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GenAI Adoption in Journalism: Innovation and Transformation from an International to a Catalan Media Perspective

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Abstract

This study examines how Generative Artificial Intelligence (GenAI) is being adopted by Catalan news organizations and how its integration reshapes newsroom practices, professional roles, and accountability standards. The analysis is informed by two previous qualitative studies conducted within the European Commission-funded Media Councils in the Digital Age project. The first was based on more than 50 interviews with journalists and fact-checkers from 12 European countries and the United States and identified the emergence of hybrid professional roles, while also recommending the disclosure of AI-generated content and greater transparency regarding the algorithms used by media organizations. The second comprised 27 interviews with Press Council representatives from 19 European countries and Canada, and highlighted concerns that reliance on technological systems, metrics, and marketing strategies may weaken ethical standards and verification practices. Rather than serving only as background, the thematic categories developed in these two previous studies were revisited and comparatively re-analysed alongside nine in-depth interviews with journalists, editors, and media executives from Catalan news organizations. This comparative analysis examines how GenAI is transforming newsroom organization, production routines, and professional practices, identifying common patterns and contextual variation across the earlier international findings and the Catalan cases. The findings suggest that, within the organizations studied, professional roles are being reconfigured through the hybridization of functions and the incorporation of new competencies, such as data analysis, automated system oversight, and technological governance. At the same time, accelerated GenAI adoption in journalistic routines contrasts with slower development of ethical frameworks and governance mechanisms, suggesting a gap between technological innovation and institutional adaptation.

Keywords: GenAI; journalism; newsrooms; fact-checkers; Press Councils; production routines; professional practices

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1. Introduction

This study focuses on the impact of the incorporation of Generative Artificial Intelligence (GenAI) into the practice of journalism in Catalonia. From this perspective, its objectives are, first, to address the structural changes that the use of GenAI is causing within organizations, which have already incorporated different tools based on this technology for the production and dissemination of journalistic pieces. These tools are also very useful for analyzing audience response and for developing strategies based on content personalization. As a second objective, this article addresses the changes caused by GenAI in the way

journalism professionals themselves work and seeks to capture their perception regarding the use of these tools. Finally, Artificial Intelligence (AI), whose capabilities are progressing very rapidly, also invites all the actors involved to reflect on the necessary adaptations to the new environment of the professional standards of journalism and the ethical principles that shape its professional ethics. This is the third objective of the study, which is methodologically based on semi-structured interviews with those responsible for Catalan media organizations, journalism professionals, and representatives of organizations.

Ultimately, this study aims to provide an accurate portrait of the evolution and consequences of the incorporation of GenAI into the practice of journalism based on the case of Catalonia, with the intention of examining the Catalan case in relation to broader transformations previously documented across different European media contexts. By Generative Artificial Intelligence (GenAI), we mean AI that has the capacity to generate new content—text, images, audio, video, code, etc.—from instructions given by the user in natural language and from patterns learned through its training on massive datasets (UNESCO, 2023; OECD, 2024). We believe that an integrated view of the phenomenon may be of great interest at a time when it is not at all easy to grasp its meaning. It should also be valuable for identifying, through this analysis, which trends will shape its evolution in the immediate future and the future consequences of the phenomenon, both in the organizational or business field, for information professionals, and in the professional standards and ethical principles that govern journalism.

It is important, however, to distinguish GenAI from other forms of AI and algorithmic technologies already embedded in journalistic practice. While GenAI refers specifically to systems capable of producing new content, such as text, images, audio, or video, other technologies, including recommendation algorithms, audience analytics, SEO tools, and traditional forms of automation, perform different functions and do not necessarily rely on generative models. Although these technologies are interconnected within contemporary newsrooms, they should not be considered interchangeable. In this study, earlier forms of automation, algorithmic decision-making, and digital transformation are examined as part of the broader technological and organizational context in which GenAI is currently being adopted. This distinction allows us to identify continuities with previous processes of newsroom digitalization while examining the specific transformations associated with GenAI.

On 17 March 2014, at 6:45 a.m., the Los Angeles Times published the first artificially produced breaking news story. It was a brief report on an earthquake in the Westwood district of Los Angeles. The simple algorithm available to the newspaper received an alert from the California alert system and, autonomously, wrote a short text containing the basic data about the earthquake and published it through the newspaper's website. The programming algorithm that wrote the report was called Quakebot and was developed by journalist and programmer Ken Schwencke. Its immediate predecessors were brief reports written from a specific set of data. One of these predecessors had been, five years earlier, the Stats Monkey project, developed by professors and students at Northwestern University (USA). The software was capable of writing a news story based on the statistics of a baseball game.

This is the text written by Quakebot and published on the Los Angeles Times website:

> "A shallow magnitude 4.7 earthquake was reported Monday morning five miles from Westwood, California, according to the U.S. Geological Survey. The temblor occurred at 6:25 a.m. Pacific time at a depth of 5.0 miles.
>
> According to the USGS, the epicenter was six miles from Beverly Hills, California, seven miles from Universal City, California, seven miles from Santa Monica, California and 348 miles from Sacramento, California. In the past ten days, there have been no earthquakes magnitude 3.0 and greater centered nearby.

> This information comes from the USGS Earthquake Notification Service and this post was created by an algorithm written by the author."

Since then, the possibilities offered by GenAI to journalism have continued to multiply. But it is necessary to go back a little in time, because the current revolution would be impossible today were it not for the changes introduced into the way journalism is practiced by the emergence of the Internet and, subsequently, websites, messaging, search engines, platforms, applications, and, more recently, GenAI. The profound reconfiguration experienced by journalism and the media from that point onward has had important consequences both for the way professionals practice their profession and for media organizations and their business models. This reconfiguration, all these changes, has given rise to important intellectual and academic reflection on their impact on journalism, communication, and our societies as well. Among the authors who have contributed to this reflection, the contributions of Anderson et al. (2015), Castells (1996, 1997, 1998), Chadwick (2013), Han (2022), Jarvis (2023), Kovach and Rosenstiel (2014), and Sunstein (2001) stand out, among others.

Within the specific field of journalism, AI has demonstrated its ability to carry out numerous tasks that help professionals become more efficient, saving time and improving the reliability of their work. Some of these tasks include the transcription of audio and audiovisual recordings, the search for documentation on a topic or a person, the creation of illustrations and images, synthetic voice-over, statistical analysis, the indexing and tagging of content, the preparation of summaries, and the analysis of large volumes of data.

In the production of complete content, Generative Artificial Intelligence has made considerable progress since the Los Angeles Times published its report on the earthquake in California in 2014. Today, GenAI is capable of producing complete journalistic pieces that are formally very close to, or even indistinguishable from, those produced by human professionals (Dörr, 2016; Graefe & Bohlken, 2020; Kreps et al., 2022; Miroshnichenko, 2018). There are even already automated "newsrooms," that is, systems that produce and disseminate content without any human intervention (Ufarte-Ruiz et al., 2023). The process, still underway, of incorporating GenAI into newsrooms in media organizations around the world has been studied by different experts and researchers. The primary focus has been on examining the impact of technology on different areas of journalistic production, as well as its potential effects on the democratic function of journalism (Carlson, 2015; van Dalen, 2012). Attention has also been directed toward capturing journalists' perceptions and opinions regarding this new professional landscape (Arias-Robles, 2026; Perreault & Ferrucci, 2020). Finally, research has addressed the digital advancements that have transformed journalism (Broussard et al., 2019) and explored the technology that enables so-called robot journalists (De Lima-Santos & Ceron, 2022).

Regarding the impact that GenAI could have on journalistic practice, Carlson anticipated in 2015 some of the central issues that would emerge forcefully in the following years. More than a decade ago, Carlson pointed out that "At the positive end of the spectrum, the growth of automated journalism greatly expands the amount of available news and frees up journalists to pursue less mechanical stories". The author then warned: "Conversely, negative predictions include increased layoffs, polarizing personalization, and the commoditization of news writing" (Carlson, 2015, p. 429). Likewise, there are numerous studies aimed at mapping experiences of the incorporation of GenAI in specific media outlets or in particular countries or geographical areas (Mayoral-Sánchez et al., 2023; Munoriyarwa et al., 2023; Quiñonez & Meij, 2024; Thurman et al., 2025; Ventura, 2025).

Journalism professionals are aware that technology, in this case GenAI, has enormous potential to help them in their work. Nevertheless, especially in the early stages of incorporating GenAI into newsrooms, concerns arose about the quality and reliability of the results (outputs) generated by Artificial Intelligence. There were also considerable concerns about

the repercussions in the labor sphere—in terms of job losses—that may result from how journalistic organizations decide to use the efficiency gains that are being produced and that will tend to become progressively greater (Cools & Diakopoulos, 2024; Gutiérrez-Caneda et al., 2023; Montal & Reich, 2017; Noain-Sánchez, 2022; Wu, 2024).

The changes that, as we have seen, GenAI is causing in the field of journalism raise a considerable number of questions and ethical issues. Thus, there is an ongoing debate about the moral agency necessary to practice journalism—which GenAI would not possess—and about to whom responsibility for the action and the outputs resulting from the action of robots should be attributed (Coeckelbergh, 2023; Floridi, 2023; Johnson, 2006). Likewise, in more applied terms, there is discussion about which deontological provisions should be emphasized or newly established in light of the impact of GenAI. These include aspects such as the degree of transparency of organizations regarding the involvement of GenAI in production and the necessary human supervision of these same outputs (Forja-Pena et al., 2024; Kahn, 2024; Parratt-Fernández et al., 2024; Sánchez-García et al., 2025; Ventura, 2023).

Previous research within the Media Councils in the Digital Age project also indicates that these ethical and technological challenges are not perceived uniformly across national contexts. Comparative media-system research provides a framework for interpreting this heterogeneity. Hallin and Mancini (2004) distinguish media systems according to the development of media markets, political parallelism, journalistic professionalism, and the role of the state. Subsequent research has shown both the usefulness and the limits of this typology: Brüggemann et al. (2014) identified four empirical types among Western media systems; Castro Herrero et al. (2017) found substantial internal variation within Central and Eastern Europe rather than a single regional model; and Humprecht et al. (2022) showed that digitalization has altered traditional media-system configurations, including the emergence of a hybrid cluster. These differences caution against treating the national contexts represented in the previous datasets as a homogeneous media environment and support a context-sensitive interpretation of the Catalan findings.

Research Questions

This study sets out, in line with its objectives, three research questions, each of which includes several related aspects:

RQ1: How has GenAI transformed workflows, processes, and work routines within journalistic organizations? Do these transformations include the need to adapt certain professional roles or incorporate new ones?

RQ2: What adaptations and training do journalists and newsrooms require in order to incorporate and take advantage of the potential of GenAI? How do journalists perceive the integration of GenAI into the production and distribution of journalistic content?

RQ3. What ethical principles and accountability practices should be considered in the adoption and use of GenAI in journalism, and how can they be integrated into journalistic workflows and newsroom governance?

2. Materials and Methods

This study adopts a qualitative research design based on in-depth semi-structured interviews, following the methodological approach previously developed in the Media Councils in the Digital Age research project and more recently applied in the IAPer project. The IAPer project examines the impact of artificial intelligence on journalistic practices, newsroom workflows, and journalists' perceptions, uses, and training needs in Catalonia. The study also draws on the theoretical framework proposed by Quivy and Van Campenhoudt (2005).

The aim of this approach is not to measure the prevalence of specific practices, but rather to explore how key actors in the journalistic field interpret, negotiate, and respond to the technological transformations associated with digitalization, platformization, and

the growing incorporation of artificial intelligence into news production processes. Semi-structured interviews were selected because they allow for a common set of topics to be addressed while also providing sufficient flexibility to delve into emerging issues, unexpected reflections, and context-specific experiences. This methodology is particularly suitable for analyzing ongoing technological transformations whose implications are still being negotiated within media organizations and professional communities.

The analytical framework builds on previous qualitative research developed in the Media Councils in the Digital Age project, which included 50 interviews with journalists and fact-checkers from twelve European countries and the United States conducted between June 2022 and January 2023 (Media Councils in the Digital Age, 2023b), as well as 27 interviews with representatives of Press Councils from 19 European countries and Canada carried out between February and May 2023 (Media Councils in the Digital Age, 2023a). The sample of journalists and fact-checkers covered Spain, Germany, Turkey, Belgium, Portugal, Italy, Denmark, the Netherlands, France, Poland, Croatia, and Bosnia and Herzegovina, as well as the United States. The Press Council sample covered Armenia, Azerbaijan, Belgium, Denmark, Finland, France, Georgia, Germany, Iceland, Luxembourg, Montenegro, the Netherlands, Norway, Portugal, Serbia, Slovakia, Spain, Sweden, and Switzerland, together with Canada. To preserve participant anonymity, quotations from Press Council representatives are not attributed to specific councils or national contexts in the present study. This precaution is particularly relevant for small organizations in which the combination of country, institutional affiliation, and professional role could make an interviewee indirectly identifiable. Given the qualitative design and the distribution of interviews across multiple national contexts, the comparative analysis is used to identify common patterns and contextual variation rather than to infer representative country-level differences. These studies provided an initial map of the ethical, professional, and organizational challenges associated with digital technologies and new forms of automation in journalism. Participants in the two previous studies were contacted and informed in advance about the interview procedure. Interviews were conducted mainly by videoconference, recorded with participants' consent, transcribed, and anonymized for analysis and publication. Personal names were not included in the reports or in the present study.

To integrate the three datasets, the thematic categories developed from the two previous interview-based studies were revisited and re-analysed in comparison with the nine interviews conducted in Catalan media organizations. This comparative re-analysis aimed to identify points of convergence, continuity, and divergence between the earlier international findings and the Catalan cases, while taking into account the different periods in which the data were collected.

The countries examined in the previous studies provide an international comparative framework for identifying patterns in the adoption and use of AI in journalism, while the Catalan case allows us to examine how these broader dynamics operate in a specific media environment shaped by both the Spanish system and its distinctive local media ecosystem. This helps us understand how global technological change interacts with local media contexts.

Catalonia constitutes a particularly relevant case for examining the transformation of journalism and the adoption of AI because of the distinctive characteristics of its media system within the broader Spanish context. As Corominas (2019) explains in her analysis of the Catalan communication system, the Catalan media environment shares important characteristics with the Spanish system, including features associated with the polarized pluralist model identified by Hallin and Mancini (2004), but it also presents specific institutional, linguistic, professional, and political characteristics that make it analytically

distinguishable. As also supported by Hallin and Mancini (2004), the media in Catalonia differ in several respects from those in the rest of Spain.

According to Corominas (2019), previous research has identified several specific features of the Catalan media system. Almiron et al. (2016), for example, argue on the basis of empirical research that the professional journalistic culture in Catalonia does not fully fit the Mediterranean model, particularly regarding independent accountability and self-regulatory mechanisms, which display some characteristics more closely associated with the Northern European liberal model. At the same time, Zallo (2013) highlights the relevance of the national or identity axis alongside the traditional left–right political axis in media systems such as Catalonia.

The analysis presented is based on nine in-depth interviews conducted with media professionals and managers from organizations involved in journalism and information verification in Catalonia. The sample includes profiles with different levels of responsibility within the organizations analysed. It comprises professionals directly involved in journalistic activity and newsroom management, as well as those responsible for digital, technology, data, product, and fact-checking areas. Thus, the interviewees are not exclusively practicing journalists, but also include managerial profiles and professionals specialized in the digital transformation of the media. Participants were selected through purposive key-informant sampling. The objective was not to construct a statistically representative sample of Catalan journalists, but to recruit information-rich participants with direct knowledge of organizational decisions concerning AI adoption, newsroom digitalization, editorial workflows, and technological governance. Selection sought variation across media organizations and professional responsibilities, including editorial management, technology, product, data, digital strategy, and fact-checking. Given the focused nature of the research questions and the specialized knowledge of the participants, the sample provided sufficient information power to identify recurrent practices, perceptions, and organizational tensions across the cases examined. However, the study does not claim statistical representativeness or exhaustive saturation of the heterogeneous Catalan journalistic field. The findings should therefore be interpreted as analytically relevant patterns within the organizations and professional perspectives represented in the sample, rather than as estimates of the prevalence of these practices or attitudes among Catalan journalists as a whole.

The interviewees represent 3Cat News, the Catalan News Agency (ACN), *Diari de Tarragona*, *La Vanguardia*, Nació Digital, VilaWeb, *Segre*, Verificat, and *Diari ARA*.

The nine interviewees have extensive professional experience in communication, journalism, and the digital transformation of the media. Among the profiles for which publicly verifiable information is available, professional experience ranges approximately from 8 to 49 years, with an estimated average of 26 years. Several participants also have long-standing ties to the organizations analysed, in some cases spanning more than two decades, providing the sample with substantial knowledge of the evolution of the sector and the transformation processes taking place within newsrooms. Regarding the use of artificial intelligence (AI) systems, the interviews reveal different levels of frequency of use, ranging from daily and regular use to more occasional use. This diversity of professional profiles and degrees of AI adoption makes it possible to examine the incorporation of AI into journalism from different professional positions and levels of responsibility.

The interviews, conducted between November 2025 and February 2026, focused on three interrelated dimensions: organizational transformations resulting from the adoption of artificial intelligence tools, journalists' perceptions and uses of these technologies, and their practical implementation in professional routines and editorial workflows. Once transcribed, the analysis of the interviews combined deductive and inductive thematic coding. In the first stage, the thematic categories identified in the two earlier studies—such

as technological acceleration, professional autonomy, hybridization of roles, verification, transparency and accountability—were used as sensitizing categories for examining the Catalan interviews. In the second stage, the 2025–2026 interviews were coded inductively to identify themes specifically associated with the contemporary adoption of GenAI that were not adequately captured by the earlier framework. The resulting categories were then compared to distinguish continuities with broader processes of digitalization and algorithmization from developments more specifically associated with GenAI. Most interviews took place via videoconference. With the participants' consent, the sessions were recorded and subsequently transcribed.

Rather than treating artificial intelligence as an isolated innovation, the analysis situates it within broader processes of newsroom digitalization, task automation, audience metrification, and dependence on technology platforms. This interpretive approach enables a deeper understanding of how journalists and news organizations perceive the opportunities, risks, and ethical implications associated with artificial intelligence, as well as the continuities between these technological developments and earlier transformations experienced by the digital media ecosystem. The three datasets are not treated as temporally equivalent samples of GenAI adoption. The international interviews were collected between 2022 and 2023, during an earlier stage of the development and professional uptake of GenAI, whereas the Catalan interviews were conducted between November 2025 and February 2026, when these technologies had become considerably more established within newsroom experimentation and organizational strategies. Accordingly, the earlier datasets are used as a contextual and temporal reference rather than as a directly comparable contemporaneous sample. The analysis examines continuities, emerging differences, and shifts in professional concerns across these periods, but does not attribute observed differences exclusively to geographical context or technological change, since these dimensions cannot be disentangled by the research design.

3. Results

3.1. The Structural Impact of Artificial Intelligence on Journalistic Processes

The incorporation of artificial intelligence into the journalistic profession cannot be interpreted as a completely autonomous disruption, or one disconnected from previous processes, as noted in the Introduction to this article. In other words, GenAI is embedded in a professional ecosystem that has already undergone profound changes with the emergence of the Internet, the transformation of newsrooms, the rise in social networks, platform logics, the centrality of metrics, the automation of processes, and the gradual normalization of algorithmic tools in both content production and distribution.

Taking into account the nine interviews conducted with managers from different Catalan news organizations and the reports based on interviews with journalists and fact-checkers from the Media Councils in the Digital Age project, technology has not functioned merely as a set of auxiliary tools, but has substantially changed the conditions of journalistic practice: "Technology has completely transformed journalism", forcing journalists "to work at the speed of light without time to think before publishing, and without time for verification" (Media Councils in the Digital Age, 2023b, p. 5).

This statement is key because it shifts the focus from the isolated use of specific tools to the formation of a new production and distribution regime: journalism subjected to accelerated rhythms, constant update pressures, and increasing dependence on external digital infrastructures.

One of the media executives interviewed for this article within the Media Councils in the Digital Age project highlights the risk that GenAI poses for journalists, as they often receive information, images, or videos that must be verified before use. In this regard, he

explains: "We created a fact-checking unit to address misinformation, but the rapid and significant rise in AI-generated content has meant that this unit has also had to work on verifying AI-produced material".

The same idea appears in a report based on 27 interviews with representatives of up to 20 national Press Councils (Media Councils in the Digital Age, 2023a). Although many representatives of these bodies tend to describe technology as a "tool", they acknowledge that the conditions of the digital environment have profoundly altered the practical application of professional standards. GenAI allows for an increased volume of publications, but with less exhaustive quality control. In this sense, warnings emerge about the use of technology to facilitate the publication of apparently plausible content, with good grammar and a convincing appearance, but without journalists properly checking sources.

The interviews with media executives and the two reports make it possible to identify three main dimensions of this structural transformation: (1) the acceleration of journalistic time; (2) the metrification of editorial decisions; and (3) the automation and algorithmization of processes, platform and social media dependence, and the emergence of new professional profiles and hybridization of roles.

3.1.1. The Acceleration of Journalistic Time

One of the most consistent findings from interviews with Catalan media executives and from the two previous studies cited above is the centrality of speed as a structural feature of digital journalism. In other words, technology has accelerated journalism exponentially, not only in the information-gathering phase, but also in content production and distribution. Media managers believe that efficiency gains—faster content production—should allow journalists to devote more time and energy to producing better journalism, with greater depth, consistency, and creativity. In this line, an interviewee from the IAPer project states: "We have freed up people's time. [...] I would not say it has yet led to organizational changes, but it does mean that more people now have more time to think and to go out into the field".

When we speak of acceleration, we are not referring merely to some improvement in production efficiency, but to a condition that alters the quality of the information process. It is well known that the pressure to publish immediately reduces the time available for verifying, cross-checking, and contextualizing information. In this regard, a fact-checker from Spain states: "Immediacy. That implies that many times, there's no fact-checking because you have to release, you have to be the first. This immediacy is what might be causing certain steps to be skipped and resulting in a problem of misinformation" (Media Councils in the Digital Age, 2023b, p. 9). Another interviewee adds that "everybody is in a hurry and everybody wants to be first", which leads to the replacement of quality with speed.

Another media executive interviewed in the Media Councils in the Digital Age project adds another drawback regarding text production using GenAI: "AI is very useful in that it is fast, but the downside is that its content lacks depth." Such statements support the idea that digitalization has altered the balance between two fundamental temporalities of journalism: the circulation time of information, increasingly immediate, on the one hand, and the production time of information, which requires verification, cross-checking, and editorial deliberation, on the other.

It should be noted, however, that publication speed should not be used to justify certain ethical failures: "Although you had to publish it first, we will see whether there was really a rush for publication, and in our case, the rush for publication is not a good excuse to make factual errors" (Media Councils in the Digital Age, 2023b, p. 12).

In summary, digital transformation has not only accelerated journalism, but has turned acceleration into an organizational and competitive norm that reshapes professional routines.

Speed becomes both an opportunity—to free up journalists' time for more complex tasks and thus improve quality—and a constraint. As such, it ceases to be an accessory value and becomes a performance criterion, even when it comes into tension with verification and quality.

3.1.2. The Metrification of Editorial Decisions

A second highly relevant issue is the incorporation of audience metrics, behavioral data, recommendation systems, and performance logics into editorial decision-making. Both the interviews conducted with media organization executives and the report on journalists and fact-checkers (Media Councils in the Digital Age, 2023b, p. 10) argue that information on audience trends and user behavior is present in newsroom editorial meetings, and that metrics analysis has become a new professional profile within journalism. The document describes these metrics as a "structural gatekeeper", that is, as a mechanism that intervenes in the selection and prioritization of content. This formulation is particularly significant because it allows audience analytics to be understood not only as a monitoring tool, but also as a device that actively participates in defining what is newsworthy.

In this regard, the key point of the report is that data logic can shift the criterion of public interest toward the immediate interest of the audience. The text asks whether "obeying metrics—ultimately, obeying the audience—displaces the traditional journalistic value of public interest in favor of the public's interest" (Media Councils in the Digital Age, 2023b, p. 10). The distinction between "public interest" and "the public's interest" is crucial: the former refers to a normative function of journalism linked to social relevance; the latter refers to consumption preferences that may be driven by curiosity, emotion, or entertainment.

The testimonies collected in the report reinforce this interpretation. A Polish fact-checker notes that journalists are forced to choose between writing "an ethical headline" or "a headline that will make money, one that people will click" (Media Councils in the Digital Age, 2023b, p. 10). Another interviewee observes that content is designed to be "the most recommended by algorithms" and to attract clicks through striking or emotionally provocative elements, so that it is no longer necessarily designed "to inform," but rather "to provoke an emotional reaction" (Media Councils in the Digital Age, 2023b, p. 11). The report also includes a striking observation from a Spanish journalist: "The editorial lines of the media are yielding to the click" (Media Councils in the Digital Age, 2023b, p. 11).

Digital transformation not only introduces new measurement tools, but can also alter the autonomy of editorial judgment and redirect production and distribution toward traffic-driven criteria. In this sense, interviewees identify the risk that editorial decisions are increasingly based on algorithms or metrics rather than journalistic relevance.

3.1.3. Process Automation, Social Networks, and New Professional Profiles

The emergence of GenAI must be situated within a broader process of progressive automation already present in newsrooms. This is the view of media organization executives. One of them, interviewed for the Media Councils in the Digital Age project, dismisses the idea that GenAI represents a substitution threat similar to that of digital cameras replacing film development teams. Nevertheless, he does believe that in the future "some departments such as editing or translation could be directly affected." Another executive nuances this view, stating that he does not see GenAI as a replacement element in traditional newsrooms—where he believes prudent use should prevail—but rather within the ecosystem of disinformation, corporate communication, and social networks, where it is already being massively used to generate manipulative content.

This perspective corresponds to an initial phase of journalistic automation focused on repetitive, data-driven tasks. However, the report notes that more technologically oriented

profiles already warned of a deeper shift: GenAI could not only automate routine content but also alter the relationship between representation and reality—"hijacking of reality and its replacement with AI-generated representations, both in text and images" (Media Councils in the Digital Age, 2023b, p. 12).

Press Councils also acknowledge the potential benefits of GenAI: reduced workload, improved efficiency, faster news production, content personalization, and the ability to process large volumes of data (Media Councils in the Digital Age, 2023a). At the same time, they emphasize that these advantages are embedded in a context of uncertainty and significant heterogeneity across countries and media systems.

This unevenness in perception is important because it shows that structural transformation does not unfold uniformly across national contexts. The previous Press Council study explicitly linked differences in perceptions of technology and AI to the territorial, political, social, and cultural circumstances of each country, while also noting that concerns about technological change vary according to national interests and conflicts. This heterogeneity is consistent with comparative media-system research showing that digitalization does not lead to a single convergent media model. Humprecht et al. (2022) identify three distinct media-system clusters in the digital age, while Castro Herrero et al. (2017) likewise find substantial internal variation among Central and Eastern European media systems.

Therefore, GenAI should not be presented as a starting point, but rather as an accelerator of already established logics such as speed, scalable production, personalization, optimization of distribution, and competitive pressure.

All of this structural transformation is not limited to newsrooms. It also affects distribution infrastructures and the ways in which media organizations compete for public attention. The report on journalists and fact-checkers argues that social networks have marked a turning point in the profession (Media Councils in the Digital Age, 2023b).

Within Media Councils in the Digital Age, several media executives highlight the impact of AI on content distribution processes. One interviewee notes that AI is changing previous rules and driving structural change. He highlights the example of Google, which is using GenAI in its search responses, forcing media organizations to rethink their audience and positioning models.

Along the same lines, another executive explains that, in addition to moderation of comments, they are using GenAI for more internal tasks, such as analyzing audience behavior to identify what may be of greatest interest and determining how news pieces should be positioned.

Interviewees point to several consequences, including increased pressure to publish quickly; changes in the notion and hierarchy of sources; the massive circulation of misinformation; growing difficulties in verification; and dependence on communicative spaces external to traditional media.

A French fact-checker states that social networks have made the use of sources more complex and have introduced new challenges for verification in digital environments (Media Councils in the Digital Age, 2023b).

From a structural perspective, we are not simply dealing with contemporary digital journalism, but with a progressive process of platformization. Media organizations depend on third-party infrastructures to attract traffic, distribute content, understand their audiences, and sometimes even define their public relevance. The incorporation of GenAI into newsrooms therefore occurs within an environment in which much of informational visibility is already shaped by external algorithmic systems.

It should also be noted that structural transformation is expressed not only through the adoption of tools, but also through the reconfiguration of professional roles and valued skills within newsrooms. Within the IAPer project, one media executive argues that the

future of these organizations lies in multidisciplinary newsrooms capable of adapting a single story to different platforms: "Today we are distributing a story across at least six different channels. And many more will come." This requires "people who create the original content, people who format it, and people who finalize it," with a strong emphasis on audiovisual storytelling.

In other words, digitalization has driven an occupational hybridization of journalism. Newsrooms are reorganizing around more technical profiles, more data-oriented roles, greater attention to audience performance, and closer links to platform logics. This transformation is not neutral, as it may alter both the internal division of labor and the definition of what counts as journalistic competence. These Catalan findings converge with the earlier journalist and fact-checker study, which identified the emergence of hybrid professional profiles combining technological skills with traditional journalistic expertise and collaboration between journalists and technical specialists.

Interviews with Catalan media executives show that the incorporation of GenAI is gradual and adapted to each organization's capacity and context. All agree that training is, and will continue to be, highly intensive and will cover all areas of the organization.

One of them describes the emergence of GenAI and digital transformation more broadly as "a cultural change in work, unlike anything we have seen in forty or fifty years", and argues that media companies that know how to invest in profiles and structures fully aligned with this shift will be the ones that ultimately succeed.

Another executive adds that it is not a question of whether journalists should be able to do everything, but rather of rethinking the architecture of teams within media organizations. In his view, the key question is not "what kind of journalist are you looking for, but what kinds of teams are you planning to design for the future".

3.2. The Adaptation of the Journalistic Profession to Artificial Intelligence: Perceptions, Uses and Training

The second level of analysis allows us to address a more interpretative rather than organizational dimension. If the first level examined the structural transformation of journalism through concepts such as metrics, automation, routines, professional profiles, and platforms, this second level focuses on how journalists, fact-checkers, and Press Council representatives understand the profession in this new environment. In other words, the aim is not only to observe which tools enter the newsroom, but also to analyze how those tools affect the definition of what it means to be a journalist, the perception of professional autonomy, the actors' technological awareness, and journalism's ability to maintain control over its own purposes. In this sense, professionals tend to describe technology as a neutral tool, while at the same time acknowledging that it alters the conditions under which journalistic work is carried out.

3.2.1. Technology as a Tool: An Instrumental Conception of the Profession

Interviewees often state that the problem does not lie in technology itself, but in the professional, editorial, or commercial uses made of it. They describe technology as something that can be used properly or improperly, depending on human intention and the professional criteria applied (Media Councils in the Digital Age, 2023b, pp. 5–7).

For many Press Councils, the main issue is not the technological tools themselves, but who uses them and for what purpose. Technology is thus framed as an instrument subordinated to professional ethics, editorial responsibility, and traditional journalistic values (Media Councils in the Digital Age, 2023a, p. 6).

This position serves a defensive function from a professional standpoint. It allows journalists to affirm that the core values of journalism—such as verification, independence,

transparency, accountability, and public service—are not undermined by digitalization or GenAI. In this sense, it seeks to preserve continuity between traditional journalism and digital journalism: tools change, but the normative foundations of the profession should not.

However, there are limits that reveal certain contradictions. Although interviewees claim that technology is only a tool, their testimonies show that digital tools do not merely assist journalists; they also modify rhythms, criteria, dependencies, forms of visibility, and relationships with audiences. In other words, professionals are used to reflecting on specific tools such as social media, SEO, metrics, big data, algorithms, or GenAI, but less so on the broader overall effect of technology on journalism (Media Councils in the Digital Age, 2023b, p. 6).

Most professionals from the nine Catalan media outlets interviewed define artificial intelligence as a support tool aimed at speeding up processes and increasing efficiency, but not at replacing the core functions of journalism. This instrumental conception is especially evident in uses related to mechanical or low-value-added tasks. Several newsrooms use tools for automatic transcription, translation, content classification, summary generation, or document retrieval. One interviewee explains that initial resistance among professionals decreased once they experienced the time savings provided by automatic transcription, especially for repetitive tasks such as interviews. Regarding the tools used, the study mentions Whisper for transcription, Google Translate via API, reverse image search, ChatGPT for classification and testing, and NotebookLM for document analysis, which enables the generation of summaries from large documents or multiple sources, as well as the exploration of direct integrations within the CMS to facilitate summaries, SEO, and internal recommendations. Implementation is oriented toward simplicity and integration in order to avoid tool fragmentation.

In other media organizations, artificial intelligence has been integrated into content management systems to generate tagging suggestions, subtitles, or alternative text for images, always under human supervision. AI-generated suggestions are not automatically implemented but require journalistic validation. This same logic is replicated in other organizations, where all AI-generated content must be reviewed by an editor before publication.

According to one of the interviewees from the IAPer project, the CMS (Content Management System) in his newsroom includes various functionalities, among which article tagging stands out. This task is already supported by artificial intelligence, although the system does not generate tags automatically; instead, it offers suggestions that must be validated by the journalist. In this sense, tagging is part of a cross-cutting project involving documentation, engineering, and news departments, aimed at optimizing archive management and improving content retrieval. Regarding headline generation, the interviewee notes that several tests have been conducted, although he acknowledges that "they are very poor," and adds that no further development is planned in this area, as headlines are intended to remain the responsibility of journalists.

In the same vein, another interviewee details the set of tools available in the newsroom, which includes, among other functions, headline improvement, language correction, summarization of external texts such as court rulings or long documents, transcription of interviews, audio and video, video editing, and comment moderation. It is also explained that artificial intelligence is used for internal analytical tasks, such as studying user behavior, their potential interests, news positioning, or optimizing the placement of stories within the platform—assessing, for example, whether it is more appropriate to place a news item in one section or another depending on its potential performance. It is also noted that a dedicated unit has been created to track potentially useful tools and experiment with them before their implementation in the newsroom.

In the newsroom of another Catalan journalist interviewed, work is also being carried out on a proprietary tool, currently in a training phase, designed to convert certain types of content such as press releases. The shared goal is to free up time so that professionals can focus on producing original content and on tasks with higher journalistic value. In this regard, another interviewee notes that artificial intelligence is not used to write articles or to verify the truthfulness of any given issue.

In another of the media outlets participating in the IAPer project, specific applications of artificial intelligence are being explored for business-oriented data analysis, the development of propensity models, content classification, tools to facilitate print layout, and the future development of a chatbot for readers. The possibility of automating draft news agency copy is also being evaluated, although always under a system of mandatory human review. Regarding best practices, the outlet establishes the principle of not publishing automated content without human supervision, not generating editorial images using artificial intelligence, and informing readers when content has been automatically translated.

The prevailing perception is that artificial intelligence is useful when applied to auxiliary processes, but not when it interferes with functions considered essential. One interviewee believes that the moment has not yet arrived for media organizations to make extensive use of these tools, as the technology is still perceived as too fragile to be trusted for content generation. Nevertheless, the same account notes that it has evolved significantly and is particularly useful for performing mechanical tasks.

3.2.2. Deficit of Technological Reflection and Normalization of Innovation

A key aspect emerging from the report based on interviews with journalists and fact-checkers is that professionals speak about tools, but do not always reflect on technology as a system. There is, therefore, a certain "lack of awareness" regarding technology in a broader sense, which is linked to the possible influence of technosolutionist or deterministic imaginaries, or those associated with Silicon Valley culture (Media Councils in the Digital Age, 2023b, p. 6).

This point allows us to formulate an analytical hypothesis in which the journalistic profession does not necessarily lack digital skills, but may lack sufficiently developed critical reflection on how technology reshapes professional autonomy. In other words, journalists may know how to use tools without having developed a clear professional theory of what those tools imply for journalistic practice.

To explain this process, we can apply the theory of technological normalization. Technologies initially enter the professional field as utopian promises or dystopian threats. They are later experienced as disruptions and, finally, become normalized as part of the field. Thus, it could be said that in terms of technological innovation, we are currently in a phase of normalization, although this normalization may be obscured by the emergence of new professional profiles linked to digitalization (Media Councils in the Digital Age, 2023b, p. 6). In other words, such normalization does not necessarily imply reflective acceptance, but rather practical incorporation. Technology is integrated into routines before being sufficiently debated from a professional standpoint. This is why questions must be raised such as whether digital competencies are new and indispensable, whether they overload journalists, whether they involve taking on tasks previously carried out by technical or marketing profiles, and whether digitalization expands or reduces the professional field of action (Media Councils in the Digital Age, 2023b, p. 6).

The relevant question is therefore not whether journalists use technology, but to what degree of critical awareness they incorporate it into their professional identity. The adoption of artificial intelligence is taking place rapidly, but often without a sufficiently developed framework for reflection. Several Catalan media outlets interviewed agree that there is

a lack of protocols, criteria, and specific guidelines regarding the acceptable uses of this technology within news organizations. In particular, one interviewee warns that there is still a widespread absence of ethical guidelines for the use of artificial intelligence and considers it essential to establish clear criteria regarding which data can be shared and the limits of professional use. In her view, society as a whole shows excessive trust in these tools without properly understanding how they work or the corporate interests behind them.

It also emerges that technological knowledge within newsrooms is uneven and, in many cases, insufficient. Some interviewees from the IAPer project acknowledge that training remains reactive and tied to the implementation of new tools, rather than to a structural reflection on the implications of technological change. At the same time, innovation tends to be normalized as an inevitable process. One interviewee describes the digital transformation driven by artificial intelligence as the most profound cultural change experienced in decades and believes that companies that fail to adapt their structures will be left behind. This view reinforces a narrative in which technological innovation is seen as a continuous process that organizations must embrace in order to remain competitive.

3.2.3. Professional Autonomy Versus Technological Inevitability

One of the most thought-provoking aspects of the journalist and fact-checker report is its critique of the idea of technological inevitability. In this sense, it becomes clear how the common understanding of technology as a tool can paradoxically imply the acceptance of technological power as something inevitable. In other words, if technology appears as an instrument that must necessarily be used, the profession may lose its capacity to discuss its goals, its limits, and the conditions under which it is adopted (Media Councils in the Digital Age, 2023b, p. 7).

This issue is directly connected to professional autonomy. If journalism accepts technology as an inevitable external force, it risks limiting itself to adapting to it, rather than autonomously defining how it should be integrated. The challenge, therefore, would be to develop journalism capable of setting its own agenda in the face of digitalization, instead of allowing technological innovation to impose the agenda that the profession must follow (Media Councils in the Digital Age, 2023b, p. 7).

Some Press Council representatives insist that technology should not displace the human nature of journalism. One testimony states that journalism is an activity of communication between people and that technology should not make us forget its democratic function (Media Councils in the Digital Age, 2023a, p. 7). This statement carries strong conceptual weight. For Press Councils, defending the profession means recalling that journalism cannot be reduced to content production, information circulation, or technical efficiency. Its identity is linked to a social, deliberative, and democratic function. However, this democratic framing was not equally salient across national contexts in the earlier Press Council study. Some representatives regarded debates about AI and algorithms as relatively distant from their immediate media environment, a variation that the report related to territorial, political, social, and cultural circumstances and to differing levels of concern about the possible weakening of democracy. Therefore, although technology may be useful, it should not become the agent that defines the meaning of journalistic practice.

The interviews reflect a constant tension between journalists' desire to maintain control over the information process and the perception that the incorporation of artificial intelligence is inevitable. Several professionals insist that certain functions must remain exclusively under journalistic control. One interviewee in the IAPer project notes that, after several tests, they decided not to automate headline generation because they consider this task should remain under human control. Other sources emphasize that artificial intelligence is not used to verify facts or to make editorial decisions.

However, the defense of professional autonomy coexists with the recognition that technology will continue to expand. Several Catalan media interviewees describe adaptation to GenAI as an irreversible process that is driving a profound transformation of newsrooms and forcing a rethinking of professional profiles, work dynamics, and traditional organizational models. This transformation particularly affects the conception of journalistic teams. One interviewee argues that the key question is not what kind of journalist will be needed, but what multidisciplinary teams will need to be designed. According to this view, news production will increasingly require specialized profiles capable of participating in different phases of the narrative process and adapting content to multiple platforms. Professional autonomy is thus redefined not as absolute resistance to technology, but as the capacity to maintain editorial judgment and control over processes within a context of ongoing technological transformation. This redefinition of professional autonomy is consistent with Lewis et al. (2019), who argue that automation challenges the conventional division between humans as communicators and machines as mediators, raising broader questions about the roles and relationships of humans and machines in news production.

3.2.4. Professional Discomfort and Deprofessionalization

The journalist and fact-checker report introduces a particularly useful concept for this second level of analysis: professional discomfort. Interviewees sometimes express a concrete discomfort, but at other times a more diffuse unease that is difficult to conceptualize and even harder to translate into an ethical code. The report links this discomfort to the idea of deprofessionalization: in a context of so many changes, it becomes difficult to assert that journalists maintain control over their own work, because the conditions that historically defined journalism as a profession are being weakened (Media Councils in the Digital Age, 2023b, p. 8).

This passage allows us to articulate a subjective dimension of technological impact. Digitalization does not only change external processes; it also generates uncertainty about the journalist's place. Professionals face pressures of speed, metrics, visibility, constant updating, social media, and new technical standards. Hence, this discomfort is not simply resistance to change, but a sign that the profession perceives a partial loss of control over its working conditions.

This diagnosis is particularly relevant for analyzing GenAI. GenAI does not enter a stable professional field, but one in which doubts already exist regarding autonomy, authority, and journalists' ability to maintain their criteria in the face of external demands. In this sense, GenAI may intensify a prior process of deprofessionalization if it is introduced as a production requirement, an optimization tool, or a partial substitute for professional skills without sufficient debate.

At the same time, perceptions of professional enrichment also emerge. The rise in hybrid profiles may expand newsroom capabilities, foster interdisciplinary collaboration, and enable more complex journalistic projects. The problem is that this expansion may simultaneously translate into overload, functional precarization, or a dilution of the professional core.

The implementation of GenAI has generated significant concern among journalism professionals, especially during the early stages of adoption. Several Catalan media interviewees describe initial reactions of fear, distrust, or skepticism regarding the possibility that these tools could replace jobs or degrade professional quality. Specifically, one interviewee believes that owners and editors have primarily driven the adoption of artificial intelligence due to its potential to reduce labor costs. This perception reinforces the idea that technology can be used to replace human resources, generating resistance within newsrooms. Other interviewees describe a wide range of positions among professionals: from those who completely reject the use of artificial intelligence because they believe content should

be exclusively human-made, to those who see it directly as a threat to employment. A generational divide is also observed, with younger professionals tending to integrate these tools more naturally.

Nevertheless, most sources agree that initial fears have diminished as journalists have experienced the practical benefits of these technologies. According to several interviewees in the IAPer project, perceptions began to shift once it became clear that the goal of organizations was not to replace journalists, but to increase productivity and facilitate specific tasks.

Training emerges as a key mechanism for reducing these reservations. Several media professionals interviewed in Catalonia highlight that training programs have helped dispel fears and encouraged a more critical, reflective, and safe adoption of emerging technologies. In this regard, one of them argues that the emergence of GenAI will require a continuous training process, sustained over time and extended across all areas of the organization, although with particularly significant impact on news departments. He also explains that a specific training strategy is already being designed to address these challenges and notes that, although many courses have already been delivered, the rapid evolution of the technology makes it necessary to establish permanent mechanisms for support and professional updating.

However, the persistence of certain reservations and concerns about possible deprofessionalization of journalistic activity indicates that the process of adaptation to artificial intelligence remains an open question.

3.3. Ethical and Practical Dimensions of Journalistic Practice in Relation to Artificial Intelligence

However, limiting the debate on artificial intelligence to a matter of productive efficiency would be insufficient. The interviews conducted with journalists, fact-checkers, and representatives of European Press Councils show that the main concern is not only the automation of certain tasks, but the gradual delegation of functions traditionally associated with journalistic professional judgment. In other words, the problem is not that machines help produce more content, but that certain decisions related to the selection, interpretation, verification, and presentation of information may become conditioned by algorithmic systems whose logic is opaque to both journalists and audiences.

3.3.1. Journalistic Ethics in the Digital Context: Between Replacement and Dependence

Regarding content generation and supervision, interviewed journalists in Catalonia emphasize that the goal is for journalists to work with the support of artificial intelligence, understood as an assistive tool, while final content creation remains the responsibility of the professional. In this sense, as one interviewee states, the system must ensure compliance with style guides, protocols, and editorial standards. However, a clear boundary is established between assistance and authorship, such that content generation remains exclusively the responsibility of journalists, with support from AI systems: "The content is generated by the journalist, but with the support of a journalistic assistant based on artificial intelligence."

In the field of verification, interviewees point to the existence of specific fact-checking methodologies and tools, and emphasize the importance of developing ethical frameworks based on two key principles: the use of artificial intelligence exclusively for repetitive tasks, and the guarantee of transparency through the identification and labeling of content in which this technology has been involved. Furthermore, one interviewee highlights that it is already possible to audit the use of AI-based journalistic assistants and that the results are satisfactory, demonstrating a progressive and functional integration of these tools into newsroom workflows.

From an organizational perspective, one interviewee describes the creation in his newsroom of a dedicated artificial intelligence committee, composed of professionals from different areas and disciplines. Its main function is to define usage protocols, oversee their implementation, and ensure compliance with established criteria in news production processes, "so that these protocols are followed when generating content and when determining how to use and how not to use artificial intelligence." This initiative is part of a cross-cutting governance model that coordinates editorial, technical, and professional units, with the aim of ensuring that technological innovation is introduced in a shared and collectively evaluated manner. It also includes the gradual revision and updating of style guides to address the specific challenges posed by artificial intelligence in journalistic practice.

In this regard, some Press Council representatives argue that artificial intelligence does not necessarily introduce entirely new dilemmas, but rather amplifies existing problems in the digital ecosystem. A member of a European Press Council warned that GenAI facilitates the production of seemingly rigorous and credible content, with impeccable linguistic quality, but built on insufficiently verified sources. As one interviewee noted, the problem is that it is increasingly easy to publish material that "looks professional" without carrying out the basic checks that have historically defined journalistic work. The result is a potential increase in the volume of published content accompanied by a reduced capacity for oversight and quality control.

This concern is directly connected to a central issue: the relationship between automation and epistemic authority. Traditionally, journalistic credibility has relied on professional capacity to gather information, cross-check sources, and publicly justify information production processes. The growing incorporation of automated systems introduces new technological intermediaries between facts and their public representation. Some Press Council representatives warn that GenAI may hinder access to original sources and foster increasing dependence on automatically generated or synthesized content, complicating information traceability and weakening independent verification capacity.

Interviews with journalists and fact-checkers reflect similar concerns. Although many professionals describe GenAI as just another newsroom tool, they also acknowledge that its integration may progressively alter the very nature of journalistic work. A Spanish fact-checker warned that the problem does not lie solely in the existence of new tools, but in the possibility that they replace essential processes of research and verification. From this perspective, GenAI appears not only as a production technology, but as a cognitive technology that may change how journalists access knowledge and construct evidence.

Another relevant aspect is the growing dependence on external technological infrastructures. Both journalists and Press Council members agree that newsrooms increasingly operate within ecosystems controlled by large technology platforms. Automation is not limited to content production, but also affects news distribution, recommendation, and visibility. As one interviewee noted, many journalists find themselves "running after technologies" and continuously adapting to dynamics defined by platforms, algorithms, and recommendation systems over which they have limited control.

This technological dependence creates a significant paradox. On the one hand, automated tools promise to increase the autonomy of news organizations through productivity gains and cost reductions. On the other hand, they may increase dependence on external technology providers, proprietary AI models, and global digital platforms. The consequence is that part of the infrastructure needed to produce and distribute information is no longer under the control of journalistic organizations but instead depends on technological actors with different interests, incentives and governance mechanisms.

3.3.2. Human Oversight and Editorial Responsibility

Against this backdrop, both journalists and Press Councils converge on a fundamental idea: the need to maintain human oversight as a guiding principle of journalistic activity. The interviews show broad consensus around the notion that ethical responsibility cannot be delegated to automated systems. Technology can assist, speed up, or expand certain professional capacities, but it cannot replace the obligation to verify information, cross-check sources, and take public responsibility for editorial decisions. As one interviewee summarized, the main risk is not the technology itself, but that professionals may forget fundamental ethical standards precisely because tools make it easier to publish, correct, or produce content without pausing to reflect on its implications.

For this reason, automation must be understood as an ambivalent process. While it offers opportunities to improve efficiency, process large volumes of data, and free up resources for higher-value tasks, it also introduces risks related to transparency, verifiability, technological dependence, and the erosion of key elements of professional autonomy. Rather than a direct replacement of journalists, the available evidence points toward a reconfiguration of their roles, in which the ability to supervise, interpret, and govern technological systems is becoming progressively as important as traditional journalistic skills. This interpretation is consistent with Diakopoulos (2019), who describes automated newswork as an increasingly hybrid arrangement in which algorithms supplement human journalistic work and argues for greater accountability around algorithmic systems. It also connects with Broussard et al. (2019), who identify human–AI interaction and algorithmic bias as central issues in the relationship between artificial intelligence and journalism.

From a verification perspective, interviewed journalists participating in the IAPer project consider artificial intelligence to be a tool with potential, but also with risks if used without a critical approach. In this sense, they emphasize that automated systems for detecting AI-generated content are not reliable, and therefore verification must continue to rely on source analysis, critical thinking, and contextualization of information. Within this framework, artificial intelligence is seen as useful for mechanical tasks such as transcription, translation, or support for technical writing, but it should not replace either original reporting or essential processes of investigation and fact-checking.

Regarding editorial practices, the same sources note that AI is promoted as a support tool, understood "as a co-pilot, as an assistant, but without replacing the critical and investigative gaze that journalism must have". Accordingly, a model is defended in which GenAI complements journalistic work, but does not replace professional judgment or the core functions of the profession.

The need to maintain human supervision over all automated content is also highlighted, as well as the obligation to inform audiences when automated translation systems or assisted content generation tools are used. However, the interviews also reveal that in many cases formal ethical frameworks and specific governance mechanisms to regulate and oversee the use of artificial intelligence have not yet been developed.

In terms of work organization, artificial intelligence is currently being used mainly for routine tasks, improving efficiency in certain processes, although its impact is not always easily measurable. It is also noted that its use is helping to redistribute functions within newsrooms, often assigning tasks linked to these tools to less experienced profiles, while more senior professionals continue to directly oversee news coverage areas.

Looking ahead, interviewed journalists identify considerable potential for artificial intelligence to optimize processes such as information retrieval, analysis, and verification, as well as to automate certain data-processing tasks. However, they consistently emphasize the need to preserve the fundamental principles of journalistic practice, especially rigorous source verification and fact-checking. In this regard, they warn that AI systems can produce

errors, inaccuracies, or seemingly plausible but incorrect answers, meaning their use requires constant supervision and an ongoing exercise of professional judgment.

4. Discussion and Conclusions

The findings of this research suggest that artificial intelligence should not be interpreted as an isolated technological disruption, but rather as the most recent stage of a broader process of digital transformation that has been affecting journalism for decades. Many of the concerns expressed by journalists, fact-checkers, and media executives do not arise exclusively from artificial intelligence itself, but from prior structural dynamics associated with the acceleration of news cycles, the growing importance of audience metrics, dependence on digital platforms, and the progressive incorporation of algorithmic systems into editorial decision-making. In this sense, GenAI appears less as a radical break and more as an accelerator of trends already present in the digital media ecosystem.

This observation helps to nuance dominant narratives about the impact of artificial intelligence on journalism. While much of the public debate has focused on the possibility that journalists may be replaced by automated systems—whether through synthetic newsrooms (Ufarte-Ruiz et al., 2023) or through media organizations operating with highly automated processes and hundreds of fully or partially autonomous bots, as in the case of Bloomberg (Quiñonez & Meij, 2024)—and on the increasing difficulty of distinguishing between journalism produced by human professionals and that generated by artificial intelligence (Dörr, 2016; Graefe & Bohlken, 2020; Kreps et al., 2022; Miroshnichenko, 2018), empirical evidence instead points to processes of professional reconfiguration and occupational hybridization.

The evidence analyzed here does not allow a categorical conclusion about whether journalists are being replaced by artificial intelligence; rather, it points to processes of professional role reconfiguration and to continuing claims about the value of specifically human journalistic competencies (Komatsu et al., 2020; Kreft et al., 2024). New competencies are emerging related to data analysis, the supervision of automated systems, platform management, and technological governance, while traditional journalistic functions are increasingly coexisting with more complex technical and analytical skills. This process confirms journalism's historical capacity to adapt to technological change, although it also raises questions about the limits and future identity of the profession. In this regard, a study on the Spanish media ecosystem notes that "six out of ten Spanish media outlets already use AI in journalistic tasks", although rank-and-file journalists continue to express "labor-related concerns" about its implementation and call for reopening debate on fundamental aspects of journalistic practice that technological acceleration has tended to push into the background (Mayoral-Sánchez et al., 2023).

At the same time, the findings show that the main challenges arising from the incorporation of artificial intelligence are not exclusively technical, but fundamentally organizational and epistemological. The increasing use of automated systems raises questions about who controls the processes of production, verification, and distribution of information. Although most interviewees emphasize the need to maintain continuous human oversight, the progressive integration of external technological infrastructures into newsroom routines introduces new forms of dependence that may affect professional autonomy. This perception is consistent with previous research showing that editors and developers tend to evaluate automation more positively, while reporters adopt more critical positions and report a lower sense of autonomy, as well as reduced margins for in-depth journalistic work (Olsen, 2025). Journalists increasingly operate within environments shaped by platform algorithms, third-party AI models, and data-driven optimization logics that remain largely outside their direct control.

The results also reveal a significant tension between technological normalization and critical reflection. Artificial intelligence tools are being rapidly incorporated into everyday newsroom routines, while the development of ethical frameworks, governance protocols, and professional standards is advancing at a considerably slower pace. This asymmetry suggests that technological adoption is progressing faster than institutional adaptation. As a result, many organizations continue to rely on informal norms, individual criteria, and experimental processes to regulate the use of these technologies, in the absence of consolidated and widely shared frameworks. According to recent studies (Chaparro-Domínguez et al., 2025), the development of ethical frameworks and the implementation of newsroom training strategies emerge as two essential measures to ensure responsible adoption of this technology in journalistic practice.

From a normative perspective, the findings indicate that the central question is no longer whether artificial intelligence will be adopted by news organizations, but under what conditions such adoption will take place. The preservation of editorial independence, professional responsibility, and verification practices will depend on the ability of media organizations to maintain effective mechanisms of human oversight, develop transparent structures of technological governance, and ensure that artificial intelligence systems remain subordinated to journalistic values, rather than the other way around. In this sense, the future of journalism seems to depend less on the technical capabilities of artificial intelligence than on the ability of organizations to govern its use in a way that is compatible with its democratic function. However, as the existing literature notes (Fernández-Barrero & Serrano-Martín, 2025), most media organizations still lack explicit internal policies on the use of GenAI, which leads to reliance on forms of individual self-regulation. In this context, transparency is a central concern, as the involvement of artificial intelligence is rarely explicitly disclosed, raising important questions about trust, intellectual property, and editorial responsibility.

Several methodological limitations should be considered when interpreting these findings. First, the datasets were collected at different moments in the development and professional adoption of GenAI. The international interviews conducted in 2022–2023 therefore provide a contextual baseline rather than a directly comparable contemporaneous sample for the Catalan interviews conducted in 2025–2026. Because temporal period and geographical context vary simultaneously, differences between the datasets cannot be attributed independently to technological change or media-system characteristics. Second, the international samples were designed to identify recurring professional and ethical concerns across contexts rather than to generate representative country-level comparisons. Third, the Catalan sample is purposive and composed primarily of senior professionals and actors directly involved in newsroom transformation and technological adoption. It consequently provides detailed organizational perspectives but should not be interpreted as representative of all Catalan journalists. Finally, because GenAI technologies and newsroom practices are evolving rapidly, the findings represent a particular stage in an ongoing process of technological adoption.

Finally, the Catalan cases analyzed in this study can be situated within broader transformations documented across European journalism, although these developments should not be understood as uniform across media systems. Comparative research shows substantial variation between national media-system configurations, including in the digital environment (Castro Herrero et al., 2017; Humprecht et al., 2022). The patterns identified here suggest that artificial intelligence is being incorporated within wider processes of digitalization, platformization, and professional change whose specific manifestations depend on organizational and national contexts. Future research should therefore examine more deeply how these technologies interact with media-system characteristics, organizational

cultures, professional identities, and the democratic expectations placed on journalism as a social institution.

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References

Almiron, N., Narberhaus, M., & Mauri, M. (2016). Mapping media accountability in stateless nations: The case of Catalonia. *Catalan Journal of Communication & Cultural Studies*, *8*(2), 207–225. [CrossRef] [PubMed]

Anderson, C. W., Bell, E., & Shirky, C. (2015). Post-industrial journalism: Adapting to the present. *Geopolitics, History and International Relations*, *7*(2), 32.

Arias-Robles, F. (2026). Between interest, uncertainty, and awareness: Outlooks on AI in leading media organizations. *Communication & Society*, *39*(1), 55–72. [CrossRef]

Broussard, M., Diakopoulos, N., Guzman, A. L., Abebe, R., Dupagne, M., & Chuan, C. H. (2019). Artificial intelligence and journalism. *Journalism and Mass Communication Quarterly*, *96*(3), 673–695. [CrossRef]

Brüggemann, M., Engesser, S., Büchel, F., Humprecht, E., & Castro, L. (2014). Hallin and Mancini revisited: Four empirical types of Western media systems. *Journal of Communication*, *64*(6), 1037–1065. [CrossRef]

Carlson, M. (2015). The robotic reporter: Automated journalism and the redefinition of labor, compositional forms, and journalistic authority. *Digital Journalism*, *3*(3), 416–431.

Castells, M. (1996). *La era de la información: Economía, sociedad y cultura. Vol. I: La sociedad red*. Alianza Editorial.

Castells, M. (1997). *La era de la información: Economía, sociedad y cultura. Vol. II: El poder de la identidad*. Alianza Editorial.

Castells, M. (1998). *La era de la información: Economía, sociedad y cultura. Vol. III: Fin de milenio*. Alianza Editorial.

Castro Herrero, L., Humprecht, E., Engesser, S., Brüggemann, M., & Büchel, F. (2017). Rethinking Hallin and Mancini beyond the west: An analysis of media systems in central and Eastern Europe. *International Journal of Communication*, *11*, 4797–4823.

Chadwick, A. (2013). *The hybrid media system: Politics and power*. Oxford University Press.

Chaparro-Domínguez, M. Á., Parratt-Fernández, S., & Mayoral-Sánchez, J. (2025). GenAI in journalism: An ethical analysis of implications, best practices, and challenges. *Online Journal of Communication and Media Technologies*, *15*(4), e202530. [CrossRef]

Coeckelbergh, M. (2023). *La filosofía política de la inteligencia artificial: Una introducción*. Ediciones Cátedra.

Cools, H., & Diakopoulos, N. (2024). Uses of generative AI in the newsroom: Mapping journalists' perceptions of perils and possibilities. *Journalism Practice*, *20*(3), 878–896. [CrossRef]

Corominas, M. (2019). Sistema comunicatiu, cohesió i fragmentació social. In S. Cardús (Dir.), *Informe sobre la cohesió social a la Catalunya del segle XXI*. Institut d'Estudis Catalans.

De Lima-Santos, M. F., & Ceron, W. (2022). Artificial intelligence in news media: Current perceptions and future outlook. *Journalism and Media*, *3*(1), 13–26. [CrossRef]

Diakopoulos, N. (2019). *Automating the news: How algorithms are rewriting the media*. Harvard University Press. [CrossRef]

Dörr, K. N. (2016). Mapping the field of algorithmic journalism. *Digital Journalism*, *4*(6), 700–722. [CrossRef]

Fernández-Barrero, M. Á., & Serrano-Martín, C. (2025). Are the media transparent in their use of AI? Self-regulation and ethical challenges in newsrooms in Spain. *Journalism and Media*, *6*(3), 152. [CrossRef]

Floridi, L. (2023). AI as agency without intelligence: On ChatGPT, Large Language Models, and other generative models. *Philosophy & Technology*, *36*, 15. [CrossRef]

Forja-Pena, T., García-Orosa, B., & López-García, X. (2024). The ethical revolution: Challenges and reflections in the face of the integration of artificial intelligence in digital journalism. *Communication & Society*, *37*(3), 237–254. [CrossRef]

Graefe, A., & Bohlken, N. (2020). Automated journalism: A meta-analysis of readers' perceptions of human-written in comparison to automated news. *Media and Communication*, *8*(3), 50–59. [CrossRef]

Gutiérrez-Caneda, B., Vázquez-Herrero, J., & López-García, X. (2023). AI application in journalism: ChatGPT and the uses and risks of an emergent technology. *El Profesional de la Información*, *32*(5), e320514. [CrossRef]

Hallin, D. C., & Mancini, P. (2004). *Comparing media systems: Three models of media and politics*. Cambridge University Press. [CrossRef]

Han, B. C. (2022). *Infocracy: Digitization and the crisis of democracy*. Polity Press.

Humprecht, E., Castro Herrero, L., Blassnig, S., Brüggemann, M., & Engesser, S. (2022). Media systems in the digital age: An empirical comparison of 30 countries. *Journal of Communication*, *72*(2), 145–164, (Erratum in 2022, *Journal of Communication*, *72*, 449). [CrossRef]

Jarvis, J. (2023). *The Gutenberg parenthesis. The age of print and its lessons for the age of the Internet*. Bloomsbury Publishing.

Johnson, D. G. (2006). Computer systems: Moral entities but not moral agents. *Ethics and Information Technology*, *8*(4), 19–24. [CrossRef]

Kahn, G. (2024, May 3). *AI newsroom guidelines look very similar, says a researcher who studied them. He thinks this is bad news*. Reuters Institute for the Study of Journalism. Available online: https://reutersinstitute.politics.ox.ac.uk/news/ai-newsroom-guidelines-look-very-similar-says-researcher-who-studied-them-he-thinks-bad-news (accessed on 17 September 2026).

Komatsu, T., Gutierrez Lopez, M., Makri, S., Porlezza, C., Cooper, G., MacFarlane, A., & Missaoui, S. (2020). AI should embody our values: Investigating journalistic values to inform AI technology design. In *Proceedings of the 11th Nordic conference on human-computer interaction: Shaping experiences, shaping society* (pp. 1–13). Association for Computing Machinery.

Kovach, B., & Rosenstiel, T. (2014). *The elements of journalism: What newspeople should know and the public should expect*. Three Rivers Press.

Kreft, J., Boguszewicz-Kreft, M., & Fydrych, M. (2024). "Guardians of the Truth": Journalists' resistance to the algorithmization of journalism. *Ethos. Kwartalnik Instytutu Jana Pawła II KUL*, *37*(2), 132–149. [CrossRef]

Kreps, S., McCain, R. M., & Brundage, M. (2022). All the news that's fit to fabricate: AI-generated text as a tool of media misinformation. *Journal of Experimental Political Science*, *9*(1), 104–117. [CrossRef]

Lewis, S. C., Guzman, A. L., & Schmidt, T. R. (2019). Automation, journalism, and human–machine communication: Rethinking roles and relationships of humans and machines in news. *Digital Journalism*, *7*(4), 409–427. [CrossRef]

Mayoral-Sánchez, J., Fernández, S. P., & Mera-Fernández, M. (2023). Uso periodístico de la IA en medios de comunicación españoles: Mapa actual y perspectivas para un futuro inmediato. *Estudios sobre el Mensaje Periodístico*, *29*(4), 821. [CrossRef]

Media Councils in the Digital Age. (2023a). *European press councils express caution against the over-reliance of technology in journalism*. Press Councils. Available online: https://www.presscouncils.eu/european-press-councils-express-caution-against-the-over-reliance-of-technology-in-journalism/ (accessed on 17 June 2026).

Media Councils in the Digital Age. (2023b). *Journalists and fact-checkers talk about the ethical implications of technology on their work*. Press Councils. Available online: https://www.presscouncils.eu/journalists-and-fact-checkers-talk-about-the-ethical-implications-of-technology-on-their-work/ (accessed on 17 June 2026).

Miroshnichenko, A. (2018). AI to bypass creativity. Will robots replace journalists? (The answer is "yes"). *Information*, *9*(7), 183. [CrossRef]

Montal, T., & Reich, Z. (2017). I, Robot. You, Journalist. Who is the author?: Authorship, bylines and full disclosure in automated journalism. *Digital Journalism*, *5*(7), 829–849.

Munoriyarwa, A., Chiumbu, S., & Motsaathebe, G. (2023). Artificial intelligence practices in everyday news production: The case of South Africa's mainstream newsrooms. *Journalism Practice*, *17*(7), 1374–1392. [CrossRef]

Noain-Sánchez, A. (2022). Addressing the impact of artificial intelligence on journalism: The perception of experts, journalists and academics. *Communication & Society*, *35*(3), 105–121. [CrossRef]

Olsen, G. R. (2025). Enthusiasm and alienation: How implementing automated journalism affects the work meaningfulness of three newsroom groups. *Journalism Practice*, *19*(2), 304–320. [CrossRef]

Organisation for Economic Co-Operation and Development. (2024). *OECD digital economy outlook 2024 (Volume 1): Embracing the technology frontier*. OECD Publishing. [CrossRef]

Parratt-Fernández, S., Chaparro-Domínguez, M.-Á., & Moreno-Gil, V. (2024). Journalistic AI codes of ethics: Analyzing academia's contributions to their development and improvement. *Profesional de la Información*, *33*(6), e330602. [CrossRef]

Perreault, G. P., & Ferrucci, P. (2020). What is digital journalism? Defining the practice and role of the digital journalist. *Digital Journalism*, *8*(10), 1298–1316. [CrossRef]

Quiñonez, C., & Meij, E. (2024). A new era of AI-assisted journalism at Bloomberg. *AI Magazine*, *45*(2), 187–199. [CrossRef]

Quivy, R., & Van Campenhoudt, L. (2005). *Manual de investigación en ciencias sociales*. Limusa.

Sánchez-García, P., Diez-Gracia, A., Mayorga, I. R., & Jerónimo, P. (2025). Media self-regulation in the use of AI: Limitation of multimodal generative content and ethical commitments to transparency and verification. *Journalism and Media*, *6*(1), 29. [CrossRef]

Sunstein, C. R. (2001). *Republic.com*. Princeton University Press.

Thurman, N., Thäsler-Kordonouri, S., & Fletcher, R. (2025). *AI adoption by UK journalists and their newsrooms: Surveying applications, approaches, and attitudes*. Reuters Institute for the Study of Journalism. Available online: https://reutersinstitute.politics.ox.ac.uk/ai-adoption-uk-journalists-and-their-newsrooms-surveying-applications-approaches-and-attitudes (accessed on 17 June 2026).

Ufarte-Ruiz, M.-J., Murcia-Verdú, F.-J., & Túñez-López, J.-M. (2023). Use of artificial intelligence in synthetic media: First newsrooms without journalists. *El Profesional de la Información*, *32*(2), 5. [CrossRef]

UNESCO. (2023). *Guidance for generative AI in education and research*. UNESCO. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000386693 (accessed on 17 June 2026).

van Dalen, A. (2012). The algorithms behind the headlines. *Journalism Practice*, *6*(5–6), 648–658. [CrossRef]

Ventura, P. (2023). *Guías y recomendaciones éticas para el uso de la inteligencia artificial en el periodismo*. Available online: https://www.patriciaventura.me/single-post/gu%C3%ADas-%C3%A9ticas-para-el-uso-de-la-inteligencia-artificial-en-el-periodismo (accessed on 17 June 2026).

Ventura, P. (2025, September 3). *Inteligencia artificial en medios de comunicación: Un inventario en evolución de casos reales*. Patricia Ventura. Available online: https://www.patriciaventura.me/single-post/casos-de-uso-de-inteligencia-artificial-en-medios-de-comunicaci%C3%B3n (accessed on 17 June 2026).

Wu, S. (2024). Journalists as individual users of artificial intelligence: Examining journalists' "value-motivated use" of ChatGPT and other AI tools within and without the newsroom. *Journalism*, *27*(2), 388–406. [CrossRef]

Zallo, R. (2013). Polítiques de comunicació a les nacions sense estat: El cas espanyol. In M. Civil i Serra, J. J. Blasco Gil, & J. À. Guimerà i Orts (Eds.), *Informe de la comunicació a Catalunya 2011–2012* (pp. 269–278). Generalitat de Catalunya. Available online: https://ddd.uab.cat/pub/llibres/2011/214051/infcomcat_a2011.pdf (accessed on 17 June 2026).

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