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Artificial Intelligence Applied to Public Service Journalism: Multimodal Innovation by RTVE

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ABSTRACT

Introduction: The application of artificial intelligence (AI) in journalism is advancing through experimentation in media outlets that put high-tech to the test in the service of their teams and audiences. While private companies are gearing their efforts towards competitiveness, public media are mandated to drive technological innovation aligned with their public service approach. The aim of the research is to analyze the development of AI in journalism for public service purposes through the case study of RTVE in the context of European public media. **Methodology:** By means of a methodology based on digital ethnography, which combines direct observation, content analysis and interviews, a complete comparison of the eight tools created in the Spanish public broadcaster, with a triangular analysis that can be replicated in future similar case studies. **Results:** The study confirmed the usefulness of experimentation with

advances in the application of multimodal AI in verification, documentation and automation of data-driven news; the applicability to all phases of the journalistic process is confirmed, combining analytical and generative AI, as well as the effectiveness of interdisciplinary collaboration between internal experts, companies and universities. **Conclusions:** The study provides conclusions that can be extrapolated to other media on the application of AI for three main public service purposes: combating misinformation, addressing "information deserts" and improving accessibility and interaction. Experimental technological innovation is effective, although it still faces the limitation of achieving the integration and interdisciplinary application of AI that effectively transforms production processes.

***Keywords*:** artificial intelligence; automated journalism; algorithms; media; public service; RTVE; digital ethnography.

1. INTRODUCTION

The development of automation applied to the information process has been boosted in the last decade through innovation and experimentation with artificial intelligence (AI) in media (Montoro- Montarroso et al., 2023; Salazar García, 2018; Ufarte Ruiz & Murcia Verdú, 2024) showing evidence that it will be the technology with the greatest impact on journalism in the coming years (Newman, 2021). The comprehensive implementation of "media AI" is in its initial stage, in which those who adopt it first will gain an advantage over their competitors (Mondría Terol, 2023). Its application will reduce costs and improve quality (Gutiérrez-Caneda et al., 2023), although its effectiveness will depend on the ability of this technology to permeate all layers of the information process.

Its recent surge in the sector, still considered an emerging reality, has become a top-level object of study in the field of communication since the first decade of the 2000s, with a clear takeoff from 2015 onwards (Ufarte Ruiz et al., 2021) and with greater interest after the popularization of the first conversational models that boosted the expansion of research in the sector from the end of 2022 (Almakaty, 2024; Ioscote et al., 2024; Lopezosa et al., 2023; Páez et al., 2024). As it is an emerging phenomenon, most of these investigations focus on case studies based on innovation and experimentation of AI applicable to all phases of the journalistic process (Sánchez-Gonzales & Sánchez-González, 2020; Newman, 2022). The initial results show that it is effective in: task automation (Graefe, 2016), information gathering and writing (Diakopoulos, 2015, 2019), trend detection (Tejedor Calvo et al., 2021), verification (Beckett, 2019; Ufarte Ruiz and Manfredi Sánchez, 2019), translation (Noain-Sánchez, 2022), and interaction with audiences through recommendation systems (Canavilhas, 2022; Túñez López et al., 2022), subscription and measurement (Díaz Noci, 2023).

Despite progress, its comprhensiveness has not been achieved and its profitability is not yet assured (Newman & Cherubini, 2025), while also raising doubts about its impact on employment in journalism (Canavilhas, 2025). Among the limitations to its implementation are the training deficit (Fieiras Ceide et al., 2023) and some internal resistance to change in the media (Mondría Terol, 2023; Ufarte Ruiz & Murcia Verdú, 2024), coupled with the ethical challenges posed by bias, oversight, and transparency (García-Ull & Melero-Lázaro, 2023; Hansen et al., 2017). These challenges are already being addressed with the recent self-regulation guidelines for the media in the use of AI (De-Lima-Santos et al. 2025; Parrat -Fernández et al., 2024; Sanahuja-Sanahuja & López-Rabadán, 2025; Sánchez-García et al., 2025).

Having established these initial achievements and limitations, the present research focuses on a perspective that has been scarcely studied in the sector: the usefulness of AI in the development of public service journalistic information that contributes to a collective informational benefit and is especially driven by public media.

1.1. AI in Public Service Journalism

Public service media (PSM) face new challenges in the era of technological innovation, with the unique characteristic that they receive public funding to fulfill "the arduous task of contributing to inclusion and social cohesion, strengthening local culture, and fostering democratic processes with pluralistic and diverse content" (Sørensen, 2019, p. 1). They play an essential role in the cohesion of democratic societies (Zaragoza-Fuster & García-Avilés, 2020) by guaranteeing rights such as access to information, diversity, and universality, among others (Aslama Horowitz & Nieminen, 2017), which compels them to innovate to serve their audiences (Crusafon et al., 2020). They are expected to fulfill the mandate of the General Assembly of the European Broadcasting Union (2014) which sets six core values: universality, independence, excellence, diversity, responsibility and innovation.

The need for innovation has sometimes been limited to the diffusion of technologies, without identifying a real change in the work and business model (Ostertag & Tuchman, 2012; Spyridou et al., 2013). However, AI-based technology is revealed as an opportunity to revitalize public media and address some of the specific problems identified by Tambini (2015): declining audiences, dwindling funding, a contested mission, the threat of digitization in traditional formats, and aggressive competition from private operators. These challenges can be met by strengthening the quality of information that impacts citizens' lives (Lowe & Martin, 2014), within a complex ecosystem composed of emerging and traditional players (Crusafon et al., 2020) that have pushed the platformization of PSM (Dragomir & Túñez López, 2024). This context requires greater technological literacy (UER, 2019) in the field of public media, to combat biases that harm democracy, as well as an improvement in privacy management, funding of innovation and training of professionals (Fieiras Ceide et al., 2022).

European public corporations' experimentation with AI includes comprehensive approaches supported by innovation labs with initiatives focused on combating disinformation, content coverage, and audience distribution and interaction (Fieiras Ceide et al., 2022). Pioneering applications include personalization trials by the Finnish public broadcaster YLE (Yleisradio), which launched its first news assistant, Voitto, in 2014; and the BBC's experience developing object-based media that allows for personalized user experiences based on location or sensory capabilities (Armstrong et al., 2019). Projects based on open-source software (Sørensen, 2019) and proprietary systems for greater control and independence (Sørensen & Van den Bulck, 2018) have also been developed, such as the BBC, which pioneered the incorporation of the "public service" condition into its algorithm (Fieiras Ceide et al., 2023). Among the collaborative experiences of public service media (PSMs) in combating disinformation, the support of the European Broadcasting Union (EBU) through the "A European Perspective " Project stands out. It promotes the exchange of quality information content between public media, through the use of AI (Canavilhas, 2022), without implying the replacement of journalists and editors (Wölker & Powell, 2021).

Advances in automated experimentation continue today and involve addressing their own challenges, such as the difficulty of finding trained professionals (Fieiras Ceide et al., 2023) or, among others, the loss of information diversity in algorithmic recommendation systems (Napoli, 2011). These challenges and advances characterize an emerging phase that requires research through case studies of public media, such as the one developed here, which focuses on the RTVE public broadcasting model.

1.2. The Case of RTVE, a Benchmark in Innovation

This research focuses on the case study of Radio Televisión Española (RTVE) as a leading media outlet in innovation that stands out for its experimentation in journalistic automation with AI in various areas (Fieiras Ceide et al., 2023) by achieving results and learnings that can be extrapolated to all types of media in general and public media in particular.

RTVE Corporation has a renowned track record in state-of-the-art technologies, being a pioneering television broadcaster in Europe in 4K production, the introduction of virtual tools, and experimentation with narratives through its Innovation Lab (Zaragoza-Fuster & García-Avilés, 2020). It has a Strategic Technology Plan (PET, in Spanish) with advancements also in big data (Cátedra RTVE de la Universidad de Zaragoza[1], n.d.), participation in the European 5G Media and Visual Media project, and multi-screen developments, among others (Real Rodríguez et al., 2024). It anticipated experimentation with AI in 2015 by launching a research program on systems based on intelligent information processing (Aramburú Moncada et al., 2023), the detection of newsworthy events and the presentation of news (Rozalén-Serrano et al., 2020). Initially, he experimented with the news alert system "Dataminr," a software business used by various media, and with the tool "Social Media Radar," a tested system for the analysis of social networks (Tejedor Calvo et al., 2021).

In the successive stages of experimentation, RTVE has promoted several university chairs (Universidad de Granada[2], 2022; Prensa RTVE[3], 2021; Cátedra RTVE de la Universidad de Zaragoza[4], n.d.; Universitat Autònoma de Barcelona[5], 2016) for collaboration on specific projects. In addition, it collaborates with other media outlets and technology companies such as, for example, with EFE and Narrativa, collecting health data for the pandemic in the "Covid-19 Tracking Project" (Corral, 2020); it has participated in the "Visiona" plan, for gender equality studies promoted by the BBC (n.d.); and together with Monoceros Labs and Amazon Web Services. It was part of a pilot project for the automation of news with synthetic voices (Corral, 2023).

These and other AI innovations at RTVE have been academically studied as isolated projects, such as document automation (Bazán-Gil, 2023), news segmentation (Bazán-Gil et al., 2021), automated storytelling in sparsely populated areas (Aramburú Moncada et al., 2023), fact-checking (Sánchez Esparza et al., 2024), and their applications in radio (Fieiras Ceide et al., 2025). This research aims to complement these previous studies by providing the first comparative analysis of all AI applications applicable to the public service news process implemented within the Corporation, which are analyzed here along with the assessments of those responsible for them.

2. OBJECTIVES

The main objective of this research is to conduct a comparative analysis of multimodal AI applications developed by RTVE that are applicable to the news process for public service purposes. It includes two specific objectives:

- O1. To identify the applications and to examine the characteristics of their equipment, the technological development by phases and formats, the usefulness and its dissemination.
- O.2. To analyze with the professionals involved the benefits achieved, challenges and current limitations in the implementation of AI.

The study begins with three initial hypotheses:

- H1. RTVE's AI applications are multimodal, with analytics predominating for the documentation and distribution phases, and they are driven by its own teams.
- H2. The main benefits are the reduction of production costs and the offering of new services.
- H3. The limitations lie in the technological training of professionals and in the ethical risks of AI.

[1] RTVE Chair at the University of Zaragoza
[2] University of Granada
[3] RTVE Press
[4] RTVE Chair of the University of Zaragoza
[5] Autonomous University of Barcelona

3. METHODOLOGY

3.1. Triangulation for Research on Journalistic Innovation with AI

This research employs the digital ethnography methodology associated with studies on newsmaking (Retegui, 2020; Somohano Fernández, 2023) and digital environments (Fieiras Ceide et al., 2025; García-Avilés et al., 2018), typical of emerging communicative phenomena (Kawulich, 2005) and useful in AI case studies (De Lara et al., 2022; Ufarte Ruiz & Manfredi Sánchez, 2019). It combines triangulation through content analysis, on-site observation, and semi-structured interviews (Ardèvol et al., 2003; Estalella, 2018; Alba Martínez & Arizpe Ramírez, 2021) to achieve a deeper understanding of the analyzed reality and to have the perspective of its members (Cervantes Barba, 1994; Guber, 2001). The main difficulty is achieving face-to-face involvement and contact in professional environments (De León Vázquez, 2019; Zaragoza-Fuster & García-Avilés, 2020), This is especially valuable in the exploration of changing phenomena and innovative environments, as in the case of AI (Mantilla, 2024).

The study begins with a literature review to define the units of analysis, the research context (Atkinson & Hammersley, 2007), and the selection of primary sources with those responsible for innovative practices (Lopezosa, 2020). This is complemented by two months of on-site observation in the Digital News Content and Technological Strategy and Innovation area of RTVE[6]. This facilitated interaction with different profiles and departments to address issues that might go unnoticed in an external documentary analysis (Retegui, 2020), and allowed for an understanding of how orders of meaning and belief systems are configured (Giménez Delgado, 2023).

3.2. Samples and Analysis Table

The selection of units of analysis begins with the review of the Corporation's publications on its use cases, completed with the advice of internal professionals of the medium, until it is posible to identify a complete sample of the 8 multimodal AI projects (Table 1) linked to innovative information processes of RTVE with a public service purpose developed until 2025.

Table 1. *Sample of AI innovation projects at RTVE linked to information processes for public service purposes developed up to 2025*

PROJECT	BRIEF DESCRIPTION AND WEB LINK
A European Perspective	Automatic translation and intelligent content recommendation for participation in a collaborative European public media news service aimed at combating disinformation, promoting European values, and strengthening information as a public service. URL: https://www.europeanperspective.net/home
Intelligent content analysis	Evaluation of content treatment and accessibility through intelligent analysis of its own news and programs to assess the time dedicated to the 2030 Agenda and the SDGs, as well as content supported by sign language. URL: https://rtve2030.rtve.es/ods
Document Archive	Automated cataloging and intelligent metadata system for the content of its Documentary Collection ensures greater utilization of the archive and increased efficiency in archival processes. URL: https://www.rtve.es/play/videos/programa/rtve-incorpora-inteligencia-artificial-su-archivo-audiovisual/16302226/
HiperIA Radio 3	Project for a virtual presenter who can interact directly with the audience and creation of an audiovisual program about music generated entirely through AI. URL: https://www.rtve.es/play/audios/hiperia/
Local election	Election coverage with automated news for municipalities with fewer than 1,000 inhabitants

[6] Successive visits were made in March and April 2024 to establish contacts with interviewees and to learn firsthand about the developments described, as well as the dynamics between departments.

information	that guarantees multimodal information access (text, image and audio) on election results with a public service approach to the so-called "Empty Spain". URL: https://www.rtveia.es/elecciones-generales-2023
Weather information in co-official languages	Automated weather information with real-time local forecasts, providing text and audio updates that generate daily news about small towns. It has begun as a proof of concept adapted to towns in Lleida, in both Spanish and Catalan. https://www.rtveia.es/meteo/
Iveres	Development of an AI-based "toolbox" to help journalists combat disinformation, using verification technologies that facilitate the detection of fake news and the understanding of online disinformation patterns. URL: https://iveres.es/
Smart subtitling	Use of an audio transcription tool for audiovisual content that integrates into the workflow of subtitlers and facilitates information accessibility. https://www.rtve.es/rtve/20221118/territoriales-tve-subtitulado-automatico-bilinguee/2409497.shtml

Source: Elaborated by the authors.

The identification of the projects was coordinated with the selection of primary sources that make up the intentional convenience sample, which brings together the internal managers of AI developments in different areas of RTVE to whom the semi-structured interviews are directed (Table 2)[7].

Table 2. *Intentional Sample of Those Responsible for AI Project Development at RTVE*[8]

NAME AND SURNAME	POSITION /PROFILE	DEVELOPED AI PROJECT	INTERVIEW DATE
Pere Vila Fumas	Director of Technology Strategy and Innovation	SDG analysis and sign language and overview	May 21, 2024
Lucía Rado	AI Project Coordinator at the Documentary Fund	AI in the Documentary Fund	May 22, 2024
Borja Díaz-Merry	Responsible for Verifica RTVE	IVERES	May 22, 2024
Iván López Olmos	Producer for RNE	HiperIA	May 27, 2024
Gorka Zubizarreta	Head of Digital Projects at RTVE.es	A European Perspective	May 28, 2024
César Peña	Journalist at the RTVE Audiovisual Innovation Lab	Overview and Lab Orchestra	May 29, 2024
David Corral	Head of Innovation	Automated election and weather information	June 4, 2024
Carmen Pérez Cernuda	Deputy Director of Technological Strategy and Innovation	Smart subtitling and overview	June 12, 2024

Source: Elaborated by the authors.

3.3. Study Categories for AI Innovation in Journalism

The content analysis is developed around four study categories and 21 variables (Table 3) compiled into an analysis table that can be replicated in future AI research in media. The proposal allows for the coding of the "Teams" (C1) with their profiles, training, and interrelationships; the "Technological Development" (C2) of each AI (analytical/generative and its modality), with the journalistic phases (documentation-production-distribution), its functionality, and the public service purpose offered; the internal "Dissemination" (C3) and

[7]The selection of both samples was advised by David Corral, journalist and Head of Innovation, along with engineers Pere Vila Fumas and Carmen Cernuda as heads of the Directorate of Technological Strategy and Innovation, a department that was eliminated in the first months of 2025 within the Corporation.

[8]The members of the Department of Technological Strategy and Innovation have held these positions until early 2025.

transparency to audiences through the publication of results; and, finally, the "Effectiveness and Perceived Benefits" (C4) through the perspective of those responsible for each project regarding its productivity, quality, benefits, and limitations.

Table 3. *Content Analysis Table of AI Innovation Projects in Media*

CATEGORY AND DESCRIPTION	VARIABLES	DESCRIPTION
C1. Team Analysis of the team responsible for the development of the AI application	**V1. Responsible Department**	Department in charge of development.
	V2. Key Roles	Team identification and profiles.
	V3. Training	Specific training for team professionals.
	V4. Integration into the writing	Linking the team's work to other areas.
	V5. External collaborators	External companies and entities involved in technological development and/or implementation.
C2. Technological Development Analysis of the technical characteristics and application to the journalistic process	**V6. Tool type**	Type of AI: analytical or generative. Multimodality: audio, image, video, text and others.
	V7. Objective and public service	Purpose of the tool and approach to the public service it offers.
	V8. Phase of the journalistic process	Documentation/verification. Production. Distribution.
	V9. Main features	Technical applications of AI implemented for specific tasks.
	V10. Period of time	Project execution timeframe.
C3. Dissemination/Integration Analysis of the dissemination and transparency of each tool and its integration into the company	**V11. Public Presentations**	Presentation of the tool at conferences and public events.
	V12. Academic Production	Academic articles and published research.
	V13. Media coverage on CRTVE	Dissemination of the tool through the different channels of the media.
	V14. Internal Information	Dissemination and acceptance of the tool within the field.
	V15. Distribution to the audience	Mechanisms planned to deliver the tool to the audiences.
C4. Effectiveness and Perceived Benefits Results analyzed by those in charge and public service approach	**V16. Productivity**	Perceived impact on performance.
	V17. Content Quality	Achievements in the quality of the content generated.
	V18. Advantages for RTVE	Benefits it brings to the organization in terms of time and resource optimization.
	V19. Impact on accessibility and critical understanding of information	Effect of the tool on the ease with which audiences access content and their ability to interpret and critically evaluate it.
	V20. Effects on the relevance of the content	Influence of the tool on the relevance and value of the content produced.
	V21. Challenges and limitations	Obstacles encountered during the development and implementation of the tool.

Source: Elaborated by the authors.

4. RESULTS

The results of the study of the eight journalistic innovation projects with AI by RTVE implemented until 2025 collect data from the individual analysis of each of them, which is presented through a joint comparison that offers findings from the experimentation with AI applicable to public service journalism and the media in general.

Overall, the projects are heterogeneous, employing automation tools that cover different information processes and address the specific needs of each area involved. This results in diverse approaches to objectives and functionalities. The main results are presented in a comparative table (Table 4) tailored to the study categories and supported by information gathered through on-site observation and interviews with project managers.

Table 4. *Comparative Analysis of AI Information Applications at RTVE for Public Service Purposes*

PROJECT AREA YEAR	**ANALYSIS BY CATEGORIES AND STUDY VARIABLES**					
	PHASE INFORMATION TYPE OF AI	**OBJECTIVE (O) PUBLIC SERVICE (PS)**	**FUNCTIONALITY**	**PRODUCTIVITY (P) LIMITATIONS (L)**	**INTERNAL / EXTERNAL PROFILES**	**INTEGRATION(I) DISSEMINATION (D)**
A European Perspective Informative Digital Content 2021	**Dissemination** **AI Analytics** **Multimodal**	**O.** Collaborative news service between the various European PSMs. **PS.** Strengthen spaces for truthful information.	- Classification of public service content - Translation and transcription - Synthetic audio dubbing - Smart recommender	**P.** Access to international information and improvement of PSM networks **L.** Dedication to supervision	**Internal** : Telecommunications Engineer **Organizations:** UER and Constructive Institute	**I.** Null **D.** A total of 2 training sessions, 3 academic articles, 4 news items https://www.europeanperspective.net/home
Intelligent content analysis Strategy and Innovation Department 2019	**Documentation** **AI Analytics** **Multimoda** l	**O.** Evaluate the content of SDGs and the information interpreted in sign language. **PS.** Transparency and commitment to inclusion and the 2030 Agenda.	- Content Transcript - Multimodal analysis - Intelligent content categorization	**P.** Optimizes time, content quality, transparency, and accountability **L.** Involvement of areas	**Internal** : Telecommunications Engineering and Business Management **Universities** : UC3M	**I.** Null **D.** A total of 2 training sessions, 1 Sustainability Plan, 4 news items https://rtve2030.rtve.es/

Document Archive Archive 2021	**Documentation** **AI Analytics** **Multimodal**	**O.** Cataloging and retrieval of the audiovisual archive **PS.** Preservation and use of multimedia heritage	- Extraction of alphanumeric characters - Multimodal categorization - Audio to text transcription - Keyword extraction - Content classification - Semantic segmentation - Facial recognition	**P.** Increases metadata capacity and recovery of unpublished material **L.** Workflows and design of new fields in the database	**Internal**: Telecommunications Engineering and Documentation **Universities** : UNIZAR	**I.** Null **D.** A total of 6 training sessions, 3 academic articles, 10 news items and 1 award. https://www.vsn-tv.com/es/rtve-vsn-inteligencia-artificial-vsnexplorermam/
HiperIA Strategy and Innovation Department Radio 3 2023	**Production** **Dissemination** **Generative AI** **Multimodal**	**O.** Audiovisual music program presented by an avatar that interacts with the audience **PS** Innovation in cultural dissemination	- Automatic generation of text and synthetic voice over musical themes and synthetic voice - Avatar generation and animation - Chatbot	**P.** Increases the capacity of small teams and interaction with young audiences **L.** Innovation and growth of the project	**Internal**: Telecommunications Engineering, Audiovisual Production, Graphic Design and Journalism	**I.** Null **D.** A total of 4 training sessions, 1 academic article, 2 awards https://www.rtve.es/play/audios/hiperia/
Election information Strategy and Innovation Department 2021	**Production** **Generative AI** **Multimodal**	**O.** Electoral information for municipalities with fewer than one thousand inhabitants. **PS.** Information in 'information deserts' with a principle of equality.	- Automatic generation of texts from official data - Generation of synthetic images and audio	**P.** Increase in locally accessible content **L.** Bureaucracy and team integration	**Internal**: Telecommunications Engineering and Journalism **Universities**: UCLM, UGR, UdL **Companies:** Narrativa, Monoceros Lab, Amazon Web Services, ONCE	**I.** Null **D.** A total of 2 training days, 3 academic articles, 15 news items, 1 award. https://www.rtveia.es/elecciones-generales-2023
Weather information Strategy and Innovation Department 2021	**Production** **Generative AI** **Multimodal**	**O.** Local weather information in Spanish and Catalan with audio. **PS.** Local content coverage with translation.	- Automatic generation of texts from official data - Development of synthetic voices	**P.** Increase in locally accessible content **L.** Bureaucracy and team integration	**Internal**: Telecommunications Engineering and Journalism **Universities**: UCLM, UdL **Companies:** Narrativa and Monoceros Labs	**I.** Null **D.** A total of 4 news items, https://www.rtveia.es/meteo
Iveres	**Documentation**	**O.** Development of a	- Social Media Monitoring	**P.** Optimization of verification	**Internal:** Telecommunications	**I.** Null It is planned to

Strategy and Innovation Department RTVE Verification 2022	**Dissemination** **AI Analytics** **Generative AI** **Multimodal**	verification 'toolbox' for journalists. **PS.** Simple use of tools against disinformation for media and public institutions	- Text analysis and classification - Detection of bots, deepfakes, and synthetic audio. - Anticipation of viral content - Transcription and machine translation	time. Rigor **L.** API Access and CrowdTangle (Meta)	Engineering and Journalism **Universities:** UAB, UC3M, UPC and UGR	extend it. **D.** A total of 7 training sessions, 7 articles, 8 news items, 1 award https://iveres.es/
Smart subtitling Strategy and Innovation Department 2022	**Dissemination** **AI Analytics** **Generative AI** **Audio and text**	**O.** Bilingual recognition and real-time subtitling of co-official languages. **PS.** Accessibility in co-official languages and for deaf people.	- Audio extraction, transcription, and bilingual translation - Real-time language recognition	**P.** Time optimization and accessibility **L.** Demanding regulations, detection of language change, shortcomings of language models that are not Spanish	**Internal**: Telecommunications Engineer **Companies**: Etiqmedia, Vicomtech **Universities:** UC3M	**I.** Null **D.** A total of 3 sessions, 4 articles, 8 news items, 1 prize https://www.rtve.es/rtve/20221118/territoriales-tve-subtitulado-automatico-bilinguee/2409497.shtml

Source: Elaborated by the authors.

4.1. Multidisciplinary Team, External Companies and Universities (C1)

The results reflect the collaboration between internal hybrid teams and external entities with multidisciplinary profiles (C1). RTVE's internal AI project teams primarily consist of engineers and journalists, and, depending on the tools, also include documentalists and Corporate Social Responsibility (CSR) managers, as well as audiovisual and design technicians. The composition of hybrid teams is common to all projects driven by the Technological Strategy and Innovation Department, which served as the coordinating department until early 2025. These projects have involved the Document Archive, the Digital News Content area (especially the RTVE Verifica unit), and Radio 3. This interdepartmental collaboration in the design phase, confirmed through interviews and direct observation, allows for the subsequent transfer of responsibility and project management to each area responsible for its implementation. The heads of the Directorate of Technological Strategy and Innovation interviewed, Pere Vila Fumas and Carmen Pérez Cernuda, both engineers, confirm that the innovation team functions as a “proof-of-concept driver”, with the aim of introducing AI into the different departments.

At the same time, for the technical development of AI applications, RTVE opts for collaboration with external technology companies such as Narrativa, Monoceros Lab, and Amazon Web Services; a social organization (Once); and seven universities involved in the development of the projects through collaborative professorships: Autonomous University of Barcelona (UAB), Carlos III University of Madrid (UC3M), Polytechnic University of Catalonia (UPC), University of Granada (UGR), University of Zaragoza (UNIZAR), University of Castilla-La Mancha (UCLM), and University of Lleida (UdL). RTVE's innovation managers justify the effectiveness of this external technical collaboration in interviews. The Director of Technological Strategy

and Digital Innovation, Pere Vila Fumas (personal communication, May 21, 2024), states that, “developing our own systems requires an economic and human effort that is not currently within the Corporation's reach; we need to acquire expertise, not machines, and adapt to the new technologies that are constantly emerging.”

4.2. Technological Development and Phases of the Information Process (C2)

RTVE's eight applied AI innovation projects in news processes were launched between 2019 and 2025. Their main developments and functionalities (C2) are linked to one or more of the journalistic phases of documentation, production and distribution with public service objectives (Figure 1) which are explained below in a descriptive manner.

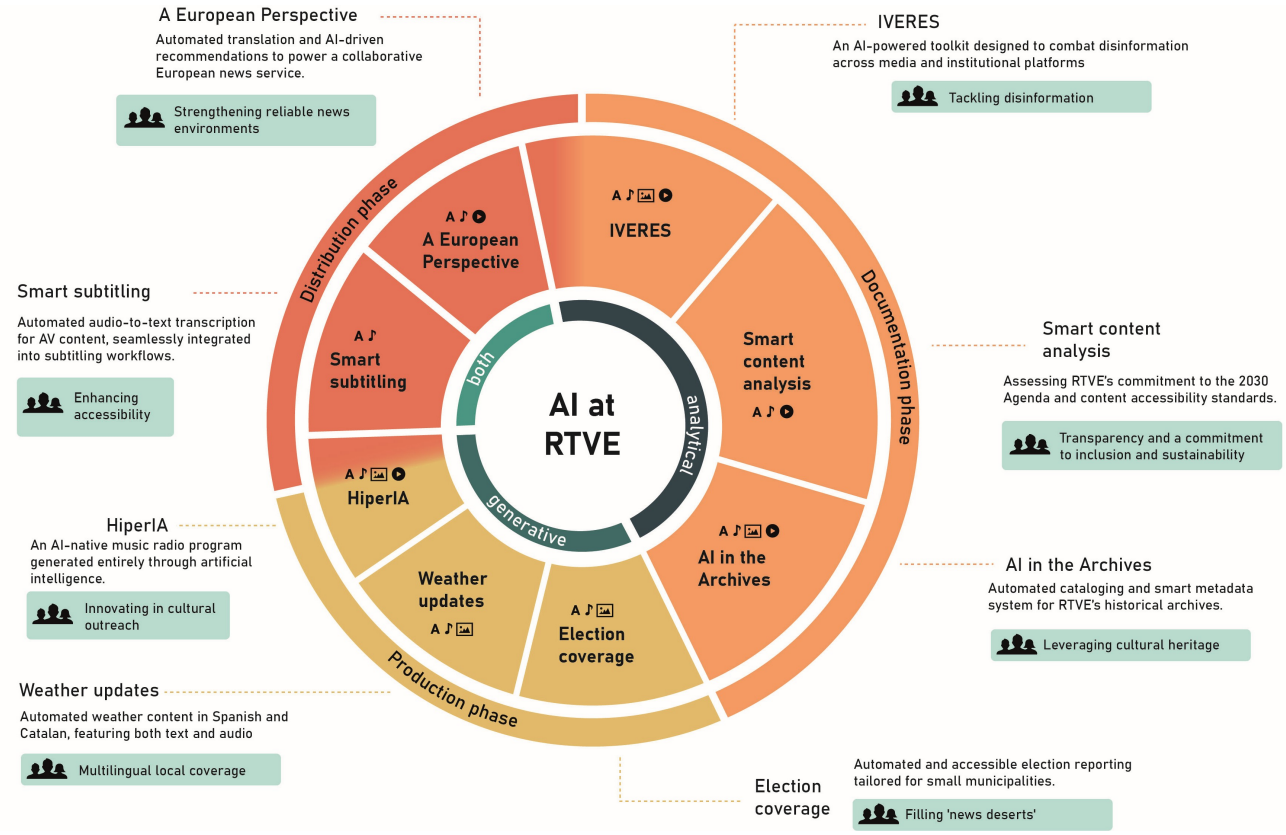
In the documentation phase, three applications with specific public services have been identified: AI in the archival collection, which allows cataloging and retrieving content from the RTVE audiovisual archive, with the public purpose of protecting audiovisual heritage and making it accessible; the IVERES application for verification in documentation and distribution tasks against disinformation; and the documentary analysis of proprietary information to strengthen its commitment to content of the 2030 Agenda and sign language.

In the production phase, three projects are being promoted: the development of tests with automated news based on official data from the electoral process in Spain, including text, audio, and graphics, aimed at rural areas with fewer than 1,000 inhabitants, as a public service announcement in so-called "information deserts"; the automation of provincial weather content through a proof of concept focused on Catalonia and combining Spanish and Catalan; and the HiperIA project, linked to music radio, which focuses on two information phases: production, through the autonomous generation of cultural content, and dissemination through interaction with the audience via a chatbot as a specialized conversational assistant that allows the audience to delve deeper into the content of each program.

Regarding dissemination, four projects were identified with functionalities designed to strengthen the connection with audiences. These include the aforementioned IVERES and HiperIA projects, which facilitate the public's verification of information and musical queries; the project A European Perspective with the exchange of quality content between European public media to combat disinformation; and, finally, the development of an intelligent subtitling system, based on the automatic generation of texts in several languages that expands multilingual accessibility for deaf people.

All the managers consulted emphasized in the interviews that this implementation of AI tools has led to significant improvements in productivity, by optimizing time and processes, and that it has enabled the production of a volume of high-quality content that would not have been feasible using conventional methods. Furthemore, they all agree that these tools contribute to strengthening RTVE's commitment to public service.

Figure 1. *RTVE 's AI Tools Based on Phases, Types of AI and Public Service*



Source: Elaborated by the authors.

4.3. Types of AI, Multimodality and Functionalities

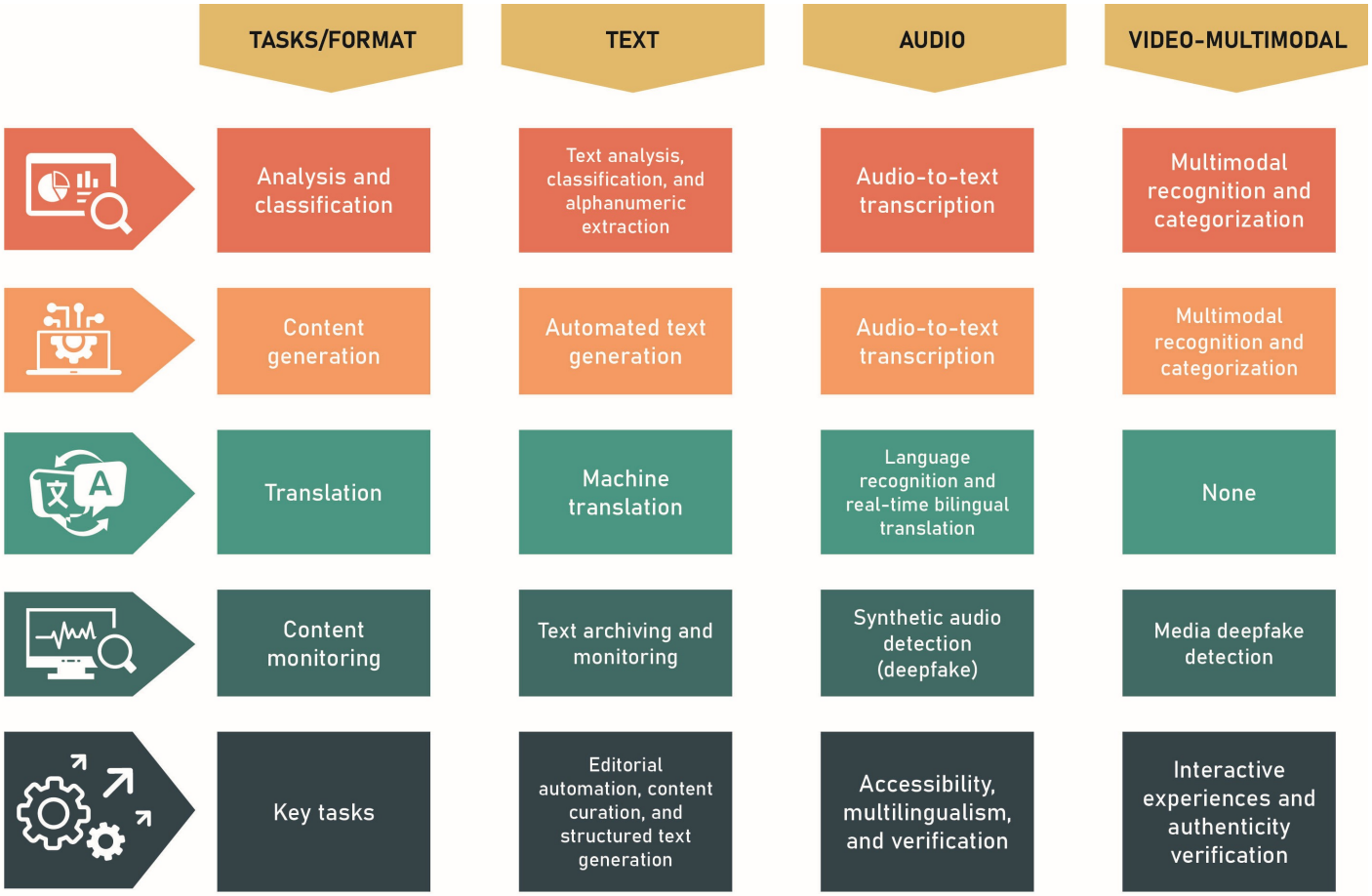
From a technological development perspective, most of RTVE's AI projects employ multimodal technologies when processing audio, image, text, and video (Table 3) and utilize both analytical and generative AI. Analytical AI, used to extract patterns, predominates in three of the eight projects (Document Archive, IVERES, and Intelligent Content Analysis), while three others use generative AI, which provides regenerated content (Electoral Information, Weather Information, and HiperAI), and the remaining two combine both (A European Perspective and Intelligent Subtitling). Regarding learning models, the projects have in common that they are based on Natural Language Processing (NLP) and Deep Learning (DL) developed by third parties. Carmen Pérez Cernuda (personal communication, June 12, 2024) points out that they choose to adapt existing models to their specific needs and train them to obtain specific results, always supervised by a human team.

The functionalities offered by the suite of applications are differentiated by tasks and formats (Figure 2). The automatable journalistic tasks focus on creating data-driven content and ensuring verification and security through the detection of bots, deepfakes, and deceptive synthetic audio. They improve accessibility by promoting multilingualism, translation, transcription, and dubbing. And they are experimenting with content personalization and recommendation through classification based on public interest.

Regarding formats, AI applications on text stand out as the most numerous and most developed, using Natural Language Processing (NLP) for editorial automation, content curation, and the generation of structured texts. Audio-related applications provide accessibility, multilingualism, and authenticity

verification. Video-related applications focus on creating interactive and personalized experiences, as well as verifying the authenticity of visual and audiovisual content.

Figure 2. *Main Functionalities of AI Applications at RTVE That Can Be Implemented in Other Media Outlets*



Source: Elaborated by the authors.

4.4. Dissemination, External Transparency and Internal Knowledge (C3)

The "Dissemination and Transparency" category (C3) includes an analysis of RTVE publications explaining the development and operation of each AI application, as a means of internal and external transparency, especially through its own news reports, public presentations at universities and conferences, and academic articles. IVERES stands out as the project that has received the most external visibility, along with automated electoral information and the Documentary Archive. In contrast, less dissemination has been given to the project A European Perspective and to the weather information project.

Data, interviews, and observations confirm greater external visibility for innovation projects, in contrast to limited internal recognition in other areas of RTVE. The experiences of those interviewed show that, outside the teams directly involved, the level of internal knowledge of the tools is low and that, paradoxically, "more support is received from outside than from within" (D. Corral, personal communication, June 4, 2024), especially from universities and technology companies. Managers point out that "the widespread lack of awareness" about these initiatives within the Corporation is striking, as they stated in the interviews, "we organize training sessions, but they are voluntary, and there isn't much interest from employees and

managers" (C. Pérez Cernuda, personal communication, June 12, 2024). This perception reinforces the idea that, despite the level of development achieved, these are experimental projects dependent on specific innovation units that fail to achieve comprehensive implementation in RTVE's news processes.

4.5. Effectiveness and Challenges Perceived by Professionals (C4)

The interviews with the eight RTVE interviewees linked to AI developments make it posible to gather results on the effectiveness of the projects and perceived challenges, taking into account variables of productivity, quality of public service, resources, accessibility, relevance and limitations.

There is unanimous agreement on the transformative potential of AI, and it is confirmed that it adds value to the public service approach in terms of quality, accessibility, comprehension, and relevance of content. Regarding productivity, the agility it brings to the development of specific tasks is highlighted, and the notion that this technology represents a threat to employment in the sector is rejected. It is pointed out that automation allows for the offering of new services without eliminating jobs. Instead, efforts are optimized to promote an expanded offering that would be impossible to develop otherwise, as it would require excessively large teams. Some examples include election information in small municipalities and the HiperIA radio project, which does not seek to "replace workers, but rather to expand the product and interact with the audience" (I. López Olmos, personal communication, May 27, 2024).

The interviewees highlighted the improvements in content quality, noting that "training machines is a lot of work, but the results lead to places that would not be possible without AI" (D. Corral, personal communication, June 4, 2024). They exemplified this with news from small towns or with the Archival Collection, which has allowed them to "recover large volumes of historical materials, some even unknown, with the potential to be reused in production, research, or commercialization" (L. Rado, personal communication, May 22, 2024).

Regarding technological developments, they value external contracting with companies and academic researchers, considering that "creating our own systems from scratch involves an economic and human effort that is not currently within the Corporation's reach" (C. Pérez Cernuda, personal communication, June 12, 2024). They agree that it is more efficient to adapt existing solutions and focus on "hiring knowledge, not machines, and adapting to the new technologies that are constantly emerging" (P. Vila Fumas, personal communication, May 21, 2024). This approach allows them to "triangulate with various tools to increase accuracy" and "stay up-to-date if any become outdated" (B. Díaz-Merry, personal communication, May 22, 2024). In this regard, they highlight the effectiveness of these collaborations in facilitating innovation that allows the progressive integration of tools with future benefits: "Companies that integrate AI tools will have higher quality and efficiency than those that do not and, therefore, a greater probability of surviving" (P. Vila Fumas, personal communication, May 21, 2024).

Participants highlighted the benefits of applying AI to public service proposals. They cited as an example the impact of these projects on the critical understanding of information, as reflected in initiatives such as A European Perspective, which allows for "offering different perspectives on the same topic, helps to better understand reality" (G. Zubizarreta, personal communication, May 28, 2024). Regarding accessibility and transparency, intelligent content analysis allows monitoring the Corporation's commitment to inclusion to promote equality and, therefore, "raise the alarm when the standard is not being met" (P. Vila Fumas, personal communication, May 21, 2024), as is the case with information on sustainable development, for example, or intelligent subtitling. This latter project has benefits for a specific group, such as deaf people. "They congratulated us because for the first time they could enjoy accessible news programs on television in their own language" (C. Pérez Cernuda, personal communication, June 12, 2024).

Regarding the impact and relevance of the projects, those interviewed do not directly link them to economic results or audience increases, but rather to a strategic repositioning of RTVE as an innovative player and a benchmark in the media ecosystem. “The key is to successfully develop proof-of-concept projects that demonstrate it is possible” (D. Corral, personal communication, June 4, 2024). From this perspective, they highlight experimentation as a success in itself because it demonstrates the ability to follow emerging technological trends and strengthen leadership as a public broadcaster because “it contributes to offering a more diverse perspective” and its application in different areas “has a positive impact on RTVE’s visibility” (G. Zubizarreta, personal communication, May 28, 2024).

In short, the RTVE sources consulted agree that AI “strengthens the public service commitment, through tools that highlight what the Corporation can offer and enhance its capabilities” (B. Díaz-Merry, personal communication, May 22, 2024). And regarding the challenges and limitations, they place them not so much in technological developments or their cost, but rather in internal reluctance to implement the projects and integrate them across the organization in a comprehensive manner.

The results obtained from on-site observation and interviews reveal a disparity between the interest and commitment of the teams involved in AI projects and the support received from the Corporation's senior management: "RTVE's internal culture is very resistant to change, and it's very difficult to make progress" (C. Pérez Cernuda, personal communication, June 12, 2024). This reality confirms the structural tension between the impetus provided by innovation teams and the still limited comprhensive integration of innovative advances into news processes, a situation that persists in the media sector.

5. DISCUSSION AND CONCLUSIONS

The study of AI innovation projects developed by RTVE confirms the usefulness of experimentation for public service purposes while also highlighting the difficulty of its cross-functional integration into workflows due to the lack of guaranteed cost-effectiveness (Newman & Cherubini, 2025). The case study presented makes it possible to draw conclusions that can be implemented in journalism in general, and to AI applied to public service journalism in particular.

First, as conclusions that can be extrapolated to journalism in general, it is clear that the applications developed during the innovation and experimentation phases represent progress in the application of AI to different informational tasks with multimodal tools—text, video, and audio—(H1) that combine analytical AI for the documentation and distribution phases, and generative AI for the automated production of content. This confirms its applicability throughout the journalistic process (Newman, 2021; Sánchez-Gonzales, 2020) with three predominant functionalities: verification, data-driven information, and personalization of content and services.

The development of experimental applications is driven by leveraging the knowledge of external companies with existing solutions, primarily in Natural Language Processing (NLP) and Deep Learning (DL). This allows for the acquisition of expertise, not just tools, through collaboration with institutions and universities, facilitating a more agile adaptation to constant technological transformations. This practice differs from that of other European public corporations that prioritize internal technological development (Sørensen, 2019).

The managers interviewed from the different areas of RTVE confirm that the main benefits of applying AI are focused on reducing production costs and offering new services (H2), both for journalists in their documentary work, content analysis and verification, and for audiences with greater information accessibility, translation and interaction possibilities.

Regarding the limitations encountered in project developments (H3), these are not linked to technological

complexity or ethical risks, as they involve proof-of-concept projects and supervised designs. Instead, they arise from the internal culture and the lack of support for transferring technological innovation from its experimental phase to integrating it into production processes (Ostertag & Tuchman, 2012; Spyridou et al., 2013). A perception from the primary sources consulted also points to the limited interest of professionals, which confirms the resistance to change in the sector (Mondría Terol, 2023; Sánchez-García et al., 2023). This reality contrasts with the strategic and integrative approach to AI that has been implemented in other European public broadcasters (Fieiras Ceide et al., 2023; Sørensen & Van den Bulck, 2018).

Regarding the findings that can be implemented in Public Service Journalism, it is confirmed that innovation with applied AI fits the mandate of Public Service Media (PSM) to better respond to the information needs of audiences (Crusafon et al., 2020), and implement the technological literacy required to use AI (UER, 2019). In this sense, the findings of this study demonstrate that the main public service purposes that AI promotes are three: 1. the fight against disinformation through verification tools and agreements between public media to share quality information that strengthens democratic societies (Canavilhas, 2022; Sørensen, 2019; Zaragoza-Fuster & García-Avilés, 2020); 2. addressing "information deserts" with automated, data-driven news that allows for reaching underserved or invisible areas in media agendas, saving time and resources, and with a public service approach by integrating and connecting territories (Aramburú Moncada et al., 2023); 3. improving accessibility and audience interaction through real-time translation, intelligent subtitling, access to new services such as interaction with conversational bots and specialized content queries.

This case study ultimately illustrates the value of innovation and experimentation with AI applications in journalism, which facilitate technological advancement, reduce news production costs, and improve services for the audience. At the same time, it highlights the limitations in its widespread implementation across production processes, due to resistance within the sector that currently prevents applied AI technology from becoming a true instrument for transforming news processes.

6. REFERENCES

Alba Martínez, A., & Arizpe Ramírez, D. A. (2021). La etnografía digital: ¿posibilidad o realidad? *Revista Científica de Educación y Ciencias Sociales (RECIECS)*, *2*(2), 29-37. https://revista.unes.edu.mx/index.php/RCECS/article/view/11

Almakaty, S. S. (2024). The Impact of Artificial Intelligence on Global Journalism: An Analytical Study. *Review of Communication Research*, 12, 99-118. https://doi.org/10.52152/RCR.V12.7

Aramburú Moncada, L. G., López Redondo, I., & López Hidalgo, A. (2023). Inteligencia artificial en RTVE al servicio de la España vacía. Proyecto de cobertura informativa con redacción automatizada para las elecciones municipales de 2023. *Revista Latina de Comunicación Social*, 81, 1-16. https://doi.org/10.4185/RLCS-2023-1550

Ardèvol, E., Bertrán, M., Callén, B., & Pérez, C. (2003). Etnografía virtualizada: la observación participante y la entrevista semiestructurada en línea. *Athenea Digital. Revista de Pensamiento e Investigación Social*, 3, 72-92. https://doi.org/10.5565/rev/athenead/v1n3.67

Armstrong, M., Bowman, S., Brooks, M., Brown, A., Carter, J., Jones, A., Leonard, M., & Preece, T. (2019). *Taking Object-Based Media from the Research Environment into Mainstream Production* [Informe técnico]. BBC Research & Development. https://downloads.bbc.co.uk/rd/pubs/whp/whp-pdf-files/WHP351.pdf

Aslama Horowitz, M., & Nieminen, H. (2017). Diversity and rights. Connecting media reform and public

service media. *IC. Revista científica de información y comunicación*, 14, 99-119. https://icjournal-ojs.org/index.php/IC-Journal/article/view/385

Atkinson, P., & Hammersley, M. (2007). *Ethnography. Principles and practice*. Routledge.

Bazán-Gil, V. (2023). Artificial intelligence applications in media archives. *El Profesional de la Información*, *32*(5). https://doi.org/10.3145/epi.2023.sep.17

Bazán-Gil, V., Pérez-Cernuda, C., Marroyo-Núñez, N., Sampedro-Canet, P., & De-Ignacio-Ledesma, D. (2021). Inteligencia artificial aplicada a programas informativos de radio. Estudio de caso de segmentación automática de noticias en RNE. *El Profesional de la Información*, *30*(3). https://doi.org/10.3145/epi.2021.may.20

BBC (s.f.). *The equality project 50:50*. https://www.bbc.co.uk/5050

Beckett, C. (November 18, 2019). New powers, new responsibilities: A global survey of journalism and artificial intelligence. *The London School of Economics and Political Science*. https://blogs.lse.ac.uk/polis/2019/11/18/new-powers-new-responsibilities/

Canavilhas, J. (2022). Inteligencia artificial aplicada al periodismo: traducción automática y recomendación de contenidos en el proyecto "A European Perspective" (UER). *Revista Latina de Comunicación Social*, 80, 1-13. https://doi.org/10.4185/RLCS-2022-1534

Canavilhas, J. (2025). Tecnologia do Desassossego: O Jornalismo Humano Deve Sentir-se Ameaçado Pela Inteligência Artificial? *Comunicação E Sociedade*, 47. https://doi.org/10.17231/comsoc.47(2025).6100

Cátedra RTVE de la Universidad de Zaragoza. (s.f.). *Bases de datos de RTVE*. http://catedrartve.unizar.es/rtvedatabase.html

Cervantes Barba, C. (1994). Análisis de contenido y etnografía en el estudio de la producción de noticias. In E.E. Sánchez-Ruiz, & C. Cervantes Barba (Eds.), *Investigar la comunicación. Propuestas iberoamericanas* (pp. 77-103). ALAIC, Universidad de Guadalajara. http://ccdoc.iteso.mx/acervo/cat.aspx?cmn=download&ID=561&N=1

Corral, D. (July 25, 2023). 70.000 noticias hechas con inteligencia artificial, una cobertura especial de RTVE del 23J. *RTVE*. https://www.rtve.es/noticias/20230725/rtve-70000-noticias-hechas-con-ia-elecciones-generales-23j/2452791.shtml

Corral, D. (April 30, 2020). Periodismo tecnológico o ¿tecnología para el periodismo? En tiempos de pandemia. *RTVE*. https://www.rtve.es/rtve/20200430/periodismo-tecnologico-tecnologia-para-periodismo-tiempos-pandemia/2013145.shtml

Crusafon, C., González Saavedra, C., & Murciano, M. (2020). Las redes sociales y las aplicaciones móviles en las estrategias de transformación digital de los medios de servicio público europeos. *Comunicació: revista de recerca i d'anàlisi*, *37*(2), 33-54. https://doi.org/10.2436/20.3008.01.195

De Lara, A., García-Avilés, J.-A., & Arias-Robles, F. (2022). Implantación de la Inteligencia Artificial en los medios españoles: análisis de las percepciones de los profesionales. *Textual & Visual Media*, *1*(15), 1-16. https://doi.org/10.56418/txt.15.2022.001

De León Vázquez, S. (2019). Estrategias etnográficas para aproximarse al periodismo contemporáneo: propuesta y desafíos. *Anuario de Investigación CONEICC*, XXVI, 43-56. https://doi.org/10.38056/2019aiccXXVI69

De-Lima-Santos, M. F., Yeung, W. N., & Dodds, T. (2025). Guiding the way: a comprehensive examination of AI guidelines in global media. *AI & Soc*, 40, 2585-2603. https://doi.org/10.1007/s00146-024-01973-5

Diakopoulos, N. (2015). Algorithmic Accountability. *Digital Journalism*, *3*(3), 398-415. https://doi.org/10.1080/21670811.2014.976411

Diakopoulos, N. (2019). *Automating the News: How Algorithms Are Rewriting the Media*. Harvard University Press.

Díaz Noci, J. (2023). Inteligencia artificial, noticias y medios de comunicación: Una aproximación jurídica desde la perspectiva de la propiedad intelectual. *Textual & Visual Media*, *17*(1), 7-21. https://doi.org/10.56418/txt.17.1.2023.1

Dragomir, M., & Túñez López, M. (2024). How public service media are changing in the platform era: A comparative study across four European countries. *European Journal of Communication*, *39*(6), 608-624. https://doi.org/10.1177/02673231241290062

Estalella, J. A. (2018). Etnografías de lo digital: Remediaciones y recursividad del método antropológico. *AIBR. Revista de Antropología Iberoamericana*, *13*(1), 45-68. https://doi.org/10.11156/aibr.v13i1.68208

Fieiras Ceide, C., Túñez López, M., & Fernández Lombao, T. (2025). From frequency to algorithm: Implementing AI in Spanish radio station. *Revista Latina de Comunicación Social*, 83, 1-22. https://doi.org/10.4185/rlcs-2025-2457

Fieiras Ceide, C., Túñez López, M., & Sousa, J. P. (2023). Radiografía de innovación de los PSM estatales de la península Ibérica: visión estratégica, tecnológica, y de captación de audiencias jóvenes en RTVE y RTP. *Revista Latina de Comunicación Social*, 81, 353-374. https://doi.org/10.4185/rlcs-2023-1957

Fieiras Ceide, C., Vaz Álvarez, M., & Túñez López, M. (2022). Artificial intelligence strategies in European public broadcasters: Uses, forecasts and future challenges. *Profesional de la información*, *31*(5), e310518. https://doi.org/10.3145/epi.2022.sep.18

García-Avilés, J. A., Carvajal Prieto, M., & Arias Robles, F. (2018). Implantación de la innovación en los cibermedios españoles: análisis de las percepciones de los periodistas. *Revista Latina de Comunicación Social*, 73, 369-384. https://doi.org/10.4185/RLCS-2018-1260

García-Ull, F. J., & Melero-Lázaro, M. (2023). Gender stereotypes in AI-generated images. *El Profesional de la Información*, *32*(5). https://doi.org/10.3145/epi.2023.sep.05

Giménez Delgado, I. (2023). Etnografía y periodismo: Usos transdisciplinarios y fronteras. *InMediaciones de la Comunicación*, *18*(1), 67-87. https://doi.org/10.18861/ic.2023.18.1.3324

Graefe, A. (2016). *Guide to automated journalism*. Tow Center for Digital Journalism, Columbia Journalism School. https://www.researchgate.net/publication/289529155_Guide_to_Automated_Journalism

Guber, R. (2001). *La etnografía, método, campo y reflexividad*. Grupo Editorial Norma.

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). https://doi.org/10.3145/epi.2023.sep.14

Hansen, M., Roca-Sales, M., Keegan, J., & King, G. (2017). *Artificial intelligence: Practice and implications for journalism*. Tow Center for Digital Journalism, Columbia Journalism School. https://www.researchgate.net/publication/320988850_Artificial_Intelligence_Practice_and_Implications_for_Journalism

Ioscote, F., Gonçalves, A., & Quadros, C. (2024). Inteligencia artificial en el periodismo: una retrospectiva de diez años de artículos científicos (2014-2023). *Journalism and Media*, *5*(3), 873-891. https://doi.org/10.3390/journalmedia5030056

Kawulich, B. B. (2005). Participant Observation as a Data Collection Method. *Forum Qualitative Sozialforschung /Forum: Qualitative Social Research*, *6*(2). https://doi.org/10.17169/fqs-6.2.466

Lopezosa, C. (2020) Entrevistas semiestructuradas con NVivo: pasos para un análisis cualitativo eficaz. In C. Lopezosa C, J. Díaz-Noci, & L. Codina (Eds.), *Methodos Anuario de Métodos de Investigación en Comunicación Social* (Vol. 1, pp. 88-97). Universitat Pompeu Fabra. http://doi.org/10.31009/methodos.2020.i01.08

Lopezosa, C., Codina, L., Pont-Sorribes, C., & Vállez, M. (2023). Use of generative artificial intelligence in the training of journalists: challenges, uses and training proposal. *El Profesional de la información*, *32*(4). https://doi.org/10.3145/epi.2023.jul.08

Lowe, G. F., & Martin, F. (2014). *The value of public service media: RIPE@2013*. Nordicom. https://urn.kb.se/resolve?urn=urn:nbn:se:norden:org:diva-10000

Mantilla, J. (2024). Etnografía e inteligencia artificial: potencialidades, retos metodológicos y desafíos futuros. *ARIES, Anuario de Antropología Iberoamericana*. https://doi.org/10.11156/aries/2024.AR0002408

Mondría Terol, T. (2023). Innovación MedIÁtica: aplicaciones de la inteligencia artificial en el periodismo en España. *Textual & Visual Media*, *17*(1), 41-60. https://doi.org/10.56418/txt.17.1.2023.3

Montoro-Montarroso, A., Cantón-Correa, J., Rosso, P., Chulvi, B., Panizo-Lledot, Á., Huertas-Tato, J., Calvo-Figueras, B., Rementeria, M. J., & Gómez-Romero, J. (2023). Fighting disinformation with artificial intelligence: fundamentals, advances and challenges. *El Profesional de la información*, *32*(3). https://doi.org/10.3145/epi.2023.may.22

Napoli, P. M. (2011). Exposure Diversity Reconsidered. *Journal of Information Policy*, 1, 246-259. https://doi.org/10.5325/jinfopoli.1.2011.0246

Newman, N. (2021). *Journalism, Media, and Technology Trends and Predictions 2021.* Reuters Institute-University of Oxford. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2021-01/Newman_Predictions_2021_FINAL.pdf

Newman, N. (2022). *Journalism, Media, and Technology Trends and Predictions 2022.* Reuters Institute-University of Oxford. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2022-01/Newman%20-%20Trends%20and%20Predictions%202022%20FINAL.pdf

Newman, N., & Cherubini, F. (2025). *Journalism and Technology Trends and Predictions 2025*. Reuters Institute-University of Oxford. https://reutersinstitute.politics.ox.ac.uk/sites/default/files/2025-01/Trends_and_Predictions_2025.pdf

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. https://doi.org/10.15581/003.35.3.105-121

Ostertag, S. F., & Tuchman, G. (2012). When innovation meets legacy. Citizen journalists, ink reporters and television news. *Information, Communication & Society*, *15*(6), 909-931. https://doi.org/10.1080/1369118X.2012.676057

Páez, Á., Saldaña Manche, W. V., Artigas, W., & Rios Incio, F. (2024). La inteligencia artificial en el periodismo. Revisión bibliométrica en Scopus (1989-2022). *Anuario Electrónico de Estudios en Comunicación Social Disertaciones*, *17*(2). https://doi.org/10.12804/revistas.urosario.edu.co/disertaciones/a.13322

Parratt-Fernández, S., Chaparro-Domínguez, M. A., & Moreno-Gil, V. (2024). Journalistic AI codes of ethics: Analyzing academia's contributions to their development and improvement. *Profesional de la información*, *33*(6). https://doi.org/10.3145/epi.2024.0602

Prensa RTVE. (March 23, 2021). *RTVE y la USAL renuevan la Cátedra sobre el Emprendimiento. Tecnológico en el sector Media* [Nota de prensa]. RTVEComunicación. https://www.rtve.es/rtve/20210323/rtve-usal-renuevan-catedra-sobre-emprendimiento-tecnologico-sector-media/2083300.shtml

Real Rodríguez, E., Príncipe Hermoso, S., & Agudiez Calvo, P. (2024). La transformación digital de la televisión pública. Estudio de caso de RTVE, Rai y RTP. *Estudios sobre el Mensaje Periodístico*, *30*(1), 211-221. https://doi.org/10.5209/esmp.91920

Retegui, L. M. (2020). La observación participante en una redacción. Un caso de estudio. *La Trama de la Comunicación*, *24*(2), 103-119. https://www.scielo.org.ar/pdf/trama/v24n2/v24n2a06.pdf

Rozalén-Serrano, M.-Á., Aranda-Jiménez, Á., Rodríguez, F., & Álvarez-Rodríguez, J.-M. (2020). *Proyecto Social Media Radar*. Madrid.

Salazar García, I. A. (2018). Los robots y la Inteligencia Artificial. Nuevos retos del periodismo. *Doxa Comunicación*, 27, 295-315. https://doi.org/10.31921/doxacom.n27a15

Sanahuja-Sanahuja, R., & López-Rabadán, P. (2025). Guías éticas para el uso periodístico de la GenAI. Tendencias del debate internacional y avances de la autorregulación en España. *Communication & Society*, *38*(1), 214-231. https://doi.org/10.15581/003.38.1.016

Sánchez Esparza, M., Palella Stracuzzi, S., & Fernández Fernández, Á. (2024). Implementation of Artificial Intelligence tools in the detection of fake and deepfake videos: Case of Radio Televisión Española (RTVE). *Visual Review*, *16*(4), 213-225. https://doi.org/10.62161/revvisual.v16.5303

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. https://doi.org/10.3390/journalmedia6010029

Sánchez-García, P., Merayo-Álvarez, N., Calvo-Barbero, C., & Diez-Gracia, A. (2023). Spanish technological development of artificial intelligence applied to journalism: companies and tools for documentation, production and distribution of information. *El Profesional de la información*, *32*(2). https://doi.org/10.3145/epi.2023.mar.08

Sánchez-Gonzales, H.-M., & Sánchez-González, M. (2020). Bots conversacional en la información política desde la experiencia de los usuarios: Politibot. *Communication & Society*, *33*(4), 155-168. https://doi.org/10.15581/003.33.4.155-168

Somohano Fernández, A. (2023). Etnografía de redacciones: metodologías, contribuciones generales y desplazamientos pertinentes para el estudio del periodismo. *Tsafiqui - Revista Científica en Ciencias Sociales*, 14(22), 27-39. https://doi.org/10.29019/tsafiqui.v14i22.1232

Sørensen, J. K. (2019). Public Service Media, Diversity and Algorithmic Recommendation: Tensions between Editorial Principles and Algorithms in European PSM Organizations. *INRA@RecSys*. https://api.semanticscholar.org/CorpusID:209068333

Sørensen, J. K., & Van den Bulck, H. (2018). Public service media online, advertising and the third-party user data business: A trade versus trust dilemma? *Convergence: The International Journal of Research into New Media Technologies*, *26*(2), 421-447. https://doi.org/10.1177/1354856518790203

Spyridou, L.-P., Matsiola, M., Veglis, A., Kalliris, G., & Dimoulas, C. (2013). Journalism in a state of flux: Journalists as agents of technology innovation and emerging news practices. *International Communication Gazette*, *75*(1), 76-98. https://doi.org/10.1177/1748048512461763

Tambini, D. (2015). Five theses on public media and digitization: From a 56-country study. *International Journal of Communication*, 9, 1400-1424. https://eprints.lse.ac.uk/62187/

Tejedor Calvo, S., Cervi, L., Pulido, C. M., & Pérez Tornero, J. M. (2021). Análisis de la integración de sistemas inteligentes de alertas y automatización de contenidos en cuatro cibermedios. E*studios sobre el Mensaje Periodístico*, 27(3), 973-983. https://doi.org/10.5209/esmp.77003

Túñez López, J. M., Ufarte Ruiz, M. J., & Mazza, B. (2022). Aplicación de la inteligencia artificial en comunicación. *Revista Latina de Comunicación Social*, 80. https://nuevaepoca.revistalatinacs.org/index.php/revista/article/view/1734

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

Ufarte Ruiz, M. J., & Murcia Verdú, F. J. (2024). An approach to the map of artificial intelligence research applied to journalism in Europe (2013-23). *Revista Latina de Comunicación Social*, 82, 01-20. https://doi.org/10.4185/rlcs-2024-2256

Ufarte Ruiz, M. J., Calvo Rubio, L. M., & Murcia Verdú, F. J. (2021). Los desafíos éticos del periodismo en la era de la inteligencia artificial. *Estudios sobre el Mensaje Periodístico*, *27*(2), 673-684. https://doi.org/10.5209/esmp.69708

Unión Europea de Radiodifusión (November 19, 2019). *News report 2019. The next newsroom: unlocking the power of AI for public service journalism*. https://www.ebu.ch/publications/strategic/login_only/report/news-report-2019

Unión Europea de Radiodifusión (August 22, 2014). *Public service values, editorial principles and guidelines*. https://www.ebu.ch/guides/public-service-values-editorial-principles

Universidad de Granada. (June 7, 2022). RTVE y la Universidad de Granada crean la "Cátedra RTVE-UGR en síntesis profunda de habla e IA conversacional y sus aplicaciones en la verificación de noticias". https://mecenazgo.ugr.es/creacion-catedra-rtve/

Universitat Autònoma de Barcelona. (April 22, 2016). *La UAB i RTVE crean la Cátedra para la innovación de los informativos*. https://www.uab.cat/web/sala-de-prensa/detalle-noticia/la-uab-i-rtve-crean-la-catedra-para-la-innovacion-de-los-informativos-1345830290069.html?detid=1345702163834

Wölker, A., & Powell, T. E. (2021). Algorithms in the newsroom? News readers' perceived credibility and selection of automated journalism. *Journalism*, *22*(1), 86-103. https://doi.org/10.1177/1464884918757072

Zaragoza-Fuster, M.-T., & García-Avilés, J.-A (2020). The role of innovation labs in advancing the relevance of Public Service Media: the cases of BBC News Labs and RTVE Lab. *Communication & Society*, *33*(1), 45-61. https://doi.org/10.15581/003.33.34466

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Baloğlu, E., & Budak, E. (2025). Cómo integrar la inteligencia artificial en las prácticas periodísticas. *Vivat Academia*, 158, 1-21. https://doi.org/10.15178/va.2025.158.e1604

Matos Mejías, C., & Carrasco Polaino, R. (2025). Implementación de la Inteligencia Artificial en los estudios de Periodismo de la Facultad de Ciencias de la Información de la Universidad Complutense de Madrid. *European Public & Social Innovation Review*, 10, 1-18. https://doi.org/10.31637/epsir-2025-1136

Páez, Á., Manche, W. V. S., Artigas, W., & Incio, F. R. (2024). La inteligencia artificial en el periodismo. Revisión bibliométrica en Scopus (1989-2022). *Anuario Electrónico de Estudios en Comunicación Social "Disertaciones"*, *17*(2). https://doi.org/10.12804/revistas.urosario.edu.co/disertaciones/a.13322

Sánchez, J. L. M., & Ruiz, M. J. U. (2020). Inteligencia artificial y periodismo. *Revista Cidob d'afers internacionals*, 124, 49-72. https://www.jstor.org/stable/26975708