

Artificial Intelligence and Journalism: exploring journalists' perspectives

Inteligencia Artificial y Periodismo: explorando el punto de vista de los periodistas



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Abstract:

Numerous recent studies have explored the impact of artificial intelligence (AI) on journalism, from several different perspectives. However, there is a dearth of studies that look into how journalists themselves perceive and adapt to this technology in their daily work. This paper examines, from the perspective of professional journalists, the effect of AI on their daily tasks, including opportunities, challenges, and the implications for work and ethics. Mixed methodology has been employed combining a bibliographic review and qualitative analysis through interviews to give a broad and in-depth view of the phenomenon. The findings reveal two predominant attitudes: acceptance and resistance, conditioned by

Resumen:

Numerosas investigaciones recientes han explorado el impacto de la inteligencia artificial (IA) en el periodismo, presentando diferentes perspectivas. Sin embargo, se observa una carencia de estudios que investiguen cómo los propios periodistas perciben y se adaptan a esta tecnología en su trabajo cotidiano. Este artículo examina, desde la perspectiva de los profesionales del periodismo, el impacto de la IA en sus labores diarias, incluyendo oportunidades, desafíos, implicaciones laborales y éticas. Utilizando una metodología mixta que combina revisión bibliográfica y análisis cualitativo mediante entrevistas, se obtiene una visión amplia y profunda del fenómeno. Los hallazgos revelan dos actitudes predominantes: aceptación y resistencia, condicionadas por el temor a la deshumanización

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fear of the dehumanisation of the profession and the loss of essential skills. However, the need to integrate AI critically and consciously is highlighted, since it is indispensable in contemporary journalistic work to ensure the quality and integrity of news content, as well as to preserve the fundamental role of journalists.

Keywords:

Artificial Intelligence; journalism; automation; fact-checking; ethics.

del oficio y la pérdida de competencias esenciales. No obstante, se subraya la necesidad de integrar la IA de manera crítica y consciente, ya que es indispensable en el trabajo periodístico contemporáneo para asegurar la calidad e integridad del contenido informativo, así como preservar el papel fundamental de los periodistas.

Palabras clave:

Inteligencia Artificial; periodismo; automatización; fact-checking; ética.

1. Introduction

The technological revolution in the 21st century has transformed every sector and profession, and journalism is no exception. Artificial Intelligence (AI), defined as the ability of a machine to perform tasks that normally require human intelligence, such as learning, reasoning, perception, and interaction with the environment (Russell & Norvig, 2020), is reshaping the media landscape in profound and multifaceted ways. From automating news generation to fact-checking, AI has begun to integrate processes that were previously exclusive to human creativity and judgment.

The application of AI to journalism has gone through numerous technological developments, starting in the 60s with computer-assisted news writing, to the current “automated journalism” that uses AI to process large volumes of data and create narrative content with minimal human intervention (Caswell & Dörr, 2017). This technological advance has transformed the entire production chain, affecting the search for, production and distribution of journalistic content (Diakopoulos, 2019; Rojas-Torrijos, 2021).

Although the study of the use of bots as a news service and for emotional connectivity with audiences is not new (Sánchez-Gonzales & Sánchez-González, 2017), recent studies on the treatment of chatbots in the Spanish press highlight how AI, and specifically tools such as ChatGPT, have been received with a mainly informative approach, with greater emphasis on their potential applications than on the risks, and dealing with it in an eminently informative and rarely interpretive manner (Calderón & del Cid, 2024). This initial approach leads us to consider the many ways in which AI is having an impact on journalism. Another recent study by JournalismAI says that 28% of journalists already use AI tools, and 20% plan to explore the applications in the near future (Beckett & Yaseen, 2023). There can be no doubt that these technologies are revolutionising the drawing up of content, the personalisation of news, and workflow optimisation, allowing journalists to generate content with greater efficiency and accuracy, as well as enhancing data collection and analysis (Carson, 2019; Vos et al., 2023; Shi & Lin, 2024). Writing algorithms and news bots free professionals to dedicate more time to the interpretation and in-depth analysis of information (Ufarte-Ruiz & Manfredi-Sánchez, 2019), improving content personalisation, something valued positively by 70% of editors (Newman et al., 2023).

The speed with which we are witnessing these changes and their consequences in many professions has sparked the interest not only of companies and professionals but also of academia. Academic research has addressed the study of AI and journalism from multiple perspectives: data journalism, big data and bots (Flores-Vivar, 2019); journalistic innovation and new formats (d’Haenens et al., 2022); computational journalism and news output (Vállez & Codina, 2018); AI applied

to news documentation and sports journalism writing (Segarra-Saavedra et al., 2019); the quality and truthfulness of both information and misinformation (Graves, 2018; Canavilhas, 2022); its possible effect on job losses (Cid, 2017; Carson, 2019) or ethical challenges (Ufarte-Ruiz et al., 2021), among others. It has also been studied from different theories of journalism. Computational journalism theory has looked into how digital tools and algorithms are transforming traditional practices, not only by automating repetitive tasks, but also by introducing new ways of gathering, analysing and presenting information (Anderson, 2013). Moreover, mediatisation theory examines how technology is reconfiguring the relationship between the media, journalists and audiences, affecting the way information is consumed and perceived, as well as the dynamics of power and trust in the media (Hjarvard, 2013).

But the integration of AI into journalism is not free from challenges to ethics and transparency. Some academic research has focused on analysing the possible job losses that it could bring about (Lokot & Diakopoulos, 2016; Valdiviezo-Abad & Bonini, 2019), as well as the major impact on the quality of journalism. For example, although AI-generated news is effective in presenting facts, it lacks the depth and context provided by human journalists, which affects the understanding of complex issues (Carson, 2019). The ways in which AI can help combat disinformation through automatic fact-checking systems has also been studied, but it also presents risks of spreading fake news (Graves, 2018). Research such as that of Martín-García et al. (2024) points out that the key lies in effective human supervision to ensure that these tools are used appropriately and ethically.

It should be noted that, although AI and journalism have been analysed from multiple perspectives, it is also necessary to consider how journalists themselves perceive such integration. The opinion and experience of professional journalists are of the utmost value, since they are the ones who directly face the challenges and opportunities that AI poses in their daily tasks. It is in this aspect where the value and contribution of this research lies. By focusing on journalists' perceptions and experiences this study provides a practical and contextualised view of AI in journalism, exploring not only the technological and ethical implications, but also the human and professional impact on the practice of journalism.

2. How AI is revolutionising journalists' work: tools

Artificial intelligence is not only redefining the gathering, analysis and presentation of journalistic information, but is also transforming the work dynamics of professionals in the field. From photojournalists to newsreaders or editors, all specialisations within the profession are influenced by these technological advances.

One of the most significant changes is the option of using AI tools to automate repetitive tasks. Well-known tools such as Wordsmith and Heliograf allow journalists to focus on critical analysis and research, rather than on more mechanical tasks such as proofreading, although this may raise concerns about the quality of information and job cuts (Carson, 2019). AI also improves the efficiency of information gathering through advanced natural-language processing algorithms, such as Google News Initiative and Dataminr, which analyse large volumes of data and swiftly detect relevant patterns (Graves, 2018).

The rapid and efficient creation of multimedia content has been one of the tasks that has evolved the most. Tools such as Lumen5 and Wibbitz allow the quick creation of high-quality audiovisual material. Journalists with little or no experience

in video editing can turn out attractive, professional material. However, it is vital to maintain a balance between automation and human supervision to ensure the quality and accuracy of the content.

Content personalisation is another aspect that has been deeply affected. News organisations can utilise AI to generate articles and features tailored to the specific interests of their audiences, increasing reader engagement and brand loyalty. However, this may create news bubbles that limit exposure to other perspectives, reinforcing pre-existing biases and further polarising audiences (Newman et al., 2023). It is therefore crucial for news organisations to implement strategies to balance personalisation with exposure to a variety of viewpoints (Pariser, 2022).

As regards fake news, AI offers automatic fact-checking systems. Tools such as ClaimBuster and Full Fact AI combat disinformation by improving the precision of fact-checking (accurate verification of facts before publishing) and reducing the spread of fake news. These systems scan large volumes of data and detect content that needs to be checked, although they require close collaboration between technologists and journalists to ensure that the algorithms are transparent and take cultural and social contexts into account (Graves, 2018; Salaverría, 2021).

Analysis of sentiment and opinion is another area where AI is making a significant mark. Sentiment analysis algorithms, such as those employed by Brandwatch, assess tone and emotion in texts, providing journalists with a deeper understanding of how their articles may be perceived. This technology is of particular use for analysing reactions on social media and adjusting content strategies accordingly, although they can misinterpret context or sarcasm, leading to erroneous conclusions (Liu, 2021).

AI has made a noticeable mark on all areas of journalism, as there are tools applicable to different specialities. Television journalists and newsreaders may find that AI has facilitated the automatic transcription and translation of content. Technologies such as Google's Speech-to-Text and DeepL have revolutionised how interviews and reports are handled in numerous languages, allowing news to be more accessible and have greater reach. Such tools not only save time, but also increase accuracy when transcribing dialogues and speeches, although they present challenges concerning accuracy and cultural nuance that require human review and editing (Mayoral-Sánchez et al., 2023). Tools for photojournalism such as Adobe Photoshop and Google Cloud Vision offer greater image quality and efficiency, permitting the removal of unwanted objects, automatic adjustment of light and colour levels, or more efficient cataloguing of images. A debate has arisen here about the authenticity of AI modifications, questioning where the line lies between digital enhancement and manipulation (Thomson et al., 2024).

The future of AI in journalism promises even greater innovations. Augmented reality (AR) and virtual reality (VR), upgraded by AI, are beginning to be used to create immersive experiences in news reporting. These technologies allow viewers to explore events and places interactively, providing a richer and deeper understanding of stories (Pavlik & Bridges, 2013; Baía et al., 2023). Furthermore, the ongoing development of language models such as GPT-4 and others is opening up new possibilities for creative and collaborative content generation between humans and machines. These models are capable of writing complex articles, conducting simulated interviews, and generating detailed analysis, thus expanding the options open to journalists (Brown et al., 2020).

The incorporation of these emerging technologies also presents challenges, such as the need for advanced technical skills and a deep understanding of the ethical implications. However, with proper management, these innovations can provide powerful tools for telling stories in novel ways, enhancing narration and the audience's understanding (Pavlik & Bridges, 2013).

Table 1 shows a list of the main AI tools applied to different areas of journalism with their advantages, limitations and functionalities.

Table 1. AI tools applied to journalism

Task / Functionality	AI tool	Advantages	Limitations
Automation of Repetitive Tasks	Wordsmith, Heliograf	Time freed up for complex tasks.	Possible job losses.
Optimising Information Gathering Processes	Google News Initiative, Dataminr	More efficient recompilation.	Risk of errors in data analysis.
Photojournalism and Image Recognition	Adobe Photoshop, Google Cloud Vision	Greater image quality and efficiency.	Debate on the authenticity of the images.
Personalisation of Content	Algorithms from news organisations	Increase reader engagement.	Possible creation of news bubbles.
Fact-checking and Combating Disinformation	ClaimBuster, Full Fact	Greater speed and accuracy of fact-checking.	Requires close collaboration between technicians and journalists.
Automatic Transcription and Translation	Speech-to-Text by Google, DeepL	Save time and increase accuracy.	Challenges related to accuracy and cultural nuances.
Analysis of Sentiment and Opinion	Brandwatch, Crimson Hexagon	Report on the emotional impact of articles.	Limitations to the interpretation of context.
Generation of Multimedia Content	Descript, Lumen5	Facilitates the creation of high-quality visual materials.	Requires human supervision to ensure quality.
Ethics and Human Supervision	Human-AI collaboration systems	Ensures integrity and trust.	Implications of algorithmic bias.
Future Innovations and Emerging Trends	AR and VR tools, GPT-4	Provides powerful tools for storytelling.	Requires advanced technical skills.

Source: created by the author

As the table shows, these AI tools cover a wide range of functionalities in journalism. Wordsmith and Heliograf, for example, enable automated news generation, freeing up time for journalists to focus on more complex tasks, while ClaimBuster and Full Fact AI improve the accuracy and speed of fact-checking. Tools such as Adobe Photoshop and Google Cloud Vision facilitate efficient image editing, although they open up debates about visual authenticity. Technologies such as Google DeepL reduce work time in transcription and translation, and sentiment analysis systems, such as Brandwatch, provide a deeper understanding of public reactions. Despite their usefulness, journalists can (and should) review the results such tools create to identify possible errors and ensure that both the data utilised, and the information provided are accurate.

3. Objectives and Methodology

3.1. Objectives

The general objective of this study is to explore, from the perspective of professional journalists, the impact of AI on the many tasks that make up their daily work. To this end, three research questions are posed to analyse the opportunities, challenges and implications associated with its implementation:

1. What opportunities does AI integration offer to improve efficiency and creativity in journalism?
2. What are the main challenges and concerns facing journalists with the use of AI?
3. What is the impact of the introduction of AI on the job market for journalists and what skills should journalists develop to adapt to these changes?

3.2. Methodology

A double methodology was chosen to better answer these questions: namely, bibliographic review and then qualitative analysis through semi-structured interviews with Spanish journalists. First, an exhaustive bibliographic review on AI and its impact on journalism was carried out, based on highly prestigious sources, including papers published in journals indexed by Journal Citation Reports (JCR) and Scimago Journal & Country Rank (SJR). This review addressed key topics such as the automation of news, content personalisation, fact-checking, and data journalism. Bibliographic review is essential in academic research, allowing the compilation, evaluation and synthesis of relevant information (Martín & Lafuente, 2017). This process eases the identification of emerging trends and persistent challenges, providing a solid basis for the study's analysis and conclusions (Kitchenham & Charters, 2007). Secondly, a qualitative analysis was carried out based on semi-structured interviews with journalists. This methodology is suited to the in-depth consideration of complex and contextualised phenomena (Denzin & Lincoln, 2018), ensuring a rich, nuanced understanding of participants' experiences by going more deeply into their subjective impressions (Kvale, 2007). Interviews for this research were structured into four blocks: questions concerning socio-demographic profile (profession, age, years of experience and specialty), daily use of AI at work (tools they use, and their impact), challenges and opportunities they present in the profession (perceived advantages and limitations) and, finally, their vision of the future (repercussions for the labour market, and skills to be developed).

Selection of the sample was based on a non-probabilistic procedure, combining convenience and snowball sampling, prioritising diversity over representativeness since it is more effective in qualitative studies (Dyas, 2009; Papathanassis & Knolle, 2011). Two filter conditions were set for the selection of participants: having a degree in journalism and being active or having been so in the last 5 years. 12 personal interviews were conducted online through Google Meet. The interviews were conducted in March 2024 and lasted approximately one hour. This number of interviews achieved data saturation, a widely accepted methodological principle in qualitative research (Saunders et al., 2018). Data saturation indicates that further data gathering is unnecessary once sufficient data has been collected (Hennink & Kaiser, 2021). After that point additional interviews no longer reveal new aspects or issues. Data saturation could be considered the equivalent in qualitative research of representativeness in quantitative studies (Papathanassis & Knolle, 2011). The profiles of the interviewees are set out in Table 2.

Table 2. Personal interview profile sheet

Interviewee	Age	Profile	Years of Experience	Length of Interview	Medium	Geographical scope
1	39	Sports journalist	5	45 minutes	Radio	National
2	41	Freelance journalist	10	50 minutes	TV	Regional
3	28	Photojournalist	3	50 minutes	TV	International
4	56	Radio Host	20	60 minutes	Radio	Local
5	45	Columnist	13	55 minutes	Written press	National
6	26	News Editor	1	60 minutes	Radio	Regional
7	32	Data Journalist	3	55 minutes	Economic news agency	National
8	49	Agency Correspondent	12		News agency	International
9	54	Television Investigative Journalist	24	60 minutes	TV	National
10	61	Economic Journalist	30	45 minutes	Digital newspaper	National

11	33	Agency Journalist	6	55 minutes	News agency	National
12	29	News Editor	2	40 minutes	Digital newspaper	Local

Source: created by the author

Thematic analysis was utilised to analyse the interviews. Its chief objective is to identify, analyse and report patterns (themes) within qualitative data, offering a detailed and nuanced interpretation of the content (Braun & Clarke, 2006). This method focuses on the experiences and perspectives of individuals and groups, allowing for a deep understanding of how they perceive and make sense of their surroundings (King, 2004). The analysis procedure was carried out in three phases: familiarisation and transcription of the interviews, generation of initial codes and grouping of codes by themes. Table 3 shows the process followed.

Table 3. Phases of qualitative analysis

Phases of qualitative analysis		
Phase 1 Familiarisation and transcription	Phase 2 Initial code generation	Phase 3 Code grouping and refinement of themes

Source: created by the author

In the primary phase of familiarisation and transcription, a detailed transcription of the interviews was made, including notes on possible emerging themes and relevant contextual details (Riessman, 1993; Poland, 1995). In the second phase, initial codes were generated using open coding techniques, organising the data with NVivo software (Strauss & Corbin, 1998; Jackson & Bazeley, 2013). Themes were sought in the third phase, and refined by grouping codes into broader themes, using the constant comparison method to assess the coherence and relevance of the themes in the context of the study (Glaser & Strauss, 1967). Themes identified included: effects on the production of content, ethics and transparency, the impact on employment, the quality and veracity of information, the relationship with the public, and innovation and the future of journalism, with specific codes assigned to each theme, as shown in Table 4. This approach allowed for a rich and complex understanding of participants' narratives, providing a solid basis for the interpretation of qualitative data (Patton, 2002).

Table 4. Refined codes and themes

Themes	Codes
Effects on content production	Automation of editing, news generation, content personalisation
Ethics & transparency	Algorithmic bias, transparency in the use of AI, ethical responsibility
Impact on employment	Mobility of journalists, new job opportunities, professional adaptation and training
Quality and truthfulness of information	Automated fact-checking, precision in news generation and disinformation
Relationship with the public	Interaction with readers, trust in AI-generated content, relationship with the audience
Innovation and the future of journalism	New forms of narrative, data analysis tools, future AI applied to journalism

Source: created by the author

4. Results

The results of the interviews reveal a mix of optimism and concern about the adoption of AI in newsrooms which respond to the research questions posed.

4.1. Opportunities for AI to improve efficiency and creativity in journalism

Analysis of the journalists' discourse reveals a generally positive perception of artificial intelligence (AI) as a transformative tool in journalism. Benefits such as automation of repetitive tasks, improved fact-checking and personalised content are highlighted. These capabilities not only increase efficiency and enrich research quality, but also serve to expand the global reach of journalism through the automatic translation of articles, underlining the innovative potential of AI in the media industry.

One of the most noted benefits is AI's ability to automate repetitive, low-value tasks, freeing journalists to focus on more creative and analytical work: *"AI streamlines the data collection process. Otherwise, we'd find it more difficult to work with large volumes of data and information, it simplifies the more routine daily tasks."* This aspect allows journalists to spend more time on tasks that require creativity and analysis, thus improving the quality of their work. However, interviewees point out that, although AI makes data processing faster, it is still human judgment that adds real value to news: *"Sure, AI allows us to process a lot of data and information in seconds and makes certain more repetitive tasks easier, but it is our judgment that turns the data into interesting, well-told, truthful stories."*

Value is appreciated in AI's ability to identify patterns and trends that would normally go unnoticed, it significantly improves the quality of a journalist's research. Efficiency in analysing large amounts of data not only saves time, but also enriches the quality of research: *"We can review huge databases. That helps us discover stories that we would otherwise not be able to detect. But there's no replacement for our work in selecting, writing or sifting, at least not for now."* This ability to review huge amounts of data and find relevant information seems especially useful in the case of investigative journalism, when complemented by human endeavour.

There is also a significant improvement in fact-checking, a crucial function in a media environment where speed and accuracy are essential to maintaining credibility: *"AI makes us more efficient at fact-checking and I think we can also identify false news more quickly and accurately, but our job as a human is essential – an intelligent machine or a program can't do it in the same way."* Nonetheless, even though AI has revolutionised fact-checking, many journalists emphasise that their role is still essential in giving context and depth to information: *"AI helps us detect false news with impressive speed, especially when we are working against the clock. But in the end, we're the ones who make sense of the facts and understand their import."*

AI offers benefits by personalising content, transforming the way readers receive their news. The reading experience becomes much richer and more meaningful, as each piece of content is carefully selected to capture the reader's attention and keep them informed about what matters most to them: *"Being able to open a news app and find articles that perfectly align with your hobbies, your work or your favourite topics of interest instead of being bombarded with generic information is of great value to both media and readers."* Despite the obvious benefits that AI offers in personalising content, some journalists stress the importance of balancing this capability with information diversity: *"The challenge is to find a balance between personalisation and information diversity. It is up to us, journalists, to ensure that this personalisation does not limit access to a broader view of the world."*

In sports journalism, AI enables instant reporting, which is crucial for covering events in real time: *"When I'm covering a football match or sporting event, AI gives me immediate access to the latest, most important data. I can then write and publish detailed analysis almost instantly. This speed and efficiency is crucial for delivering accurate and comprehensive live coverage."*

Regarding the creation of multimedia content, there is unanimity that AI models can edit videos and improve audio quality, freeing journalists to focus on the narrative and context of the story: *"AI helps us generate high-quality multimedia content more efficiently, but the journalist's mind is still unmatched by any AI."*

AI also opens up new possibilities for innovation in narration, facilitating experimentation with formats such as augmented reality and virtual reality. These tools offer innovative and engaging ways to tell stories, allowing readers to live immersive experiences and better understand information: *"AI tools allow us to experiment with new narrative formats such as augmented reality and virtual reality. That's all well and good, but the final word, the compositions, are the journalist's job. The human touch is still vital in our profession today."*

Another positive aspect is AI's ability to automatically translate content, expanding the global reach of journalism. This is relevant to disseminating important news worldwide quickly and efficiently: *"With AI we can automatically translate articles into many languages, which helps us reach more people around the world. There we have gained a lot in both time and cost. But there are other things that call for a journalist's brain. I don't watch any TV or radio programmes presented by*

a machine. I doubt I'll ever watch one." In this regard, we know that there are already presenters created with AI. This is the case of Mediaset with its first AI-created presenter hosting the programme 'Supervivientes', or Natcha, the Thai television news presenter also created using AI. Nevertheless, the journalists interviewed for this paper unanimously point out that, although they are technically impressive, they fail to replicate the human factor, especially when it comes to the emotions they can convey: *"AI can do loads of things, including present the news, but it can't feel. I don't think that viewers're just looking for data; They're looking for empathy, human connection, that's what sets us apart, and at least for the moment, I don't believe technology can offer it. That's what really sets us apart."*

4.2. Main challenges and concerns faced by journalists regarding the use of AI

The study also reveals significant concerns about the use of AI in journalism. Challenges include the loss of essential skills, the possible homogenisation of content, and the greater spread of fake news. Furthermore, the use of AI in content moderation may result in inappropriate decisions and a disconnect from the audience. The need for human oversight and appropriate regulation to maintain the integrity of journalism is apparent.

One of the biggest perceived risks is the potential erosion of quality and depth in investigative journalism, because an over-reliance on these systems could lead to a loss of these values in investigative journalism: *"The lack of a human touch and contextual understanding can ultimately make reporting much more superficial or biased. I think that in the end, no matter how much AI is used, a journalist has better criteria."* *"In photojournalism, AI seems like magic, but a photo is not just an image, it's heart. AI doesn't have that. I believe and hope it never does"* Similarly, over-reliance on AI could lead to a decline in the critical and analytical skills of journalists themselves: *"If we get used to AI doing all or a great part of the work, we could lose our essential investigative and analytical skills."* This could turn out a generation of journalists who are less skilled at conducting in-depth research without the help of technology. Another risk is the possibility that AI could amplify existing biases from the data it is trained with: *"AI learns from previous data, and if that data contains biases, AI will replicate and amplify them."* This can perpetuate stereotypes and prejudices, something particularly problematic in a field that should aim for objectivity and fairness. Finally, there is also the risk that AI will be used to conjure up fake news in more sophisticated ways: *"Using AI, fake news can be created and distributed faster and more convincingly, making the fight against disinformation even more difficult."* The journalists stress that this risk could jeopardise public trust in the media and in the veracity of the news they receive.

There is also concern about the potential homogenisation of content. Because AI algorithms tend to rely on patterns and prior data, one piece of content can become too similar to another, diminishing the richness of journalistic discourse: *"Automating news creation could lead to all stories being very similar, which would greatly reduce the variety of viewpoints and opinions, an important part of our profession."* This risk of uniformity in news threatens to diminish the diversity needed for robust and meaningful journalism.

Furthermore, there is concern that the use of AI may moderate content on social media. AI's automated decisions do not always manage to understand the cultural or political context, which can lead to censorship of valuable opinions: *"We cannot leave certain issues up to AI. There're choices that should be made by people, not by machines or algorithms."* This lack

of contextual understanding by AI can result in the unfair removal of relevant and valuable content, thereby diminishing the diversity of journalistic discourse. AI, which bases its decisions on patterns and prior data, may fail to pick up on important nuances and specific contexts, leading to decisions that do not adequately reflect the complexities of real-life situations. This underlines the need for human oversight in content moderation to ensure that the richness and diversity of discourse on social media is maintained, preventing uniformity that would impoverish public debate: *“Human intervention is essential to ensuring that the decisions taken are not only fair, but that they reflect the variety and depth of our cultures and opinions.”*

As regards sources of information, the interviewees point out that trust between journalists and their sources is essential to journalism. If sources feel that they are talking to a machine or that their words will be analysed out of context by an algorithm, they may be less open and frank: *“I can't imagine one of my sources having to give information, which may be sensitive, to a machine.”* Such a lack of trust would be worrying because it could affect the quality and depth of the information obtained. The relationship of trust between a journalist and his/her sources is fundamental to ensuring that the information shared is both truthful and complete. There is also a concern that AI could create a disconnect between journalists and their audience. *“AI can make us lose the personal touch with our audience, making our news feel colder and less human.”* This disconnect could damage the relationship of trust that is crucial for readers to feel connected and to trust the news. AI's ability to subtly manipulate information is also seen as a threat to the profession of journalism: *“The idea that AI can be used to subtly manipulate information is a catastrophe for our profession because where does that leave us?”* This concern underlines the need for proper supervision and regulation to prevent AI from being used unethically and eroding public trust.

4.3. Impact of the adoption of AI on the labour market for journalists and the skills that journalists need to adapt to those changes

The results reveal that the adoption of AI in journalism raises concerns about unemployment and the transformation of the labour market, chiefly affecting repetitive tasks, while roles with human presence seem less threatened. The interviewees highlight the ethical risks related to privacy and the chance of errors and biases without adequate supervision. In addition, there is uneasiness that AI may increase workloads by requiring greater supervision and correction. Despite these concerns there is emphasis on the need for a harmonious, ethical integration of AI, developing complementary skills that highlight the unique human aspect which cannot be automated.

Concern and uncertainty about unemployment and the transformation of the labour market that AI may bring about is a common denominator in the interviewees' discourse: *“AI scares us because we think that our profession, to some extent, may disappear... this question is widespread across many other professions”*; *“I think that this should start to be considered in the universities. AI is here, it's a reality, we'll no longer be able to work without it. Faculties should be teaching how to use these tools to the benefit of journalists, to make them even better professionals.”* This perception does not seem to affect all journalists' tasks equally; repetitive tasks, such as data-driven writing, are seen as more easily automatable, while roles requiring human presence, such as newsreaders, are apparently seen as being under less of a threat: *“AI doesn't affect a*

news anchor in the same way as it does an editor or photojournalist... a newsreader... can't be replaced so easily because they provide the human touch. It wouldn't make sense."

Regarding risks to privacy and ethics, the interviewees suggest that the increasing use of AI raises serious ethical questions concerning privacy and data use. Monitoring and analysing user behaviour to personalise content can become invasive, and without proper regulation risks eroding public trust. This concern is increased by the potential for AI to introduce errors and biases: *"One of my biggest concerns is that AI can introduce errors and biases without proper oversight; "I'm worried about ethical issues, fake news, identity theft..."* These concerns reflect the ethical challenges that must be faced to ensure the integrity of journalism.

There is also concern that AI may increase the pressure and workload on journalists rather than reducing them: *"Although AI can automate many tasks, it may also mean that we have to check and correct more, adding to our workload, because we can't assume that everything AI churns out is right."* This increased workload not only affects journalists' efficiency and well-being at work, but may also have a negative effect on the quality of the content generated. By having to spend more time on monitoring and correction, journalists could actually have less time to carry out in-depth research and build relationships of trust with their sources. There is a widely-held opinion that there is a need to find the right balance in the use of AI to ensure that these fundamental aspects of journalism are not compromised: *"If we are busy correcting AI errors, we won't have time to do quality journalism. We need to use the technology in a balanced way so as not to compromise our quality of work."*

Despite these concerns, the journalists agree that there is a need to integrate AI harmoniously and ethically into the practice of journalism: *"AI is here to stay, and we have to live with it. We can't see it as an enemy. We need to learn how to use it as a complement to our work." "We should look on AI as a tool that lets us give the best version of ourselves as journalists, not as a substitute."* This perspective underlines the importance of a balanced, deliberate adoption of the technology. The interviewees unanimously agree that professional journalists need to develop skills to complement AI, focusing on tasks that highlight their value: *"The human touch is what really connects with people and keeps their trust. Although AI advances, we need to focus on what makes us unique and can't be replaced by machines."*

5. Discussion and conclusions

The aim of this study was to look more closely, from the perspective of professional journalists, at AI's impact on their work. The findings confirm that AI has emerged as a transformative tool in journalism, offering significant benefits but also presenting ethical and professional challenges. Mastering AI is essential for journalists to improve their employability in an increasingly technological labour market. The advantages offered include the potential these tools have to automate repetitive and low added value tasks, freeing journalists to focus on more analytical and creative tasks where human input is irreplaceable (Hepp & Loosen, 2021; Stenbom et al., 2023). Apart from saving time and simplifying complex processes, the quality of journalistic research is improved (Brennan et al., 2020). New possibilities present themselves to innovate in aspects such as narratives or mining large databases to discover previously hidden stories, something of particular value to investigative journalists. AI's usefulness is also apparent for experimentation with new formats such as augmented and

virtual reality, offering immersive experiences and adding to the quality of journalists' research (Beckett, 2019; Mandela, 2024). The integration of AI in journalism adds to journalists' ability to offer a more precise, efficient and enriching version of their work, something of benefit to both the industry and society (Túñez-López & Tejedor-Calvo, 2019).

However, major challenges have also arisen. Over-reliance on automated systems may lead to the production of superficial, impersonal and biased content, compromising the integrity and diversity of journalistic discourse (Diakopoulos, 2019). Journalists' integrity and ethics, together with their ability to provide context and critical analysis, are indispensable for the generation of truthful, meaningful news (Susskind & Susskind, 2020). Concerns about the effects of AI on employment and changes to the labour market cannot be merely brushed aside (Cid, 2017); a perception that varies according to one's specialisation and specific field within the profession. Structured, repetitive tasks, such as writing data-driven news, are more susceptible to automation and there is therefore a greater fear of job substitution. As is the case with photojournalists, who face direct competition from technologies that can generate images, and therefore feel more threatened (Hausken, 2024). Roles that require significant human presence and greater interpersonal skills, such as news anchors, seem to feel less vulnerable. The findings underline the crucial need for professional journalists to develop skills that can be complementary to AI, focusing on tasks that are not so easily automated. Wölker & Powell (2021) underlined the importance of journalists focusing on those tasks that, by their very nature, cannot be easily automated. AI facilitates the compilation and analysis of enormous amounts of data, but human abilities to detect nuances, understand sociocultural contexts and exercise critical thinking are essential to maintaining the quality and rigor of journalism. We are speaking here of skills that have to do with the ability to understand and interpret surroundings, and the ability to keep watch over the powerful, among many other functions that call for creativity and real, not simulated, intelligence (Codina et al., 2022).

According to the journalists themselves, the integration of AI into their work must be approached proactively, critically and sensibly. Keeping a balance between automation and human participation is crucial to ensuring the quality and integrity of content. Hence the importance of ethics, transparency and critical thinking in both its use and training (Lopezosa et al., 2023). The findings indicate that AI tools not only bring new possibilities to newsrooms, but that their effectiveness depends on how they are used and who is using them. This underlines how AI changes the way journalists work and, at the same time, how journalistic work influences the development and application of AI (Carlson, 2015; Jarrahi et al., 2023).

Academia has the responsibility to lead this transition, with the incorporation of AI training into educational programs (Flogie & Aberšek, 2021). Communication faculties cannot just stand idly by and watch changes of such importance to society, changes that are shown to have a wide impact on employability (Lopezosa et al., 2023). It is vital that future journalists acquire technical skills and overcome any fear of these technologies, seeing their potential as complementary tools rather than threats (Calvo-Rubio & Ufarte-Ruiz, 2020). Education must therefore focus on the ethical and competent use of AI, preparing students to effectively and responsibly integrate these tools into their professional practices. Professionals in the world of communication need to know, handle and understand very clearly what AI systems are and how they work. It is therefore time to talk about professional training that needs to include AI (Codina, 2024). Media outlets also have a crucial role to play in this transformation. Providing ongoing training, access to advanced AI tools, fostering an environment that values technological innovation, and empowering staff would not only serve to improve the quality of journalism, but

could also ensure the competitiveness and relevance of media outlets. Nevertheless, despite these findings, this research has certain limitations. Chief amongst these is its qualitative approach based on personal interviews, which may restrict the generality of the results. Although a deep and detailed insight into journalists' experiences and perceptions has been achieved, the findings may not be fully representative of the entire sector.

Future lines of research should consider the development of specific methodologies for teaching AI in journalism courses, as well as in empirical studies that evaluate the effectiveness of these methodologies. There is also a need to investigate how media companies can better structure their investments in AI technologies and ongoing training in order to maximise benefits. Another crucial aspect is to continue to delve deeper into the ethical and social effects of using AI in journalism, ensuring that these tools are used in ways that benefit society as a whole.

Only through research, ongoing education and technological adaptation will it be possible to ensure a future of ethical, innovative journalism capable of meeting the demands of a society in constant technological evolution. AI does not replace journalism as a profession; it should be understood as an ally that offers significant opportunities to improve and perfect work. Journalists bring editorial judgment, cultural and ethical sensitivity, and the ability to establish relationships of trust with sources, attributes that machines cannot yet replicate. It is essential to lose the fear of these tools and understand their potential to raise the quality of journalists' work.

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7. Conflict of interest

The author declares that there is no conflict of interest contained in this article.

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