the adoption of artificial intelligence

According to the practices reported in the interviews, it is possible to identify that, within the company, there is an organizational culture based on supervision and human awareness, in addition to the prohibition of the irresponsible use of automation. Nicolini was direct in pointing out the «copy and paste» process, widely used in the routine of those who use technology, as the main ethical risk to be avoided. For him, publishing AI-generated content without review is incompatible with the responsibility that the journalist assumes when signing a story. Fernandes (2025) supports this position by stating that journalism involves interpretation and decision-making that technology is not able to reproduce in its entirety, which makes human review not an optional step in the production process of professionals who use AI, but rather a *sine qua non* condition for the journalistic product to maintain its credibility.

The survey participants recognize AI as an irreversible reality in the field of communication, but highlight the importance of human action to ensure the quality, depth, and credibility of the content produced. This understanding is summarized in the statement of one respondent: «AI speeds up the process; the human gives depth and credibility» (Respondent 11).

In addition, they express concern about how these tools have been used. One respondent points out that using AI without preparation or adequate knowledge can result in generic and superficial content. In his assessment, the quality of journalistic work will depend on how the relationship between professionals and technology is developed in the coming years. The participant argues that, if AI continues to be used only as a facilitation resource, there may be damage to the quality of information. On the other hand, it argues that investments in training, organizational adaptation, and incentives by companies can enhance journalistic work, expanding their capacity to inform society in real time and strengthening their social role (Respondent 5).

Dudu Prado addressed ethics from the perspective of authenticity, stating that the greatest care to be taken is not to allow AI to replace someone. For him, attributing to the tool a role that it is not capable of performing with quality, such as creating an emotional bond with the listener, is both an ethical mistake and a strategic mistake.



Table 2. Technological Changes.

Sub-area of communication	What was it?	Innovation	
		What is it?	What can it be?
Radio	Manual production, time-consuming editing, reliance on human research, and high time to finish	Use of AI for text generation, voiceover, editing, and data analysis, with high agility.	Partial automation of programs, greater scale of production and personalization of content.
TV	Use of physical equipment, linear editing, and slower calculation and production processes	Digital production, quick editing, and the use of AI for organization, summarization, and agenda support.	Leaner newsrooms, increased productivity, and full integration with AI tools.

Source: Research Data (2026).

Branco Neto (2024) reinforces this reading by drawing attention to the risks of technological dependence and reduced analytical capacity of professionals when automated systems operate without adequate monitoring. In general, the data collected indicate that Grupo Band Vale is in a moment of conscious transition, in which AI is already present in production routines, but still depends on more structured guidelines to ensure that its adoption preserves the editorial and ethical values that sustain the credibility of the organization and its audience.

Table 3. Artificial Intelligence Tools.

Tools	Radio	TV	Description
ChatGPT	X	X	Text generation, ideas, and organization
ElevenLabs	X		Automated audio production: AI Voice Over
LANDR AI	X		Mastering and finishing: Audio Editing AI
Manus AI	X	X	Audience and behavior interpretation: Data Analytics AI
Claude and ChatGPT		X	Summary of bulletins and documents: Text summarization AI
Midjourney, Nano Banana and Kling AI	X	X	Social media and visual content support: AI for image creation

Source: Research Data (2026).

The transformations presented in Table 2 show that the incorporation of AI in the Band Vale Group is not limited to the automation of specific tasks, but also represents a structural change in the processes of production and distribution of content. In both radio and television, there are gains in operational agility, resource optimization, and expansion of the productive capacity of the teams. In this context, the adoption of AI-based tools plays a central role in enabling these changes. Resources focused on text generation, information synthesis, visual content creation, data analysis, and process automation have become part of different stages of the workflow. Table 3 presents the main tools identified during the research and their respective applications in the radio and television areas of the Band Vale Group.



Contribution of Results to Journalism Course Education

This research recognizes the potential of AI tools in the professional practice of journalists. Thus, it is important that the tools mentioned in Table 3, which have been used in the practice of journalism at Grupo Band Vale, are addressed in the curricular disciplines of journalism courses, especially in Brazil. Thus, students can become graduates who are more prepared for the job market by knowing about these AI-operated tools, as well as how to use them in the best way.

By integrating the themes of artificial intelligence and journalism in Figure 1, Koehler & Mishra's (2009) TPACK (Technological Pedagogical Content Knowledge) model is renamed Artificial Intelligence Journalist Knowledge (AIJK). In the thematic scope of this article, the Technological Knowledge (TK) component is understood as Artificial Intelligence Knowledge (AIK), which encompasses the knowledge of artificial intelligence as a whole, as well as its vast and growing options for AI tools, which can be used in different ways, according to the area of knowledge of interest.

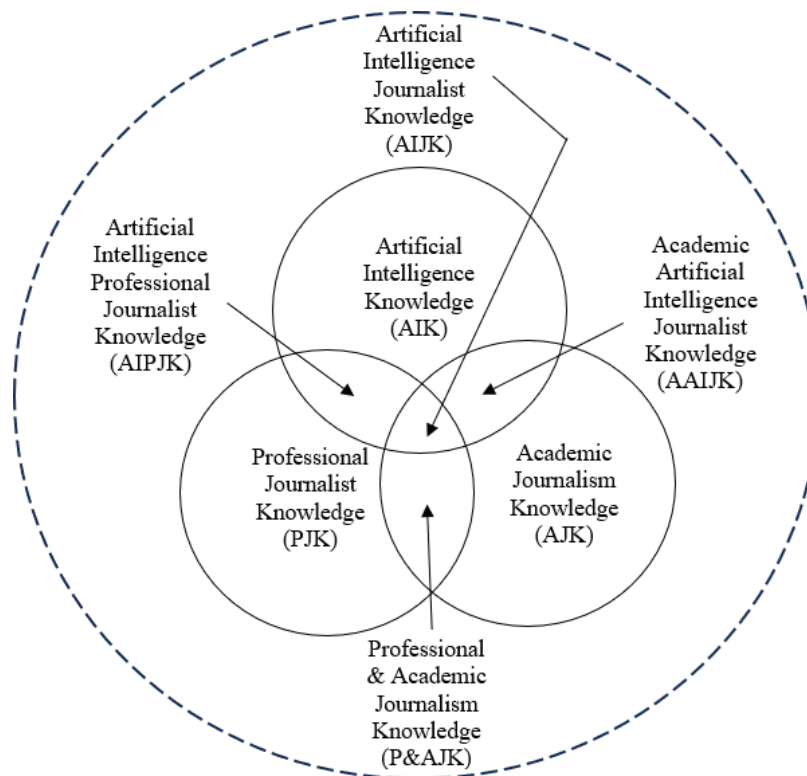


Figure. Journalism TPACK Model

Source: Research data based on Koehler & Mishra (2009), created in Visio Professional.

The Content Knowledge (CK) component model is replaced by the Academic Journalism Knowledge (AJK), which represents the teacher's knowledge of the subject to be taught to students (Figure 1). This includes teaching knowledge about the best AI tools that, in the journalism course, should be included in the syllabus of a specific discipline. In this proposal, Pedagogical Knowledge (PK) is adapted to Professional Journalist Knowledge (PJK). It is precisely with this dimension of



knowledge that this article contributes, offering readers empirical examples of the application of AI in a recognized Brazilian communication company (Grupo Band Vale), in addition to presenting some risks and concerns based on the challenges inherent in the use of AI in professional journalism. In this way, this research contributes to the intersection between AIK and PJK: Artificial Intelligence Professional Journalist Knowledge (AIPJK).

The intersection between the AIK and AJK dimensions (Figure 1) is called Academic Artificial Intelligence Journalist Knowledge (AAIJK). It concerns the possibility of integrating AI into the journalism curriculum, as well as the emergence of lines of research that integrate both areas and the interest of students and professors in teaching and research on the use of artificial intelligence in journalism (Ngoc Linh & Chien Thang, 2026).

The last intersection is between the PJK and AJK dimensions (Figure 1), called Professional & Academic Journalism Knowledge (P&AJK). The result is graduate students prepared to critically identify when an AI has been used or should be used, to maintain healthy competition in the journalistic market, as well as to know which is the most appropriate AI tool for a given work activity. By reaching this dimension, the professional journalist has not only practical knowledge but also theoretical knowledge, in constant development, to face the challenge of living with AI and integrating it into his journalistic practices and, in general, his activities, sustainably and responsibly. This level of stance relies on Ethical Knowledge and Institutional/Policy Knowledge as empirically grounded domains, as addressed by Ngoc Linh & Chien Thang (2026).

CONCLUSION

The study analyzed the insertion of Artificial Intelligence in the communication processes of the Band Vale Group, in São José dos Campos. The research was built from a theoretical framework on the transformations of contemporary journalism and the technological advances that have been redefining the production and circulation of information. Then, the case study made it possible to approach the organization's reality through technical visits, interviews with managers, and the application of questionnaires to employees, allowing a broader understanding of the impacts of AI in the work environment.

The results showed that AI is already part of the company's production routine and has been contributing to making processes more agile and efficient. Automation tools help with content production, information organization, and operational optimization, reducing the time needed for certain tasks and strengthening the group's competitiveness amid constant technological change. However, the data also showed that technology does not replace human action. Although AI can speed up processes and expand teams' productive capacity, decision-making, critical analysis, editorial sensitivity, and ethical responsibility continue to depend on communication professionals. In this sense, the survey revealed that employees see AI as a support tool, and not as a substitute for journalistic work.

Another relevant aspect observed refers to the preservation of regional identity. Concerns related to the spread of fake news, the production of artificial content without transparency, and the possible loss of local cultural characteristics demonstrate that adopting technology requires



constant attention. For a broadcaster that maintains a strong bond with the public of Vale do Paraíba, preserving credibility, language, and proximity to the community remains as important a challenge as keeping up with technological innovation. In this way, the results allow us to affirm that AI represents a strategic opportunity for the modernization of the Band Vale Group. However, the benefits provided by technology tend to be more effective when accompanied by human supervision, professional training, and well-defined ethical guidelines. Thus, the future of regional communication does not seem to lie in replacing people with machines, but in building a complementary relationship between human intelligence and AI, capable of uniting technological efficiency, journalistic responsibility, and appreciation of local characteristics.

The methodological choice of convenience sampling is limiting. The single case study limits the interpretation of the results in relation to other companies in the communication industry. Thus, future research should consider multiple case studies in this area of activity. Despite the long period of experience of the study participants, the authors acknowledge the limitation of the sample, with a total of 12 professionals interviewed. Future research should consider a larger number of participants to achieve less descriptive and more generalizable results. In addition, the participation of one of the authors as a participating observer may have biased the first notes, which were later evaluated and discussed with the other researchers to mitigate this possible bias. Finally, the results are influenced by the regional culture of the Paraíba Valley and the North Coast of the state of São Paulo.

Declaration of Generative AI and AI-assisted technologies in the writing process

The author(s) used TurboScribe to transcribe the interview audio into text and Gemini to structure the initial topics of the article before writing it. After using these tools, the authors reviewed and edited the content as needed and assume full responsibility for the final content of the publication.

REFERENCES

- Barbosa, C. de L., & Caldas, M. das G. C. (2025). A Inteligência Artificial no jornalismo brasileiro: transformações no ecossistema midiático. *Caderno Pedagógico*, 22(7). <https://doi.org/10.54033/cadpedv22n7-183>
- Branco Neto, W. C. (2024). We make ourselves stupid in order to make the computers seem smart: The risks of artificial intelligence. *Boletim de Conjuntura (BOCA)*, 18(54), 348–366. <https://doi.org/10.5281/zenodo.13281283>
- Brasileiro, A. de F. (2024). Planos de ensino de jornalismo investigativo, práticas de núcleos de redação e de Inteligência Artificial. *Revista Brasileira de Ensino de Jornalismo*, 15(35), 22. <https://doi.org/10.46952/rebej.v15i35.1276>
- Canavilhas, J. (2023). *Manual de jornalismo na web*. Livros de Comunicação (LabCom). ISBN 978-989-654-968-8. <https://labcom.ubi.pt/manual-de-jornalismo-na-web/>
- Cascais, F. (2001). *Dicionário de jornalismo: As palavras dos media*. Verbo Editorial. ISBN: 9789722220880
- Comissão Europeia. (2021). Proposal for a Regulation of the European Parliament and of the Council laying down harmonised rules on artificial intelligence (Artificial Intelligence Act). European Commission.



- Davenport, T. H., & Ronanki, R. (2018). Artificial intelligence for the real world. *Harvard Business Review*, 96(1), 108–116. <https://hbr.org/2018/01/artificial-intelligence-for-the-real-world>
- Diakopoulos, N. (2019). Automating the news: How algorithms are rewriting the media. *Harvard University Press*. <https://www.jstor.org/stable/j.ctv24w634d>
- Farias, K. W. de. (2024). Inteligência artificial no jornalismo: Aspectos cognitivos da ética jornalística. *ALAIC*, 22(44). <https://doi.org/10.55738/alaic.v22i44.1052>
- Fernandes, D. (2025). Inteligência artificial no jornalismo: aspectos cognitivos da ética jornalística. *Esferas*, 1(32). <https://doi.org/10.31501/esf.v1i32.15579>
- Fidalgo, J. (2000). A questão das fontes nos códigos deontológicos dos jornalistas. *Comunicação e Sociedade*, 2, 319–337. [https://doi.org/10.17231/comsoc.2\(2000\).1404](https://doi.org/10.17231/comsoc.2(2000).1404)
- Flick, U. (2009). *Introdução à pesquisa qualitativa* (3. ed.). Artmed.
- Fontcuberta, M. (1999). *A notícia: Pistas para compreender o mundo*. Notícias Editorial.
- Forja-Pena, T., García-Orosa, B., & López García, X. (2024). The ethical revolution. *Communication & Society*, 37(3), 237–254. <https://doi.org/10.15581/003.37.3.237-254>
- Geloneze, F. R. (2024). Inovação e Inteligência Artificial na produção de conteúdo digital: Um Projeto Extensionista do Curso de Publicidade e Propaganda das FIB. *Revista Multiplicidade*, 13. <https://doi.org/10.59237/multipli.v13i.781>
- Koehler, M. J., & Mishra, P. (2009). What is technological pedagogical content knowledge? Contemporary Issues in Technology and Teacher Education, 9(1), 60–70. <https://www.learntechlib.org/p/29544/>
- Laia, E. J. M., Bravin, A., Guimarães, L. L., & Morais, M. M. de. (2024). Inteligência artificial e jornalismo: Alianças possíveis para traduções além do humano. *Galáxia*, 49, 1–22. <https://doi.org/10.1590/1982-2553202466574>
- Lima, C. M. S., Júnior, D. F. B., Silva, L. M. & Souza, A. K. C. (2025). A influência da Inteligência Artificial no mercado de trabalho brasileiro: impactos e oportunidades para a Administração. *Revista Universitária Brasileira*, 3(5), 002–019. <https://doi.org/10.5281/zenodo.18312301>
- Martínez-Navarro, G. (2024). Inteligencia artificial y periodismo. *Doxa Comunicación*, 40, 259–278. <https://doi.org/10.31921/doxacom.n40a2717>
- NgocLinh, N., & ChienThang, P. (2026). Barriers and solutions in using artificial intelligence to transform journalism education in Vietnam. *Journalism*, 0(0), 1–21. <https://journals.sagepub.com/doi/10.1177/14648849261467553>
- Organisation for Economic Co-operation and Development. (2023). *Recommendation of the Council on Artificial Intelligence*. OECD/LEGAL/0449. OECD Publishing. Source: Compendium of Legal Instruments of the OECD. <https://legalinstruments.oecd.org/en/instruments/OECD-LEGAL-0449>
- Perides, M. P. N., Vasconcellos, E. P. G., & Vasconcellos, L. (2020). A gestão de mudanças em projetos de transformação digital: estudo de caso em uma organização financeira. *Revista de Gestão e Projetos (GeP)*, 11(1), 54–73. <https://doi.org/10.5585/gep.v11i1.16087>
- Silva, A. C. A. (2024). Rádio: Sintonização Constante ou Frequência Perfeita. *Trends Hub - Revista Acadêmica de Tendências em Comunicação e Ciências Empresariais*, (4). <https://doi.org/10.34630/tth.vi4.5727>
- Thäsler-Kordonouri, S., et al. (2024). Too many numbers and worse word choice. *Journalism*. <https://doi.org/10.1177/14648849241262204>
- Thurman, N., Dörr, K., & Kunert, J. (2017). When reporters get hands-on with robo-writing. *Digital Journalism*, 5(10), 1240–1259. <https://doi.org/10.1080/21670811.2017.1289819>
- Tsamados, A., et al. (2020). The ethics of algorithms. *AI & Society*, 37, 215–230. <https://doi.org/10.2139/ssrn.3662302>



União Europeia. (2024). *Regulation of the European Parliament and of the Council on artificial intelligence (Artificial Intelligence Act)*. European Union. <https://eur-lex.europa.eu/eli/reg/2024/1689/oj>

Yin, R. K. (2015). *Estudo de caso: Planejamento e métodos* (5. ed.). Bookman.

Zandomênic, R. (2023). Inteligência Artificial e Jornalismo: implicações na redação de notícias e na aquisição do conhecimento. *Pauta Geral - Estudo em Jornalismo*, 9(2). <https://doi.org/10.5212/RevistaPautaGera.v.10.22462>