RESEARCH

FIGHT FAKE NEWS. THE PROFESSIONAL PROFILE OF THE INFORMATION VERIFIER IN SPAIN

Combatir las noticias falsas. El perfil profesional del verificador de la información en España

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ABSTRACT

The boom experienced by fake news in recent years has generated new professional profiles, such as fact-checkers, who seek solutions to a problem that affects the credibility of the media. The objective of this study is to find out about this new professional profile, analyze the skills and abilities most in demand to perform these functions, and reflect on whether this specialty represents a new professional outlet for the labor market. To achieve this purpose, the independent Spanish data verification projects Maldita.es, Newtral Media Audiovisual, and Verificat are studied through different qualitative techniques, such as in-depth semi-structured interviews with their co-founders or managers and the analysis of web content and social media. It is a combination of techniques that have made it possible to draw conclusions and provide examples of interest to the research. The data show that there is a hybridization of profiles and a cross-section of knowledge, skills, and

attitudes around information verifiers in Spain, who have competencies in current technologies, visualization, and database management.

Keywords: fact-checking; fake news; fact-checkers; information checkers; fact checkers ; professional profiles.

RESUMEN

El auge que han experimentado las noticias falsas (*fake news*, según la terminología inglesa) en los últimos años ha generado nuevos perfiles profesionales, como los verificadores de datos o *fact checkers*, que buscan soluciones a un problema que afecta a la credibilidad de los medios de comunicación. El objetivo de este estudio es conocer este nuevo perfil profesional, analizar las competencias y habilidades más demandadas para desempeñar estas funciones y reflexionar sobre si esta especialidad supone una nueva salida profesional para el mercado laboral. Para alcanzar este propósito se estudian los proyectos independientes de verificación de datos españoles Maldita.es, Newtral Media Audiovisual y Verificat a través de diferentes técnicas cualitativas, como las entrevistas semiestructuradas en profundidad a sus cofundadores o responsables y el análisis de contenido web y de redes sociales. Se trata de una combinación de técnicas que ha permitido extraer conclusiones y aportar ejemplos de interés a la investigación. Los datos muestran que existe una hibridación de perfiles y una transversalidad de conocimientos, aptitudes y actitudes en torno a los verificadores de la información en España, que poseen competencias sobre las tecnologías actuales, la visualización y la gestión de bases de datos.

Palabras clave : *fact-checking*; noticias falsas; verificadores de la información; *fact checkers*; perfiles profesionales.

O COMBATE CONTRA AS NOTICIAS FALSAS.
O PERFIL DO PROFISSIONAL VERIFICADOR DE INFORMAÇÃO NA ESPANHA

RESUMO

O auge que tem evidenciado as notícias falsas(fake news, segundo a terminologia em inglês) nos últimos anos tem gerado novos perfis de profissionais, como os verificadores de dados ou fast checkers, que procuram soluções a um problema que afeta a credibilidade dos meios de comunicação. O objetivo deste estudo é conhecer este novo perfil profissional, analisar as competências e habilidades mais demandadas para desempenhar estas funções e refletir sobre se a mesma especialidade supõe uma nova alternativa profissional para o mercado de trabalho. Para atingir estes objetivos se estudam os projetos independentes de verificaçao de dados espanhois Maldita.es, Newtral Media Audiovisual, e verificar através de diferentes técnicas qualitativas, como os questionários semiestruturados em profundidade aos seus cofundadores ou responsáveis e a análise de conteúdo web e

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de redes sociais. Trata-se de uma combinação de técnicas que permitiu tirar conclusões e gerar exemplos de interesse para a pesquisa. Os dados mostram que existe uma hibridação de perfis e uma transversalidade de conhecimentos, aptidões e atitudes em torno aos verificadores da informação na Espanha, que possuem competências sobre as tecnologias atuais, a visualização e gestão de bases de dados.

Palavras chave: *fact-checking*; notícias falsas; verificadores da informação; *fact checkers*; perfis profissionais.

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1. INTRODUCTION

Journalistic projects aimed at data verification have multiplied worldwide in recent years (Palau-Sampio, 2015; Stencel, 2016), even though the origin of verifying and confirming facts as an institutionalized practice dates back to 1913 when the *New York World* newspaper founded the Bureau of Accuracy and Fair Play, a body dedicated to correcting oversights and eradicating phonies (Ayuso and Bauzá, 2018; Herrero et al., 2020).

Many independent media and platforms have set up sections, working groups, or spaces aimed at verifying information published by other media, disseminated through social media, or proclaimed by the main political leaders (Cherubini and Graves, 2016). The objective is to contribute more effectively to the demand for accountability of public representatives and better information for citizens, a key point to strengthen democracy (Gueham, 2017). Journalism must seek truthful information, prepare pieces of public interest, reconstruct and represent what happens in society, and monitor the powers, which implies being faithful to the elements that have defined the profession over time (Kovach and Rosenstiel, 2003).

The census of information verification projects prepared by the Duke University Reporters' Lab (Duke Reporter's Lab, 2020) quantifies a total of 306 fact-checking initiatives in 84 countries as of February 28th, 2021. There are 16 more initiatives than in December 2020, when the institution counted 290 web pages and organizations dedicated to these functions (Graph 1), and more than double that in 2015 (Adair and Thakore, 2015).
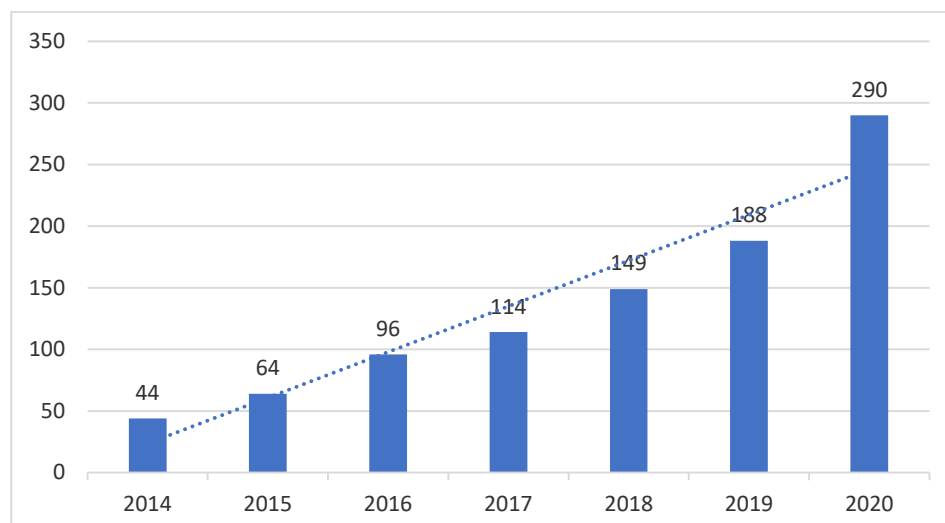
Figure 1: *Number of data verification projects worldwide.*
Source: Self-made based on Duke Reporter's Lab data.

Regarding the geographical origin, the United States, with 58 initiatives, is the country with the highest number of platforms, although cases are also identified in the rest of the continents (Vázquez, Vizoso, and López, 2019). However, the panorama of projects associated with the verification of information defies any attempt at categorization (Graves, 2016).

The consolidation of *fact-checking* is closely linked to the crisis of trust that has been generated around journalism (Ireton and Posetti, 2018), so that it is increasingly necessary to verify all the information that is consumed online, verifying the statements of the protagonists and the events that could be news (Mantzarlis, 2018). For this reason, Amorós-García (2018) considers that this practice is the most effective instrument to combat the height of false information, conceived from the journalistic field with the sole purpose of counteracting them and offering the public stories that adjust to reality.

The verification of information in the journalistic field has aroused interest among Spanish researchers (Ufarte, Peralta, and Murcia, 2018), who are already beginning to address, from different perspectives, the performance and evolution of these professionals who focus their attention on those statements and information based on verifiable facts (Amazeen, 2015). In this sense, there are works that make epistemological reflections on *fact-checking* (Rodríguez-Pérez, 2020), while others analyze these functions as a formula to combat fake news and disinformation, (Echevarría, 2016; Magallón, 2018; Lotero, Romero, and Pérez, 2018); as a tool to combat sensationalism (Álvarez and López, 2016); as a service in cybermedia (López, Rodríguez, and Álvarez, 2016) and in public service audiovisual media (López, Ufarte, and Murcia, 2019; Ufarte, Galletero, and López, 2020). Some studies also verify the televised electoral debates of the 2015 and 2016 general elections (Mazaira, Rúas, and Puentes, 2019), analyze the trends and narratives of *fact-check*ing on

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Twitter (Pérez and Velasco, 2020), and make comparisons between the different European initiatives (García and López, 2021; Ufarte, Anzera, and Murcia, 2020). In the press, you can read how journalistic companies create tools to improve the internal verification process (Pérez-Colomé, 2019).

Other works, on the contrary, have focused on examining whether these projects are a sustainable business model for journalism, (Ufarte and Murcia, 2018; Ufarte, Sidorenko, and Cantero, 2019), or have analyzed the tools used for the verification and contrast of information in the digital ecosystem (López, Toural, & Limia, 2018; Graves, 2018). On an international scale, this has also been verified, since numerous research pay attention to this field of study (Caeiro, 2014; Ciampaglia et.al., 2015; Hassan et. al, 2015; Nyhan and Reifler, 2014; Spivak, 2011; Uscinski and Butler, 2013, and Walter et al., 2020, among others).

Similarly, the verification of the information has given rise to a new professional profile (Ufarte, 2019), such as *fact-checkers*, who analyze, interpret, and reconstruct the information (Renó and Flores, 2014) taking advantage of technology to make better journalism and facilitate the understanding of the published pieces (Casero and Cullell, 2013; Paniagua, Gómez, and González, 2014).

However, little is known about the traits that define this new professional, nor the skills and abilities required to perform these tasks. This lack of research is striking, especially if it is considered that one of the requirements of the University Reform of the Bologna Plan is to bring university studies closer to professional practice and that, moreover, various authors have highlighted the existing gap between the training that is taught and the needs of the labor market (Alonso, Fernández-Rodríguez, and Nyssen, 2009; Álvarez-Flores, Núñez-Gómez, and Rodríguez-Crespo, 2017; Arias-Oliva, Torres-Coronas, and Yález-Luna, 2014; Armendáriz, 2015 ; García-Ureta, Toral-Madariaga, and Murelaga-Ibarra, 2012; Humanes and Roses, 2014; López-García, 2012; López-García, Rodríguez-Vázquez, and Pereira-Fariña, 2017; Martín-del-Peso, Rabadán-Gómez, and Hernández-March, 2013; Sánchez-González and Méndez-Muros, 2013, Torres-Coronas and Vidal-Blasco, 2015, Ufarte-Ruiz, Calvo-Rubio, and Murcia-Verdú, 2020, among others). In the case of the journalistic profession, this distancing is increased by the youth of the discipline itself and by the speed of changes in this area, largely motivated by the technological and digital explosion.

The objective of this research is to know the profile of the data verifier in Spain, analyze the most demanded competencies and skills to perform these tasks, and reflect on whether this specialty represents a new career path for the labor market, at a time when the media demand fewer and fewer journalists and more other profiles and specialties (APM, 2018). There are several approaches to this new professional profile (Ufarte and Manfredi, 2019; Vizoso, López-García, and Pereira-Fariña, 2018), although none with an extensive field study. For this reason, and given the descriptive nature of this research, the work does not have a starting hypothesis, but

rather tries to answer the following research questions: Q1: How do these teams work?; Q2: Are they made up of journalists or are they made up of other professional profiles?; Q3: What is the best profile to develop these tasks?; Q4: How is the verification done?; Q5: Is information verification a new career path for journalism? This is an important issue given the pressing need to defend journalism models based on excellence and quality against the invasion of others that give more value to traffic than to the relevance of the published content.

1.1 New profesional profiles

Sociological changes in the profession (Boczkowski, 2004) as a result of technological change, the practice of convergence (Kolodzy, 2013), and laboratories as innovation in cyberjournalism (Salaverría, 2015) in the new network society define the current renewal of journalistic profiles, which will have a foreseeable boost in the future (López-García, Toural-Bran, and Rodríguez-Vázquez, 2016) and in which the figure of the information verifier is framed.

The general evolution of the professional profile of journalists in Spain has been analyzed from different areas (Andueza-López and Pérez-Arozamena, 2014; Ferreras, 2013; López-García, 2001, Mico-Sanz, Masip-Masip, and García-Avilés, 2009 ; Meso, 2002; Micó-Sanz, 2003; Scolari et al., 2008; Sánchez-Illán, 2005; Sánchez-García, Campos-Domínguez, and Berrocal-Gonzalo, 2015; Ufarte, 2019; Vivar-Zurita, 2011, among others), who agree that the essence of current journalism is in technology, but also in the quality of the content, according to what Masip (2016) and Deuze (2017) also propose.

The work environment of companies, determined to renew to compete and update themselves in the technological field, has pushed professionals to quickly incorporate digital tools, under the pretext that they facilitate work and improve journalistic practice (Calvo-Rubio, 2019; García-Avilés, 2007; Westlund; 2014). But in the new media ecosystem, the values of journalism such as truthfulness, accuracy, and impartiality (Schudson, 2003), as well as its social and service function (Kunelius, 2007), must remain alive, even though the production systems have changed.

Hence, López-García, Rodríguez-Vázquez, and Pereira-Fariña (2017) argue that the professional profiles that journalists currently perceive, regardless of the specific tools, have two central vectors. The first refers to the basic elements or foundations of journalism, that is, the set of precepts that have settled over time and forged in communicative processes in the course of history, always under a humanistic and social mantle, more or less accentuated depending on the context. And the second refers to the technological dimension, where it is not so much about knowing the tools but understanding the basics, entering the different territories, and having knowledge for individual work or for dialogue in interdisciplinary teams that undertake a good part of the most complex pieces disseminated by current cybermedia and that circulate through the flows of the current communication ecosystem.

Currently, the great dilemma of journalism is not so much the incorporation of technologies into professional practice as a set of tools, but rather the preparation of professionals with a more technological profile, with skills and abilities to take advantage of the opportunities of the computer model, in which *software* has taken control (Manovich, 2013) and in which dimensions that from the professional perspective define journalistic quality, such as relevance, completeness, diversity, impartiality, and precision remain stable (Kümpel and Springer, 2015).

2. BACKGROUND: FAKE NEWS

Fake news is not an exclusive characteristic of the current moment (Burkhardt, 2017; Petroni, Massa, and Anzera, 2017), but has been present throughout the history of Communication (Salas, 2019), especially during great war conflicts and in the interwar stages to favor certain interests (Barragán and Bellido, 2019; Bloch, 1999; Schudson; Zelizer, 2017). However, the new media ecosystem, characterized by being a context of information disorder (Wardle and Derakhshan, 2017) due to the emergence of social media (Haigh, Haigh, and Kozak, 2017; Pavlik, 2013), has contributed to the proliferation of this type of content (Jan; Kim, 2018) that is produced with the appearance of journalistic information but has erroneous, exaggerated, or manipulated data (Alandete, 2019), and high levels of factuality and deception (Khaldarova and Pantti, 2016), to create new interpretations (Balmas, 2012), favor ideological or economic interests (Allcott and Gentzkow, 2017), and generate confusion and anxiety among citizens (Waisbord, 2018).

Fake news is a "problematic oxymoron" (Blanco, García, and Tejedor, 2019) and confusing (Romero-Rodríguez, Valle-Razo, and Torres-Toukoumidis, 2018) of which some common elements are gradually becoming known, although there is no universal definition, not even in journalism (Zhou and Zafarini, 2020). Derakhshan and Wardle (2017) highlight its pernicious intentionality, while Vosoughi, Roy, and Aral (2018) highlight the virulence and speed with which they spread. Zaryan (2017) and López, González, and Medina (2011) allude to the social and intergenerational impact, while for Catalina-García, Sousa, and Silva (2019) the problem lies in whether the audiences can differentiate fake news from those that are not, since they often believe in the information that best fits their vision of the world (Mihailidis and Viotty, 2017). For its part, Amorós (2018) focuses on its structure, made up of three elements: a shocking headline, a reaffirming or indignation-causing revelation, and a legitimate and trustworthy appearance.

For Rubin, Chen, and Conroy (2016), the concept also encompasses tabloid news stories that feature unchecked headlines and exaggerations, large-scale hoaxes, and humorous fake news. And Tandoc, Lim, and Ling (2018) consider that satirical news, parodies, false content written in a journalistic way that is not warned to the

audience, manipulation of images, advertising content under the guise of reporting, and propaganda must also be taken into account.

These "alternative facts" (Macías-Varela, 2017) that lack veracity (Quin, 2017) are currently linked to the political field (Pennycook and Rand, 2019) and are disseminated through the internet or other means (Cambridge Dictionary, 2018). For (Murolo, 2019), they are intrinsically related to social media and the digital ecosystem due to aspects such as transience, immediacy, or imprecision of those who promote this type of misleading information. However, this type of information is also spread through conventional media (Terol and Alonso, 2020).

The moment of biggest rise of the phenomenon occurred during the 2016 presidential elections in the United States, when Donald Trump questioned during his electoral campaign the veracity of the information of some media (Carrera, 2018; Greenberg, 2017; Jankowski, 2018; Niño, Barquero, and García, 2017). It has also been present in the electoral processes of France, Germany, and Spain (Lowrey, 2017; Manfredi, Ufarte, and Herranz, 2020); during the Brexit referendum (Bastos and Mercea, 2019), and the coronavirus health crisis (Aguado-Guadalupe and Bernaola-Serrano, 2020; Casero-Ripollés, 2020; Fernández, 2020; Pérez-Dasilva, Meso-Ayerdi, and Mendiguren-Galdospín , 2020; Fernández-Torres, Almansa-Martínez, & Chamizo-Sánchez, 2021; Rodríguez Fernández, 2019; Sánchez-Duarte and Rosa, 2020; Salaverría et. al, 2020, and Villa Gracia and Cerdán Martínez, 2020; among others).

Among the factors that facilitate its spread is the disinhibiting effect of online interaction, particularly when false profiles that maintain anonymity are used, allowing the publication of supposed data to discredit actions, people, or organizations (Gutiérrez, Coba, and Gómez, 2020). To this content dissemination, the use of bots is added that automate the process and enlarge expansion (Flores Vivar, 2019). Rehm (2018) also highlights that certain types of content are more likely to go viral, because they are aggressive, sensitizing, provocative, credible, and because the posture of the article is easily identified.

From the point of view of professional practice, fake news is a serious breach of journalistic ethics. The effects, in any case, are negative because the truth is confused with the lie, credibility towards the false increases (Rapp and Salovich, 2018), and the legitimacy of the democratic discourse is put at risk (Champy; 2011; Codeluppi, 2018; Fisher, 2018; Magallón, 2019; McChesney, 2014; Stewart et al., 2019).

3. METHODOLOGY

The objective of this research is to know the professional profile of data verifiers in Spain. The methodological design to achieve this purpose is structured in a series of phases, which must be carried out explicitly so that it allows other researchers at different times and circumstances to apply the same technique and obtain results comparable to previous studies, completing them or verifying them in coherent analysis spaces (Ortega-Mohedano, Pereira-Galhardi, and Igartua, 2016).

Additionally, it is relevant to understand that any research method or technique requires execution in stages (Igartua, 2006). Specifically, this research has followed three phases.

3.1. Literature review

In the first stage, a systematic review of the scientific literature has been carried out, which is part of the secondary research (Codina, 2017), and which has allowed us to know the main contributions to the state of the issue. Furthermore, techniques typical of documentary review have been applied to the object of study with a compilatory and descriptive look (Bickman and Rog, 1998; Phillips and Pugh, 2008) to offer a general view of the subject, of how it has evolved over time and depending on the context (Babbie, 1989; Fernández-Collado and Dankhe, 1986).

3.2. Delimitation of the object of study and selection of the analysis sample

The proposed analysis leads to a multiple dimensioning of the object of study attending to three dimensions: D1) Registration in the world census of information verification projects prepared by the Reporters' Lab of Duke University; D2) Signatory projects of the Code of Principles of the International Fact-Checking Network; D3) Independent projects not associated with any media.

To narrow down the first dimension (D1), the global census of verification projects carried out by the Duke University School of Public Policy has been used, which has created a webspace that geographically locates the 304 existing *fact-checking* initiatives in 84 different countries (Duke Reporter's Lab, 2019). The laboratory indicates that in Spain there are eight projects dedicated to the verification of information: AFP Factual, EFE Verifica, El Objetivo, La Chistera, Maldita.es, Newtral, Polétika, and Verificat.

However, of the eight projects counted in the census, only four are signatories of the Code of Principles of the International Fact-Checking Network (D2), which is a unit of the Poynter Institute whose objective is to bring together journalists worldwide who are dedicated to fact-checking at the international level. These projects are Maldita.es, Newtral Media Audiovisual, EFE Verifica, and Verificat. Consequently, AFP Factual, La Chistera, El Objetivo, and Polétika are excluded from the object of study.

Furthermore, EFE Verifica is a verification unit of the EFE Agency (D3) that offers useful information against the falsehoods that circulate online. It, therefore, belongs to a media outlet, so it is also excluded from the object of study.

Finally, the sample has been made up of three projects, despite the growing relevance of these initiatives and the enormous impact they have acquired in the journalistic,

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social, and political spheres in recent years. The verification units studied to know the professional profile of the data verifier in Spain have been Maldito Bulo, Newtral Media Audiovisual, and Verificat.

3.3. Analysis tools

In the third phase, an analysis sheet has been drawn up and applied to each of the selected units. This file is made up of a total of nine parameters grouped into four study categories: C1) professional profile and education of the workforce; C2) procedures and fundamental skills to perform the verification; C3) techniques and tools used, and C4) social media profiles.

The first section (C1), focused on the professional profile, collects four variables around the education of each of the members, how the teams and work routines are organized, and whether they have the collaboration of multidisciplinary teams. In the second category (C2), the skills and competencies that professionals require to verify the information are analyzed, while in the third (C3) the most widely used computer tools are studied. Finally, the fourth section (C4) contains two items focused on whether content and comments are published on social media and the interactivity that is maintained with the audience (Table 1).

Figure 2: Analysis Sheet.

Study categories	Analysis parameters
C1. Professional profile and staff education	P1. Education of each member; P2. Teams organization; P3. Work routines; P4. Collaboration of multidisciplinary teams
C2. Procedures and skills	P5. Skills; P6. Competencies
C3. Techniques and tools used	P7. Most-used computer programs
C4. Social media profiles	P8. Posting of content on social media; P9. Interactivity with the audience

Source: Self-made.

To complete this file, a web content analysis has been carried out first (Herring, 2010), which consists of the inclusion of elements of the Internet and complements the traditional content analysis (Bardin, 1977; Krippendorf, 2004). This study has made it possible to know the organizational structure, the people who make up the teams, the education of each member, and the professional profiles of each of the projects under study. To do this, the sections relating to "Us" (Maldita), "Team" (Newtral Media Audiovisual), and "Who we are" (Verificat) of the three platforms have been examined.

The web content analysis has also provided information on the profiles of the initiatives on social media. In this way, their Twitter, Facebook, Linkedin, YouTube, and Instagram accounts have been examined to know the publication of content and the interactivity they maintain with the audience. These tasks have been carried out in groups among the authors of the research to avoid coding biases.

The fieldwork has been completed with in-depth semi-structured interviews. In the case of Maldito Bulo, one of the co-founding members, Clara Jiménez, has been interviewed, while in Verificat the Education coordinator, Susana Pérez-Soler, has been interviewed. In the case of Newtral Media Audiovisual, Marilín Gonzalo, coordinator of the platform's digital area, was interviewed. The interviews were conducted online between 2019 and 2021 and the thematic blocks around which the questions were grouped have been the contextual aspects of the birth of the initiative, the organization, the human team, the experience of the initiative, and verification strategies.

4. RESULTS

The professional profile of the *fact-checker* has been defined within the framework of the evolution of online society, with fake news as a backdrop. In the three analyzed projects, data verification tasks are the result of the work of a team of professionals of different profiles, education, and capacities (Table 2). In general, they are workers who come mostly from the area of Social Sciences, standing out among them in a significant way the graduates in Journalism, although other more technical profiles are also important, such as those in the computer sector, with the ability to develop algorithms that allow quickly identifying information, both in databases and the bulk of the Internet. At Maldita.es, for example, data journalists, computer engineers, and web platforms and mobile apps developers work. At Newtral Media Audiovisual, there are journalists, engineers, researchers, programmers, producers, filmmakers, graphic artists, and documentary filmmakers; While at Verificat there are journalists, data journalists, documentary filmmakers, publicists and public relations, and experts in social media and new formats and visualization.

In this sense, Clara Jiménez, Marilín Gonzalo, and Susana Pérez-Soler agree that *fact-checking* is not the result of the intervention of a single professional, but rather that the implementation of these initiatives requires multidisciplinary, flexible teams with specific technological competencies that allow carrying out business ideas. The profile of the data verifier is, therefore, redefined as a figure with a multitude of specializations and skills and with the ability to ally with very different profiles for the development of their job. All this is coupled with an open and innovative mindset by which the changes that affect the media industry are perceived more as opportunities than as possible threats.

Figure 3: Professional profiles according to the type of company.

Company	Profile
Maldita.es	Data journalists
	Computer engineers
	Developers of web platforms and mobile apps
Newtral Media Audiovisual	Journalists
	Engineers
	Researchers
	Programmers
	Producers
	Filmmakers
	Graphic artists
	Documentary filmmakers
Verificat	Journalist
	Data journalist
	Documentary filmmakers
	Experts in social media and new formats and visualization
	Advertisers and Public relations

Source: Self-made.

The journalistic work of data verification is divided into five fundamental components and actions: working with reliable sources, access to witnesses and source authentication, use of traditional journalistic methods, use of verification tools, and alternative methods. For this reason, the competencies and skills required by the *fact-checker* are mainly framed in the management of current technologies, with tracking, verification, and visualization tools, which advises the mastery of computer science and database management programs to access the databases of official sources or business organizations and be able to confirm that the information adjusts to reality.

"In the verification process, technological tasks of image, video, or audio identification are also carried out if necessary", clarifies Jiménez, who specifies that they have a Telegram group in which the team raises doubts about verification. For her part, Pérez-Soler adds that "investigative journalism, transparency, and data journalism also come into play." For Gonzalo, "data is the basis of all our work and we are convinced that its use, through innovation in journalism, is more necessary than ever in the era of the fight against *fake news*."

Furthermore, Spanish verifiers have to master multimedia communication and on different formats because they can come across data and information of various kinds -video, audio, photographs, text- that they must know how to integrate into their journalistic products. Similarly, they resort to the technology giant Google's tools,

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such as Google Maps and Google Images, among others, to contrast the locations and check the content of the photographs.

For these reasons, the education of journalists who are dedicated to this type of communication must include very specific fields of visualization and document database management, as well as professional skills that allow the public to understand the result of the verification. The ideal profile of the data verifier also includes a good knowledge of the functioning of public administrations, since, in a good part of the issues that are verified, it is necessary to analyze the statements of political leaders, local and national authorities, or public bodies.

From the point of view of the interviewees, the *fact-checker* walks hand in hand with a profile that requires technical training in the field of database management and current technologies and permanent learning of techniques to know how to narrate with text, moving image, and sound the verifications carried out. In the case of Maldita.es, for example, verification is presented through short and concise text comments and a color scale in which the audience is warned of the reliability of the content referred to in the verification test. The verified texts are presented as news: they have a headline, subtitle, boxes with the most relevant data, and a text body in which those data that contribute to making the processed statements or information true or false are explained.

Spanish *fact-checkers* also dominate social media, the most common being (as of March 16th, 2021): Twitter (Maldita.es, 116,900 followers; Newtral Media Audiovisual, 187,200; and Verificat, 9,955); Facebook (Maldita.es, 63,268 likes and 66,040 followers; Newtral Media Audiovisual, 33,190 likes, and 35,268 followers; and Verificat, 931 likes and 986 followers); Linkedin (Maldita.es, 1,707 followers; Newtral Media Audiovisual, 4,783; and Verificat, 84); YouTube (Maldita.es 2,750 subscribers; Newtral Media Audiovisual 9,460, Verificat does not have a channel); and Instagram (Maldita.es, 30,900 followers; Newtral Media Audiovisual, 40,000; and Verificat, 2,197 followers).

These networks are used both for data verification and access to original sources and for the dissemination of informational products resulting from *fact-checking* processes and subsequent contact and conversation with their followers and the general audience. In fact, the Maldita.es team mainly verifies the statements of political leaders and hoaxes that its user community denounces. Their intensive use of Twitter, for example, serves to promote content, establish a channel for conversation with readers, and other similar functions, since messages on this social network are subject to permanent scrutiny by a high number of *followers*, among which multidirectional conversations are generated. That is, they use the journalist's brand as a promotion engine and take advantage of their active participation in social media to project their personal journalistic brand to thousands of followers in the new global communication environment.

However, information verifiers do not abandon the more traditional forms of contact and contrast of information, such as the telephone, email, or even personal contact. Ultimately, it implies making *fact-checking* compatible with conventional reporting. The central objective is journalism, so curiosity, contact with different sources and experts that help to contextualize the information, and the great interest in dismantling lies and hoaxes is vital to optimally carry out this type of projects, which if they are done well, "they are an irreplaceable instrument in society", adds Marilín Gonzalo.

For these reasons, information verification in Spain is already an important niche for the journalistic market. "There is more than enough misinformation to employ many more journalists," Pérez-Soler details, so knowing the work performed by these professionals is a requirement not only to work in initiatives that are dedicated to this practice but also to work in any media outlet that has specialized *fact-checking* departments.

5. CONCLUSIONS

The activity of *fact-checkers* is a journalistic practice rooted in journalism since its inception that has gained new strength today. For this reason, the emergence of data verification represents, to a certain extent, a paradox (López-García, Rodríguez-Vázquez, and Álvarez-Gromaz, 2016), due to its character as a new-old professional modality, in the sense that it constitutes the essence of journalistic work and a fundamental element to guarantee the quality of the information (Gómez-Mompart, Gutiérrez-Lozano, and Palau-Sampio, 2013).

Verification processes are now more important and the projects dedicated to these functions have exploded in recent years at the national level because these tasks are effective in correcting erroneous information and contribute to increasing the perception of trust in the media outlets that are committed to this practice.

The studied units emerged between 2012 and 2019, coinciding with the peak of this practice. Since then, these projects have not stopped customizing their services to respond to the demands of the media and users who rely on journalistic texts verified from reliable sources, official documents, and the results of reliable research. This situation shows the will to consolidate this public service activity, which prioritizes the civic agenda and the surveillance of public powers (Graves, 2018), at a time when the rise of so-called *fake news* and post-truth threaten the standards of quality and credibility of media and journalists (Anderson and Rainie, 2017; Lewandowsky, Ecker, and Cook, 2017).

This path of professional specialization has not replaced other profiles but has increased the options of the model that configures the tasks of journalistic work in the current media ecosystem. In fact, Gómez-Calderón, Roses, and García-Borrego (2017) consider that the most thriving employment niches in the coming years will be those related to the new possibilities offered by the digital environment since within

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these emerging spaces there can be a hybridization between the classic qualities of the journalist and virtual tools.

The result of the analysis indicates that the professional profile of *fact-checkers* in Spain is complex and heterogeneous. In these teams, there is a hybridization of profiles and transversality of knowledge, skills, and attitudes (Q1). The academic backgrounds of the professionals are disparate, although academic education in journalism or communication is the most common (Q2). For this reason, the tasks in this field are carried out by professionals with a good command of tracking and comparison techniques, database management, and information presentation and visualization techniques (Q3). These are the basic dimensions of this new professional profile, which structures verification around renewed search and data management techniques and which presents the verified texts to the audience after a process in which the contents must pass several phases before being published. (Q4). This situation reveals the need to educate in new skills adapted to the impact of technological innovation, according to what Besalú, Schena, and Sánchez (2017) and Casero-Ripollés, Ortells, and Doménech (2013), among others, propose.

Moreover, the verification of information is a new professional outlet for journalism (Q5). With increasing frequency, the press, radio, television, or even communication agencies are part of initiatives such as *The Trust Project,* which guarantee that a series of principles and practices related to verification and journalistic rigor are complied with (García and López, 2021). Similarly, data verifiers, as well as professionals from other areas of journalism, have adopted social media as tools for their daily work. In this sense, Bremer (2013) recalls that the management of social media can improve the employability of future graduates in Journalism since many young people have difficulties finding work due to the mismatch between their education and the requirements of the labor market.

The studied initiatives have been created within what is called "entrepreneurial journalism" (Manfredi, Rojas, and Herranz, 2015; Prenger and Deuze, 2017), as they advocate a return to the traditional values of journalism, principles such as truthfulness, rigor, ethics, public service, and independence, through the creation of models far removed from those that prevail in traditional media.

They also represent a strong reduction in the investments required for journalistic production (Manfredi and Artero, 2014). These companies are innovative projects because instead of trying to maintain the current analog model, they are digital, which means more flexibility, dynamism, and speed in the ability to adapt to change.

However, the fact checker is not a closed profile but rather evolves as it conquers new spaces. Studies on this new professional and the presence of technology in their day-to-day activities are configured as an avenue of relevant research in the process of reviewing the skills, abilities, and professional practices related to communication

and journalism studies. For this reason, this research aims to establish the first basis of approach to this new booming professional profile.

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