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The digital maturity of the Spanish press. A case study

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Abstract

Introduction: This research article aims to develop a reliable method to measure the Digital Maturity Index (DMI) of the Spanish press. **Methods:** To this end, the *Abc* newspaper was chosen as a case study and was subjected to quantitative and qualitative analysis, by means of interviews, participant observation and consultation to a panel of experts. **Results:** The DMI model was successfully tested and turned out to be fully applicable to any other newspaper. In 31 July 2018, *Abc* had achieved a DMI of 72.50 points out of a maximum of 100, which means it is at a fairly advanced stage of digital maturity. **Conclusions:** The Spanish press, represented in this research by *Abc* —owned by Vocento Group— is currently undergoing an advanced process of transformation and digital maturity, although there is still a room for improvement for the online edition to become the backbone for the most important journalistic routines.

Keywords

Convergence; digital maturity; crossmedia; transmedia; multi-platform; Abc.

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1. Introduction

“Being digital is being able to grow,” claimed Nicholas Negroponte (1995, p. 60) at the end of the last century. The aphorism has been assumed, with greater or lesser enthusiasm, by news media companies, particularly those based on analogue formats and technologies. The conventional press is possibly the sector that has been most affected by the digitalisation of the production processes and the preponderance of online news media and social networks. For the first time in the history of the print media, technological innovations have negatively impacted its circulation and income, jeopardising the survival of print newspapers.

In the last decade, the *ABC* newspaper, the object of our case study, has seen the purchase of newsprint reduced by more than 10 million euros (*Dircomfidencial*, 11 July 2018), going from 15.9 million euros in 2008 to just 3.1 million euros in 2017. The circulation of its print edition has also experienced a similar drop. According to the Spanish Circulation Audit Bureau (OJD), the average circulation of *ABC* went from 238,914 copies in the July 2007-June 2008 period to just 78,982 copies in mid-2018 (EGM). According to the Spanish General Media Survey (EGM), *ABC*'s audience went from 689,000 readers, in the first half of 2008, to 429,000 readers in mid-2018, when circulation was just 78,982 copies. However, the number of digital readers has experienced a continuous growth. In fact, the number of unique users of *ABC.es* went from 3.6 million, in January 2010 (according to Nielsen), to 15.6 million, in June 2018 (according to Comscore).

Martin Baron, the editor of the newspaper that exemplifies the success of historical news media in the new digital environment, *The Washington Post*, understands that the Internet has radically changed the way people communicates. To such an extent that he no longer regards *The Washington Post* as a newspaper but as “a great news organisation” (González Alba, 2017). In addition, there is a progressive decrease in the circulation of newspapers and the loss of revenue from advertising and copy sale, which paints a bleak future for the print press.

From 2007 to 2016, coinciding with the economic crisis derived from the subprime mortgage crisis, the decline of readers in Spain (Diaz Nosty, p. 19) has gone from 37.4%, a percentage that was already about half of the European average, to less than 23% in 2016. The circulation index of the 20 biggest newspapers in Spain fell almost 50% in that same period (*ibidem*, p. 21). With regards to advertising revenue, in this period, print newspapers in Spain lost 65.2%, going from 1,894 million euros to 617 million euros (*ibidem*, p. 58).

In addition, to understand the disruptive change that has occurred in the media in general, and in Spain in particular, we must mention people's new information-consumption habits. The digital option, offered on various platforms such as mobile phones, smartphones, tablets, smart TVs, PCs and laptop computers, has changed people's reading routines and ways to access information.

Peter Preston, former editor of *The Guardian*, highlights the irony of the fact that while online readers grow exponentially and circulation becomes universal, the difficulties to get benefits are bigger than ever (Sambrook, 2017). Are newspapers inevitably destined to disappear? It is one of the questions made by Mair, Clark and Fowler (2016), who point out that the only valid formula for their survival is

to increase the quality and credibility of the content, and the consideration of journalism more as a public service than as a business.

To be able to grow —and not disappear— the only alternative for news media is to evolve to reach an adequate level of digital maturity. What drives this process and therefore, promotes digital maturity? According to Kane et al (2015), the engine of this profound shift towards digitalisation is strategy and not just technology. This report, based on the answers of 4,800 executives from 27 industries and 129 countries, concludes that the leaders of the organisation are precisely responsible for promoting a culture that adapts to change and gives risk a decisive role.

Obviously, technological maturity is a key component for digital maturity, but the fundamental vectors are the organisational structure and cultural view of the institution. For this reason, the process of digital transformation is not only linked to one or more areas of the company [in our case a newspaper publishing company] but must involve the whole organisation (Álvarez Ortiz, 2015, p. 6).

For De Esteban (2017), the digital transformation has no return. For this author, the term ‘digital’ will disappear in five years as a significant differentiator, as it is assumed as an inherent characteristic of each product or service. In other words, the digital character will no longer be understood as a goal, but as a nuclear characteristic. There are more and more journalistic industries that set their horizons on tools like artificial intelligence, Big Data and analytics, blockchain, Fintech, cognitive technology, app development and the Internet of Things. And not only for the production or automated generation of content, but to attract and satisfy audiences and build their loyalty. Futurist Amy Webb (2018) argues that 2018 represents a tipping point for the media, information and technology. “Journalists must understand what artificial intelligence is, what it is not and what it means for the future of news” (p. 10).

According to Ana María Gómez (2017), the digitalisation process of a company from any sector involves four different levels of digital maturity: beginner, medium, advanced and expert. However, below we will offer a different gradation that also incorporates a fifth level. The difference between each of these levels, the author adds, is not linear, but exponential:

A digital company is 1,000 times more efficient than a traditional company. Therefore, born digital startups are able to compete, with much less resources, with traditional companies that are well positioned in the market.

2. Objectives

The main objective of our work is the design and application of a reliable, adequate and tested method to measure the digital maturity of news media, especially those that have an analogue origin, i.e., that are not born digital. There are tools to measure the digital maturity of companies and institutions in other sectors, such as the DTMA (Digital Transformation Maturity Assessment) [<https://dtma.paradigmadigital.com/#queEs>] and the Digital Maturity Model 4.0 Interactive Tool (Gill and VanBoskir, 2016). However, none of them is specific to journalistic companies, whose digital transformation has very unique characteristics. The main peculiarity is that the press not only has modified customer relations and business management, but that the product itself, the newspaper, experiences a continuous metamorphosis, or “mediamorphosis”, in the words of Fidler (1998).

The model developed by Gill and VanBoskir (ibidem) proposes a series of interactive tools that measure the dimensions that make up such maturity, such as digital intensity and digital transformation

management. Digital intensity is the investment in technological initiatives to change the working routines of the institution or company. Meanwhile, digital transformation management is to create leadership capabilities to carry out the digital transformation of the organisation.

Lorenzo Ochoa (2016) has identified several successful models such as McKinsey's digital coefficient, the Digital Maturity Model for Telecommunications, the maturity model developed by MIT's business centre, and the Industry 4.0 readiness check model. These models serve as a reference to corporations to succeed in the digital society. Lorenzo Ochoa (2017) points out that:

Maturity models imply a process of progress along a continuous line, as opposed to the most radical transformation approaches. In other words, from this perspective, digital maturity requires a process of incremental improvement. That is, digital transformation is a journey, rather than a project.

However, none of these models is fully useful for measuring the digital maturity of the press, although the four dimensions of the Digital Maturity Model 4.0 Interactive Tool (culture, technology, organisation and knowledge) are valid. Based on this structure, we aim to develop a model that fits the singularities of the press, contemplating aspects such as business convergence, technological development, newsrooms integration (web and paper), and the creation of transmedia and multimedia content.

Moreover, we also want to test the effectiveness and scientific value of our model with a specific case, the *ABC* newspaper, which is owned by Vocento, the main Spanish multimedia group, but has a fairly autonomous corporate and journalistic operation. Vocento (2018, p. 17) currently has four online editions with paywalls: *El Correo ON+* (launched in 2015), *El Abc Vasco ON+* (2016), *El Abc Montañés ON+* (2017) and *Ideal ON+* (2018)

3. Methods

3.1. The case study method

We use the case study method, which has a broad tradition in the social sciences. Simons (2011) defines it as “a study of the singular, the particular, the exclusive” (p 20). Our understanding of this method comes from the experience of such authors as Yin (1998), Coller (2000), Caro González (2002), Stake (2010) and Grandon Gill (2011). For Yin (1998), a case study is “an empirical research that investigates a contemporary phenomenon in its real context, where the boundaries between the phenomenon and the context are not accurately displayed, and where multiple sources of evidence are used” (p. 23).

Case studies are based on an inductive logic, as Jiménez Carreira points out (2016, p 18). Generalisations and theories emerge from the thorough examination of data. It is part of the qualitative analysis of one (a single case) or different cases (multiple cases), to subsequently perform a generalisation and an interpretation from which to draw conclusions. However, this method also has a deductive component as it feeds from existing laws and general theories on the subject.

As for research techniques, we have combined a purpose-created questionnaire directed at executives of the different departments of *ABC*, with participant observation and consultation to six experts in the field of technological innovation, journalistic convergence and digital transformation. We are,

therefore, based on quantitative and qualitative data. We also depart from previous studies carried out on the degree of integration and convergence of Vocento's national newspaper (Capelo 2015).

The digital maturity measurement model applied to *ABC* consists of a table of dichotomous indicators (zero or one values) and ordinal indicators (from one to five), grouped into six pillars or vectors of the digital transformation in the press (Table 1): corporate strategy, technological convergence, professional and organisational convergence, content convergence, digital intensity and digital transformation management. The indicators of the first five pillars are dichotomous and respond to an internal analysis, i.e., to information provided by the medium itself and to the inquiries of the authors. The sixth pillar includes ten ordinal indicators, of which the first eight complete the internal study and the remaining two are based on external assessments. This way, indicators 6.9 and 6.10 are complemented with the opinions of the selected experts.

The total sum of the indicators offers a maximum value of 100, which implies the Digital Maturity Index (DMI). In line with the *RepTrak* studies, carried out by the Reputation Institute (www.reputationinstitute.com), we have established five stadiums or degrees of digital maturity:

- Poor: Less than 39 points
- Weak: From 49 to 59 points
- Advanced: From 60 to 69 points
- Strong: From 70 to 79 points
- Excellent: More than 80 points

The study is completed with the contributions of six experts in digital transformation, coming from journalistic media and other sectors:

- Ramón Salaverría, full professor of journalism at the University of Navarra, where he directs the Centre for Internet Studies and Digital Life.
- Ismael Nafría, journalist, consultant and professor, author of the book “The reinvention of The New York Times” and editor of the digital media newsletter *Tendenci@s*.
- Carlos León, professor of electronic technology and director of the Telefónica Chair “Intelligence in the network” of the University of Seville.
- Bernardo Díaz Nosty, professor of journalism of the University of Malaga. Director of the Observatory of the Freedom of the Press in Latin America; Director of the UNESCO Chair of Communication at the University of Málaga and Editor of the InfoAmérica website.
- Fabián Gradolph, Head of Corporate Communications at Oracle Ibérica. Digital transformation expert. Has worked for technology companies such as IBM and Huawei.
- Borja Bergareche, Head of Innovation at Vocento. Leads innovation, digital transformation and media lab projects at Vocento's digital strategy unit.

3.2. The selection of *Abc*

The *Abc* newspaper has a series of features that make it especially attractive for our research. It is the national news medium of the most important Spanish journalistic group (Vocento) and has more than a century of experience (it was published for the first time as a weekly newspaper on 1 January 1903). According to the EGM (2018), it has the seventh largest readership in Spain, with 429,000 readers.

Under the brand *Abc*, there is an independent business unit with its own director and mercantile society that is autonomous from the parent company, which is *ABC de Sevilla*, published in its entirety in Seville and with editions in Cordoba and Andalusia. *ABC de Sevilla* was founded by Juan Ignacio Luca de Tena in 1929 and also has its own a digital edition since 2001. Although it could be argued that *ABC de Sevilla* is a different brand from the Madrid edition, we have analysed the *ABC* newspaper as a unit.

From the technological point of view, Vocento's newspaper is interesting because it is one of the few Spanish newspapers that has been produced with all the industrial press systems to have existed: typography, flexography, photogravure and offset (Alonso González, 2006). Moreover, throughout its centenarian history, it has been an innovative newspaper. It was the first newspaper to introduce in Spain photogravure and current graphic material such as photographs and illustrations. In 1936, before the outbreak of the Spanish Civil War, *ABC* printed its Sunday front pages in colour (Pérez Cuadrado 2008).

ABC was also the first tradition Spanish newspaper (Álvarez Marcos, 1997, p. 398) that dared to take a digital path with the launch, in early 1994, of a CD-R that compiled its cultural supplement, corresponding to 1991 and 1992. Although the first Spanish newspaper to be available on the Internet was the Catalan *Avui*, in April 1995. *ABC* started its circulation on the Internet on 20 September 1995. On 4 October 1997, for the first time in the digital age, *ABC* used the Internet to broadcast in real time, video and audio of the wedding in Barcelona of Princess Cristina, sister of King Felipe VI, with Iñaki Urdangarín (Álvarez Marcos 1999, p. 125). Finally, *ABC.es* (2009) was the first Spanish news media company to develop the first native app for Android devices.

4. Theoretical framework

4.1. Convergences

The informative ecosystem has always been in constant evolution, especially since technology prompted the dominance of audiovisual media and was introduced in the newsrooms of newspapers. However, the celerity and depth of the changes that took place in the last decades by the hand of digital technologies have had gigantic effects that had been predicted by authors such as Boczkowski (2004).

Everything has been altered with an unusual speed: the media universe, contents, the role of the audience, business structures and business models. During the inauguration of Umberto Eco as *Doctor Honoris Causa* by the University of Seville, Rector Joaquín Luque (2010) summarised the digital impact in a very graphic way:

When faced with new digital media, communication scholars faced the same difficulty than Kant faced to classify the duck-billed platypus and Marco Polo to define the first rhino he saw in Java. Media bestiary grows unstoppable with new hybrid creatures, fruit of magic assemblies.

For Capelo (2015, p. 26), the traditional media sector, especially the print press, currently face a bleak panorama with the loss of historic newspapers and the destruction of thousands of jobs. But at the same time, we predict unthinkable possibilities in the near future, like the use of emerging technologies, the successful experience in terms of the audience of online newspapers and the ever more necessary bet—in times of hoaxes and fake news—on the rigour and quality of journalistic content.

On this last aspect, the data offered by the latest edition of the *European Communication Monitor* (2018, p. 17) are devastating: the main sources of deceptive content are social networks (81.3%), but the media (59.6%) also play an important role in the dissemination of fake news.

New concepts have been imposed with force in the digital scenario, such as the convergence and integration of newsrooms. Both are intimately linked to the emergence of cyber media, and the ‘all to the Web’, which started in 1995. This year also marks the end of the so-called ‘religious decade’ of the print press (Álvarez Marcos, 2010). Scott (2005) relates the boom of online journalism with the emergence of the first commercial browsers: Netscape, in 1994, and Internet Explorer, in 1995. Since then, the payroll of digital media has not stopped growing. Salaverría, Martínez-Costa and Breiner (2018) identified a total of 3,431 Spanish digital media in March 2018, of which 3,065 were active on that date. One third of these media (1,077) were born digital.

When publishers discovered at the beginning of the 21st century, the possibilities of the cyberspace, they reinforced their plans for web editions, privileging in some cases their growth interests in the digital world to the detriment of the print editions. However, as Vara Miguel (2014, p. 179) points out: “Many news companies reacted very slowly (or mistakenly) to the Internet”.

Studies on the journalistic convergence cover fundamentally technological, business, professional and content aspects. Although it can also be analysed from other perspectives, such as its impact on society and public opinion. As Scolari argues: “convergences generate new professional figures and business models, produce technological breaks, create new consumption habits and impose other forms of relationships and, even, of policy making” (2009 p. 55).

In Spain, the pioneering studies on convergence were carried out by the *Infotendencias* group (www.infotendencias.com) and Salaverría and Negredo (2008) and García Avilés (2009). The result of the work carried out by the aforementioned group is the book “Digital convergence. Reconfiguration of the media in Spain” (López García and Pereira Fariña, 2010). The study had four basic research objectives: journalistic convergence, integrated production, professional versatility and multi-platform distribution. To fully understand the convergence process, it is also essential to read the methodological study led by Palacios and Díaz Noci (2009).

In just 20 years, most news companies, including the publisher of the *ABC* newspaper, the object of our study, have gone from having one newsroom with an analogue information mindset—a newsroom for each platform in which the news product was disseminated—to consider whether it is possible to merge or integrate all of the brand’s journalists into a single newsroom to feed the different platforms from it. The economic crisis of the end of the first decade of the 21st century and the realisation that a structural change was occurring in the dissemination of news contents led to very important restructurings in the newsrooms of these media without being sure what was the appropriate model (Capelo, 2015).

Newsrooms are being rapidly transformed by the hand of such concepts as media and crossmedia integration, versatility and convergence. Salaverría, Masip and García Avilés (2010, p.48) offer an appropriate definition of media convergence that includes the four characteristics mentioned above: technology, business, professional and content.

“A multidimensional process that, facilitated by the widespread implementation of digital telecommunication technologies, affects the technological, business, professional and editorial environment of the media, fostering an integration of previously disaggregated tools, spaces,

work methods and languages so that journalists create content that is distributed across multiple platforms, through their own languages”.

Let's think of a conventional newspaper that until a decade ago was only concerned with editing the paper edition and pouring content into its website. Today these newspapers have become multi-platform brands that adapt their information to a growing number of media: paper, static PDF (for print on demand), PDF enriched with hyperlinks for digital kiosks (as *Orbyt* and *Kiosko* and more), web responsive (adapted to tablets and smartphones), Twitter and Facebook, with the possibility of using the Instant Articles option in the latter (Álvarez Marcos, 2017).

Convergence has changed the paradigm of the journalistic exercise, as it has gone from “a way of doing journalism deeply rooted in the last two hundred years, to questioning whether the professional journalist is indispensable” (Capelo, 2015, p 25-26). The process has also had a strong impact on the business field. Media groups have been forced to rethink their business strategies to make the journalistic product profitable, even if this implies a reduction in the work quality of journalists (Pérez Cortés, 2017). For that reason, authors such as Martín Barbero have argued that convergence is the “technical legitimization of the economic neoliberalism of the great media companies” (2008, p 22).

4.2. Integration of newsrooms

The convergence phenomenon implies the ability to disseminate digitised information over the largest number of channels possible to be received in multiple supports. Capelo (2015, p. 125) reminds us that for this we can opt for several newsrooms, specialised in different channels (paper, web, social networks, radio, television), or a single newsroom that will serve all of them. This is what we would call an integrated newsroom. It is also possible that this multi-platform newsroom is the result of a gradual merger of the different newsrooms. There is an intermediate phase between the two models, consisting of collaborative newsrooms.

In Spain, the first step towards editorial integration was taken by the free newspaper *20 minutes* in November 2006 (Escolar, 2006). In March 2008, Unedisa unified all of its newspapers in a new building and reinforced the collaboration of paper and online newsrooms. *El País* did it in 2009 and *ABC* in February 2010 (Capelo 2015, p, 131). At the local and regional levels there are also examples of these steps towards integration, such as the cases of *La Voz de Almería*, in 2007, and some regional newspapers of Vocento, such as *Ideal* in 2011 (Capelo, p. 257) and *Sur* in 2010 (ibidem, p. 245).

The location in the same physical space of different newsrooms does not necessarily involve integration. Neither is it the existence of common editors that coordinate the different contents. All of this is important, but full integration implies conceiving the newsroom as a unique factory of news and stories for all media and with all media.

4.3. Transmedia, crossmedia and multiplatform journalism

The different convergences linked to the integration of newsrooms necessarily imply the existence of content shared or disseminated simultaneously through multiple platforms or channels. We use concepts such as transmedia, crossmedia and multiplatform journalism, which we often do not identify correctly. Rost Bernardi and Bergero (2016) help us differentiate these three journalistic modalities.

Transmedia journalism consists of the narration of a news event in different media and platforms. Contents are generated from different devices and platforms and are coordinated in autonomous stories that are part of a larger narrative. To be considered transmedia, it must have the following characteristics: it consists of independent elements that can be consumed separately, each element

contributes in a unique way and it is an entry point that can expand to new spaces, users are co-creators of the story (interactivity).

Crossmedia journalism differs from its transmedia counterpart in that it does not include the active participation of users. The role of readers is limited to consuming content and disseminating it through social networks or other platforms.

Multiplatform journalism tells the same story in different media and platforms. Content can be adapted to the platform to improve accessibility, but the information itself does not change. The role of users is passive; they consume content without providing information to the story (pp. 14-15).

Henry Jenkins coined the term transmedia in 2003, but oriented to fiction narratives. The ideas on transmedia narrative were developed and popularised by this author in the book *Convergence Culture* (2006). For Jenkins “a transmedia story unfolds across multiple media platforms, with each new text making a distinctive and valuable contribution to the whole” (p. 97). In other words, each medium contributes in a coordinated way what it knows best or what it can do best to complete the development of the story. It also implies a remarkable degree of digital maturity, as the unifying element of this convergent process is the binary language.

4.4. Definition of digital maturity

The dictionary of the Spanish language (DEL, 2018) defines maturity as the “period of life in which a person reaches the height of its life and has not yet reached an old age”. Jesus Palacios (2011) distinguishes two types of maturity in humans: sexual and social. The first is full reproductive capacity, while social maturity implies the assumption of the prerogatives and responsibilities of adults within a society. This expert in evolutionary psychology points out that “the distance between early sexual maturity and postponed social maturity does not cease to increase” (p. 64).

Hyatt (2007) also uses psychology to move the concept of maturity to other fields different from that of human evolution: “The understanding and acceptance of all normal feelings and emotions of each person and the appropriate response to those emotions in all circumstances”. Organisations, especially those that are not born digital, pursue digital maturity, which is essential to survive and succeed in today’s society. This digital growth is known as digital transformation. Digital maturity is reached not only when the productive processes are digitalised, which would be an early maturity or equivalent to sexual maturity, but when the digital thought or culture leads all the actions.

Kane (2017) reminds us that it is a mistake to understand digital transformation only as the use of state-of-the-art technologies. It is not difficult to find companies that have implemented expensive tools but have not achieved a transformation because of the lack of digital culture of their managers and/or the training of their employees. For this author (ibidem), maturity is a natural process that is not obtained automatically. He defines it as “the process through which an institution (company) learns how to respond appropriately to the emerging digital competitive environment”. That is to say, it acquires adult behaviours in the digital society.

The report titled “Achieving Digital Maturity: Adapting Your Company to a Changing World”, conducted by Kane, Phillips, Kiron and Buckley (2017), examines the processes, structures and cultures of advanced digital maturity organisations across all sectors. This study found out that digitally mature companies achieve success by increasing collaboration, scaling innovation and renewing their focus on talent. On the other hand, Martin Gill (2016) considers that digital maturity has four

dimensions and that all of them must be addressed: culture, technology, organisation and knowledge. And those are precisely the dimensions that we have analysed in the *ABC* newspaper.

Neil Sholay, Vice President of Digital Innovation at Oracle, says (personal communication, 27 July 2018) that after working on multiple transformation projects, he has discovered that all success stories share two characteristics that are not present in failure stories: “The effective participation of the executive levels to achieve transformation and the strong focus of the process on the people, culture and design of the organisation that are necessary for the new digital stage”. Another issue that Sholay considers essential is the adoption by organisations of management practices that are agile and consistent with the processes of transformation and innovation that are put in place.

4.5. Two successful models

Measuring phenomena such as digital maturity requires well-defined parameters and benchmarks. It is the same with human beings, since the maturity of the people, besides being governed by questions of physical and intellectual growth, requires external references that can be used as a paragon. In the sector of big newspapers, the clearest references of success in the process of digital transformation are *The New York Times* and *The Washington Post*.

For Salaverría (2017a), the key to the success of the *Post* is that “it has understood that the challenge is not to unite the print and digital outlets, which is something that the biggest newspaper companies have been doing in the last 20 years, but to make the best journalistic content for all audiences”. Jeff Bezos, owner of Amazon and the *Post* since August 2013, has promoted the use of the most advanced technologies, as well as the bet on talented journalists and quality content.

In late January 2017, in the forum “Journalism ‘conversations with...’”, held at the Rafael del Pino Foundation (Madrid), the editor of *The Washington Post*, Martin Baron, stressed that the survival of the traditional media depends, greatly, on their ability to transform and adapt to the changing reality, i.e., their digital transformation. He offered the following decalogue (Vocento Media Lab, 2017):

1. For a present and a future governed by “*Mobile First*”.
2. Go out and look for the reader (*One-to-one*)
3. Face the most disruptive technologies
4. Integrated work of editors and technicians
5. 24 hours on alert
6. Track stories with viral potential: *Morning Mix*
7. A network of freelancers to ‘cover the world’ (Talent Network)
8. Audiovisual research and narratives
9. Find and capture a business model
10. Good journalism... and courage

As to *The New York Times*, Ismael Nafría (2017, p. 21) notes that the key to the digital reinvention of the newspaper is that they have found that “users contribute more than advertisers”. No doubt the path to digital transformation is long and complex and is full of failed trials. However, this time it seems that the idea of betting on subscriptions (both digital and analogue) and the establishment of paywalls in any of their modalities has touched deeply.

Cornia *et al* (2017) have examined the marketing of four types of digital media: *free access*, *freemium*, *metered paywall* and *hard paywall*. In the *freemium* model, only some content is offered for free, reserving the most valuable materials for subscribers. It is certainly the most widely used formula in

Europe and America. The *metered paywall* give access to a limited number of items each month, and users have to pay when they want to see more news. Finally, in the *hard paywall* model, practically all contents are of protected by paywalls.

Metered paywall, according to Cerezo (2017, p. 3), has been revealed as a good complement to the business model as a whole and not just for the direct income it generates, but rather for its complementarity to the advertising business. This author describes the pioneering contribution of *The New York Times*:

Since the first *metered paywall* was launched, *The New York Times* has become the success model par excellence. Its great success is that it broke the total payment-free content dichotomy and to have introduced different business concepts and metrics. In the user-to-client transition, metrics that are more typical of sectors such as telecommunications and banking start to emerge” (p. 4).

Megan McArdle (2018), an opinion columnist at *The Washington Post*, argues that “the battle for the open Internet has been lost”, and predicts that, sooner or later, all important journalistic media will put their contents behind a paywall: “Free journalism was a gift, something that journalists can no longer continue offering to readers”.

5. Measurement of ABC’s digital maturity

As mentioned, the digital maturity measurement model that we applied to *ABC* consists of a table of dichotomous indicators and ordinal indicators divided into six pillars or vectors of the digital transformation in the press (Table 1). The sum of the indicators offers a maximum value of 100 points. We have established five stages or degrees of digital maturity: Poor, less than 39 points; weak, from 49 to 59; advanced, from 60 to 69; strong, from 70 to 79; and excellent, more than 80 points.

The table of indicators has been complemented with interviews with the following executives and managers of *ABC*: Ana Delgado Galán, managing director of *ABC*; Álvaro Ybarra Pacheco, editor of *ABC de Sevilla*; Manuel Contreras Peláez, deputy editor of *ABC de Sevilla*; and Javier Arias, head of digital development at *ABC*. However, the evaluation of the last two indicators is the result of the opinion of external experts (Table 2).

Table 1. Digital Maturity Index of ABC

PILLARS	INDICATORS	EVALUATION	TOTAL 100
1. Corporate strategy			
Value of indicators: Yes=1; No=0			
Internal analysis	1.1 <i>ABC</i> has a digital transformation approach that integrates all of its productive units.	Dichotomous	1
	1.2 The digital transformation approach includes a programme of cultural change to incorporate a new digital mindset	Dichotomous	1
	1.3 Each of the units has key performance indicators (KPI) to monitor the degree of digital transformation.	Dichotomous	0
	1.4 Each of the units has a digital transformation manager who participates in follow-up committees.	Dichotomous	1

	1.5 <i>ABC</i> has a Chief Digital Officer (CDO), responsible for the digital transformation of all the units.	Dichotomous	1
	1.6 The CDO of <i>ABC</i> reports to the CDO of Vocento Group	Dichotomous	1
	1.7. The governing body supports the digital strategy.	Dichotomous	1
	1.8 <i>ABC</i> has appropriate leaders to develop the digital strategy on a daily basis	Dichotomous	0
	1.9 The online platform has a paywall implemented	Dichotomous	0
	1.10 <i>ABC</i> has adapted the style book to the new single and digital newsroom.	Dichotomous	0
2. Technological convergence			
Value of indicators: Yes=1; No=0			
Internal analysis	2.1 Contents are distributed in different supports and platforms.	Dichotomous	1
	2.2 <i>ABC</i> has a single, crossmedia type, editorial management system that generates content for all media.	Dichotomous	0
	2.3 The paper-web transference of contents is automatic, and CMS are incorporated to the editorial systems.	Dichotomous	0
	2.4 The budget for technological investment is adjusted to the digital transformation strategies.	Dichotomous	1
	2.5 <i>ABC</i> takes advantage of advanced digital architectures, such as APIs, cloud, etc).	Dichotomous	1
	2.6 The technological systems department works in agreement with the areas of writing, advertising and marketing.	Dichotomous	1
	2.7 <i>ABC</i> shares digital tools with other newspapers of Vocento group.	Dichotomous	1
	2.8 <i>ABC</i> has its own informative channels in the main social networks: Facebook, Twitter, YouTube, etc.	Dichotomous	1
	2.9 There are networked collaborative platforms for all employees regardless of whether they are journalists.	Dichotomous	1
	2.10 There is a coordinated management of dissemination in social networks	Dichotomous	1
3. Professional and organisational convergence			
Value of indicators: Yes=1; No=0			
Internal analysis	3.1 <i>ABC</i> has a common editorial director for its paper and web editions.	Dichotomous	1

	3.2 All sections produce contents for all media and platforms.	Dichotomous	1
	3.3 News agenda is planned for all platforms in a coordinated manner.	Dichotomous	1
	3.4 Breaking and exclusive news are presented first in the Web	Dichotomous	0
	3.5 Newsrooms are integrated	Dichotomous	1
	3.6 New roles have emerged with the integration of newsrooms	Dichotomous	1
	3.7 Digital training courses are given to all employees	Dichotomous	1
	3.8 There are no wage differences depending on the main dedication (offline/online)	Dichotomous	0
	3.9 There is a 24/7 work schedule to cover all platforms.	Dichotomous	1
	3.10 Editors share information in their social media profiles.	Dichotomous	1
4. Content Convergence			
Value of indicators: Yes=1; No=0			
Internal analysis	4.1 Editors work for several platforms.	Dichotomous	1
	4.2 Newsrooms develop their tasks in the same physical space	Dichotomous	1
	4.3 Most writers have multimedia training	Dichotomous	1
	4.4 The multimedia coordinator role exists in ABC	Dichotomous	1
	4.5 There are specialists for each of the platforms.	Dichotomous	1
	4.6 The operation of ABC is completely multimedia	Dichotomous	0
	4.7 There is regular cross promotion	Dichotomous	1
	4.8 Social media content is a priority to generate traffic on the Web	Dichotomous	1
	4.9 Contents are exchanged with other Vocento's media.	Dichotomous	0
	4.10 ABC develops transmedia content that is open to the interaction of users and readers	Dichotomous	1
5. Digital intensity			
Value of indicators: Yes=1; No=0			
Internal analysis	5.1 ABC has a digital incorporation process that is shared by Vocento group.	Dichotomous	0
	5.2 There is a common career plan for all Vocento employees with the same digital skills.	Dichotomous	0
	5.3 ABC has platforms that facilitate the virtual workspaces (Skype, WebEx, Hangout, etc.)	Dichotomous	1

	5.4 <i>ABC</i> has a referral program that economically rewards employees who help in the external identification of talent.	Dichotomous	0
	5.5 <i>Vocento</i> has a common repository for access to informative resources (video, image and audio).	Dichotomous	1
	5.6 <i>ABC</i> uses advanced platforms to carry out marketing actions (email, SMS, push notifications, etc.)	Dichotomous	1
	5.7 <i>ABC</i> has a common corporate platform that stores structured and unstructured data for subsequent operation/activation	Dichotomous	1
	5.8 <i>ABC</i> has a corporate CRM that has a 360° vision of the customer.	Dichotomous	1
	5.9 <i>ABC</i> employs the same DMP (Data Management Platform) for the activation of audiences, which is in turn connected to Data Lake and CRM.	Dichotomous	1
	5.10 <i>ABC</i> has incorporated artificial intelligence into the professional routines of the newsroom and the marketing and advertising departments.	Dichotomous	0
6. Management of the Digital Transformation			
Value of indicators 6.1 to 6.7:			
Completely disagree=1; Disagree=2; Agree=3; Quite agree=4; Completely agree=5			
Internal questions	6.1 Those responsible for <i>ABC</i> believe that the business strategy depends on its digital capacity	Ordinal	4.5
	6.2 <i>ABC</i> 's shareholders and senior executives support Digital Transformation	Ordinal	4
	6.3 <i>ABC</i> invests enough resources in specific digital education and training at all levels.	Ordinal	4
	6.4 <i>ABC</i> 's digital vision is communicated sufficiently clear to internal and external audiences.	Ordinal	3
	6.5 The view of customers and users actively marks <i>ABC</i> 's plans	Ordinal	3
	6.6 <i>ABC</i> has clear and measurable targets for measuring the successes of the digital strategy	Ordinal	4
	6.7 <i>ABC</i> uses digital tools to internally encourage innovation, collaboration and mobility	Ordinal	4
	6.8 The full integration of the newsrooms is inevitable and desirable	Ordinal	5
Value of Indicators 6.8 to 6.10:			
Poor=1; Weak=2; Advanced=3; Strong=4; Excellent=5			
Questions to	6.9 The digital maturity of <i>ABC</i> with regards to the Spanish journalism sector is...	Ordinal	3.33

external experts	6.10 The digital maturity of <i>ABC</i> with respect to the Spanish business sector as a whole is...	Ordinal	2.66
Total			

Source: Authors' own creation.

6. The opinion of experts

As mentioned, the study of the digital maturity of *ABC* is complemented with the authoritative opinion of six experts in the field of technological innovation, journalistic convergence and digital transformation. We have asked them, via email, about the degree of maturity of *ABC* in relation to the Spanish journalistic sector, and in relation to the average maturity of the business sector as a whole (Table 2). We also ask them to freely express their opinion on the digital transformation of the press.

Table 2. Questions to experts

Experts	<i>ABC</i> 's digital maturity with respect to the Spanish journalistic sector is...		<i>ABC</i> 's digital maturity with respect to the Spanish business sector as a whole is...	
	Value of indicators: poor=1; weak=2; advanced=3; strong=4; excellent=5			
Ramón Salaverría	Advanced	3	Weak	2
Ismael Nafría	Strong	4	Advanced	3
Carlos León	Advanced	3	Advanced	3
Fabián Gradolph	Advanced	3	Weak	2
Borja Bergareche	Advanced	3	Advanced	3
Bernardo Díaz N.	Strong	4	Advanced	3

Source: Authors' own creation.

Ramón Salaverría (Personal communication, 3 July 2018) states that “*ABC* cannot be considered a lagged medium with respect to the rest of the Spanish newspapers, but it neither stands out for its innovative character or for being a trend setter. It neither excels by its experimental vocation, which can be considered essentially conservative”. When the element of comparison becomes the Spanish business sector, the result is more severe: he considers it to be poor and adds:

My opinion on the digital maturity of the press of an analogue origin is equally negative: I consider it to be weak. The reason is that, in general, they are media that have approached the Internet with suspicion and without a truly innovative spirit.

Fabián Gradolph (Personal communication, 5 July 2018) argues that the main Spanish newspapers, including *ABC*, have done a good job in the digitalisation of content.

They have included SEO policies, image management, ultimately creating a new medium. In general, all these media companies have had an advantage, as they had an established newsroom that unifies the offline and online teams, which favours the convergence and transformation of the media. However, the loss of relevance of the paper-based platform will force these media to rethink the scale of their newsroom teams, having to compete as equal with digital natives which have a more flexible, small and agile structure. Likewise, the media's

digital transformation strategies not only focus on content, but also on the use of the obtained information and data analysis (navigation, preferences...), taking at this point the challenge of converting and monetising all available information.

Borja Bergareche (Personal communication, 13 July 2018) proposes four basic criteria for defining the digital maturity of a medium:

1. Has it adapted its workflows to digital requirements? It involves analysing whether the schedules, professional profiles, methods and the newsroom organisation have been adapted to the schedules and customs of digital audiences and the needs of the digital business models.
2. Has it adapted its journalistic product? It involves analysing whether the medium has evolved in an effective and sustainable way, from the ‘manufacturing’ of a single printed product to the development and maintenance of the entire range of digital journalistic products.
3. Has it adapted its business model? It involves analysing whether the medium has been able to undertake, or has defined, a strategy and roadmap for it; the transition of a business model based on two sources of revenue, circulation and advertising, to another model that requires a more diversified income mix, and combines kiosk and offline advertising with digital advertising, direct monetisation from readers through subscription models, and indirect monetisation through digital business of brand extension and transactional business such as e-commerce and ticketing, among others.
4. Does it have a clear and, above all, sustainable digital transformation roadmap? The imperative of adapting the uses and customs of the information business to the digital age is obvious, but it should not become a crazy career chasing everything new for the sake of it. It is key to measure well the tempo of digital transformation. This should be explained well to people, and we must make sure that the speed of the transformation is adequate, i.e., that it does not destroy more business than it generates.

Ismael Nafría (personal communication, 23 July 2018) considers that the Spanish press presents, in general terms, some strengths and some weaknesses in their digital development. Its strong points include the following:

- Ability to generate strong audiences.
- Good coverage of breaking news.
- High level of development in digital journalistic design, specially infographics.
- Strong presence in social networks.
- Good development capacity, in some cases, of multimedia specials.

The list of weak points includes the following:

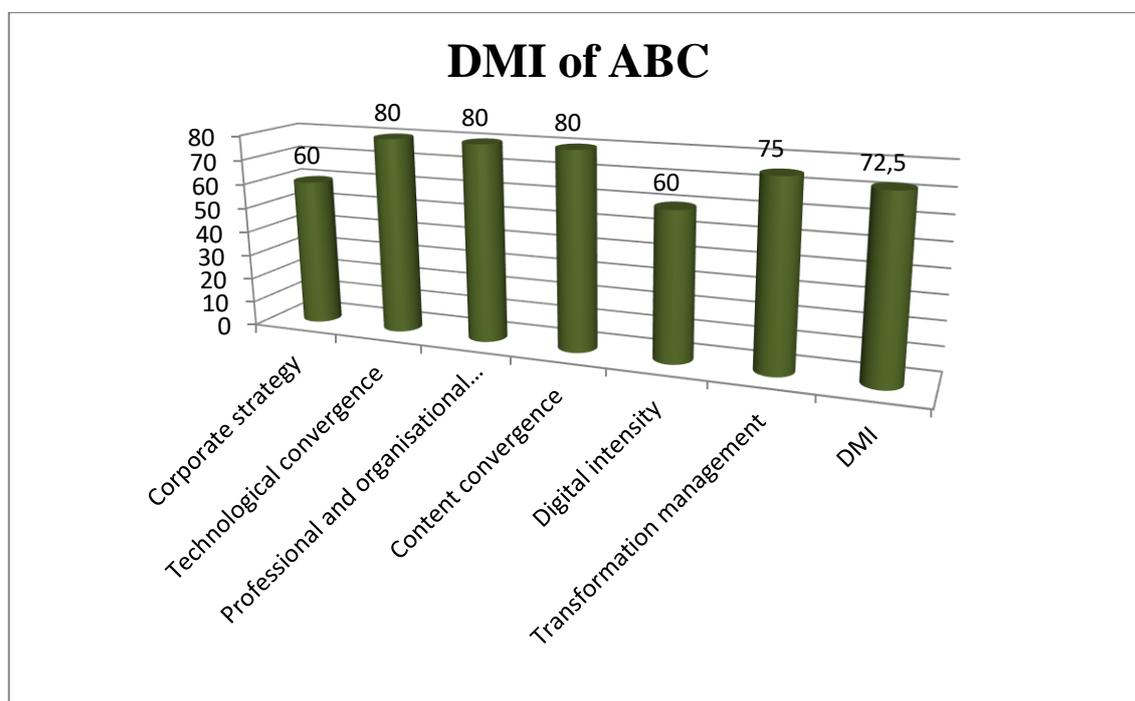
- Lack of a solid economic model that ensures the optimal development of the media in the digital environment. More specifically, the poor bet, unlike most markets in the environment, on payment-based formulas that complement advertising as a way of income
- Related to the above, excessive dependence on advertising revenue.
- Inconsiderate use of some advertising formats that cause the rejection of users.
- Certain abuse the click-bait to generate easy traffic.
- Low quality, in some cases, of published content (lack of journalistic editing work).
- Limited attention paid to readers’ comments, which often become a very low-quality space.

Bernardo Díaz Nosty (personal communication, 18 July 2018) argues that the Spanish press “is taking too long to convert the digital platform into the priority business option. Many years have been lost and currently the advertising revenue of digital media does not correspond to the Growing audiences”. Professor Díaz Nosty explains this apparently contradictory phenomenon, based on factors that affect the profitability of digital media, such as Google’s advertising success and the culture of gratuity.

7. Results

The fundamental result of our research is the implementation of a valid system to measure the Digital Maturity Index of the media involved in the transformation undertaken to adapt to the new digital ecosystem. This digital maturity model, pioneering in the press, has been successfully tested and is applicable to the study of any news media company. According to the scores listed in section 3.1 (poor, less than 39 points; weak, from 49 to 59 points; advanced, from 60 to 69; strong, from 70 to 79; and excellent, more than 80 points), by 31 July 2018, the *ABC* newspaper achieved a Digital Maturity Index of 72.50 points out of a maximum of 100, which means that it is at an advanced stage of digital maturity, although it is still far from getting into the ‘Club of Excellence’.

Figure 1



The pillars where this newspaper stands out are the three convergences: technology, profession and organisation, and content. Meanwhile, the weakest points of *ABC* are the corporate strategy and the digital intensity.

The scores presented in Figure 1 are calculated by adding the results of the indicators and converting each pillar to percentage points. In this way, the data of the first five pillars (10 points each) have been multiplied by 10 and the data of the sixth pillar (50 points) by two.

8. Conclusions

Our work has reached six fundamental conclusions:

- a) We have a new, adequate and tested tool to measure the digital maturity of the media, adjusted to the characteristics of the journalistic products, the digital habits of audiences and able to calibrate the digital intensity and intensity in the management of the transformation.
- b) The Spanish press, represented in this case by Vocento's national newspaper, is at a fairly advanced process of transformation and digital maturity, although it still far from letting the Web define the most important journalistic work routines. Exclusive news still remains reserved for the print edition of *ABC*.
- c) *ABC* has not yet articulated a paywall model, which already exists in four Vocento newspapers: *El Correo ON+*, *El Abc Vasco ON+*, *El Abc Montañés ON+* and *Ideal ON+*.
- d) To be able to grow —and not disappear— the only alternative for news media is to evolve to reach an adequate level of digital maturity
- e) Two requirements must be met to make digital transformation a success: the involvement of executives and directives and a strong focus of the process on the people, culture and design of the organisation that are necessary for the new digital state.
- f) Obviously, technological maturity is a key component of digital maturity, but the fundamental vectors are the organisational structure and cultural vision of the institution. In other words, the driving engine of the change towards digitalisation is strategy.

9. References

- AIMC (2018): *EGM resumen general*, October 2017- May 2018. Madrid: AIMC. Retrieved from: <https://www.aimc.es/a1mc-c0nt3nt/uploads/2018/06/resumegm218.pdf>
- Alonso González, M^a de los Ángeles (2006): *Un acercamiento a 'ABC de Sevilla' y su proyecto 2000*. (PhD thesis). Facultad de Comunicación de la Universidad Sevilla.
- Álvarez Marcos, José (1997): (PhD thesis) *Una experiencia de periodismo cibernético. Abc Expo 92*. Facultad de Comunicación de la Universidad de Sevilla.
- Álvarez Marcos, José (1999): *Tecnologías para la Información Periodística*. Sevilla: Mad.
- Álvarez Marcos, José (2010): *Tecnología de la Información Escrita*. Asignaturas en la Red. Universidad de Sevilla.
- Álvarez Marcos, José (2017): Las formas de la información. El diseño de los géneros periodísticos en los Abcs impresos (pp. 63-80). In Fernández Barrero, A. coord. *Escribir con estética visual, diseñar con contenido: de cómo la diagramación condiciona los textos periodísticos*. Madrid: Fragua.
- Boczkowsky, Pablo J (2004): *Digitizing the news*. Massachussets: The MIT Press.
- Capelo Hernández, Manuel (2015): *Convergencia o integración de las redacciones de papel y digital. El caso del Grupo Vocento en Andalucía*. (PhD thesis). Facultad de Comunicación de la Universidad Sevilla.

Caro González, F.J. (2002): *Cambio en innovación en la empresa informativa*. Universidad de Sevilla.

Cerezo, Pepe (2017): *White paper: el auge de los modelos de pago*. Madrid: Evoca. Retrieved from: <http://evocaimagen.com/dosieres/dosier-evoca-04-paywalls.pdf>.

Coller, X. (2000): Estudio de casos. (Cuadernos metodológicos, 30). Madrid: CIS.

Cornia, A, Sehl, A & Nielsen, R K (2017): *Pay models in European News*. Oxford: Reuters Institute for the Study of Journalism. Retrieved from <https://reutersinstitute.politics.ox.ac.uk/our-research/pay-models-european-news>

Diaz Nosty, Bernardo. (2017): *Diez años que cambiaron los medios: 2007-2017*. Madrid: Ariel

Escolar, Arsenio (2006, 14 November): “La refundación de 20 minutos. Paren las máquinas”. 20 minutos [Blog]. Retrieved from <https://blogs.20minutos.es/arsenioescolar/2006/11/14/la-refundacion-20-minutos/>

Fidler, Roger (1998): *Mediamorfosis. Comprender los nuevos medios*. Buenos Aires: Garnica.

Gómez, Ana María (2017): “Los 4 niveles de madurez de la transformación digital, ¿en cuál está tu compañía?”. In *Blog Tecnología para Negocio*. Retrieved from: <https://www.paradigmadigital.com/techbiz/los-4-niveles-madurez-la-transformacion-digital-esta-compania/>.

Gill Martin & VanBoskirk, Shar (2016): “The Digital Maturity Model 4.0”. In *Forrester.com*. Retrieved from: <https://forrester.nitro-digital.com/pdf/Forrester-%20Digital%20Maturity%20Model%204.0.pdf>

González Alba, J A (2017): “Lecciones de periodismo de Martin Baron”. In *Medium.com*. Retrieved from: <https://medium.com/journalismfirst/lecciones-de-periodismo-de-martin-baron-a410c9ff7064>

Grandon Gill, T. (2011): *Informing with the Case Method*. Santa Rosa (CA): Informing Science Press.

Hyatt, Linda; Hyatt, Blaine; y Hyatt, James (2007): “Effective Leadership Through Emotional Maturity”. In *Academic Leadership: The Online Journal*. Vol. 5. Retrieved from <https://scholars.fhsu.edu/cgi/viewcontent.cgi?article=1133&context=alj>

Jenkins, Henry (2006): *Convergence Culture. La cultura de la convergencia de los medios de comunicación*. Barcelona: Paidós.

Jiménez Carreira (2016): El uso de Internet en las diócesis andaluzas. (PhD thesis). Universidad de Sevilla. Retrieved from: <https://idus.us.es/xmlui/handle/11441/39455>

Kane, Gerald C (2017): “Digital Maturity, Not Digital Transformation”. In *MIT Sloan Review*. 4 April. Retrieved from: <https://sloanreview.mit.edu/article/digital-maturity-not-digital-transformation/>

Kane, GC; Palmer, D; Phillips, AN; Kiron, D; & Buckley, N (2017): *Achieving Digital Maturity Adapting Your Company to a Changing World*. MIT Sloan Review & Deloitte. Retrieved from:

https://www2.deloitte.com/content/dam/Deloitte/za/Documents/technology/za_DUP_Achieving-digital-maturity.pdf

López García, Xosé & Pereira Fariña, Xosé (Coords.) (2010): *Convergencia digital. Reconfiguración de los medios de comunicación en España*. Universidad Santiago de Compostela.

Lorenzo Ochoa, Oswaldo. (2016): “Modelos de Madurez Digital: ¿en qué consisten y qué podemos aprender de ellos?” In *Boletín de Estudios Económicos*. LXXI, nº 219. Pp 573-590. Deusto Business Alumni. Retrieved from: https://issuu.com/deustobusinessalumni/docs/boletin_219

Lorenzo Ochoa, Oswaldo. (2017): Modelos de Madurez Digital. In *Linkedin*, 22 June. Retrieved from: <https://es.linkedin.com/pulse/modelos-de-madurez-digital-en-qu%C3%A9-consisten-y-podemos-oswaldo-lorenzo>

Luque Rodríguez, Joaquín (2010): *Discurso con motivo de la investidura de Umberto Eco como Doctor Honoris Causa*. Universidad de Sevilla. Retrieved from: <http://iniciativasevillaabierta.es/wp-content/uploads/2010/02/Discurso-del-Rector-sobre-Umberto-Eco.pdf>.

McArdle Megan (2018): “A Farewell to Free Journalism”. In *Medium*, 5 April. Retrieved from: <https://medium.com/thewashingtonpost/a-farewell-to-free-journalism-4338746dacec>

Madurez (2018): *Diccionario de la Lengua Española* [online]. DRAE. Retrieved from <http://dle.rae.es/?id=NrIJJbt>.

Mair, J; Clark, T; & Fowler N (Eds) (2016): *Last Words? How Can Journalism Survive the Decline of Print?* Bury St. Edmunds: Abramis.

Martín Barbero, Jesús (2008): “Diversidad cultural y convergencia digital”. In *I/C. Revista Científica de Información y Comunicación* (pp. 12-25). No. 5. Facultad de Comunicación Universidad de Sevilla.

Nafría, Ismael (2017): *La reinención de The New York Times*. Austin (Texas): Knight Center four Journalism in the Americas.

Negroponte, Nicholas (1995): *El mundo digital*. Barcelona: Ediciones B.

Palacios, Marcos & Díaz Noci, Javier (Eds.) (2009): *Ciberperiodismo: métodos de investigación. Una aproximación multidisciplinar en perspectiva comparada* [online]. Bilbao: Universidad del País Vasco.

Palacios González, Jesús (2011): *Paradojas del desarrollo humano*. Sevilla: EUS.

Pérez Cortés, Manuel (2017): *La convergencia mediática en la prensa local sevillana* (Bachelor’s thesis). Facultad de Comunicación de la Universidad de Sevilla.

Pérez Cuadrado, Pedro (2008): “La evolución del código cromático de las portadas de ABC, 1936-1939”, in *Revista Latina de Comunicación Social*, 63, pp. 174-188, La Laguna (Tenerife): Universidad de La Laguna. Retrieved from:

http://www.ull.es/publicaciones/Latina/2008/16_22_URJC/Pedro_Perez_Cuadrado.html.

Rost, Alejandro; Bernardi, María Teresa; & Bergero, Fabián (2016): *Periodismo Transmedia. La narración distribuida de la noticia*. Universidad Nacional del Comahue: Publifadecs.

Salaverría, R. (2017a, 7 April): “Luces y sombras de dos décadas de medios digitales en Iberoamérica”. Conferencia de clausura del *II Congreso Internacional de Comunicación y Pensamiento*. Universidad de Sevilla, Facultad de Comunicación. Retrieved from: <https://www.youtube.com/watch?v=fgJf917VbTA&feature=youtu.be>.

Salaverría Aliaga, R; Martínez-Costa Pérez, M P & Breiner, J. (2018): “Mapa de los cibermedios de España en 2018: análisis cuantitativo”. *Revista Latina de Comunicación Social*, 73, pp.1034-1053. <http://www.revistalatinacs.org/073paper/1295/54es.html>. DOI: 10.4185/RLCS-2018-1295

Sambrook, Richard (2017): “Stop Press? Last words on the future of newspapers”. In *Independent*. 3 February. Retrieved from: <https://www.independent.co.uk/arts-entertainment/stop-press-last-words-on-the-future-of-newspapers-a7558006.html>.

Scolari, Carlos A (2009): “Alrededor de la(s) Convergencia(s): Conversaciones Teóricas, Divergencias Conceptuales y transformaciones en el ecosistema de medios”. *Signo y Pensamiento* (pp. 44-45). No. 54. Retrieved from <http://revistas.javeriana.edu.co/index.php/signoypensamiento/article/view/4527>

Scott, Ben (2005): “A Contemporary History of Digital Journalism”. In *Television & New Media*; 6 (pp. 89-126). DOI: 10.1177/1527476403255824. Retrieved from: <http://tvn.sagepub.com/cgi/content/abstract/6/1/89>.

Simons, Helen (2011): *El estudio de caso: Teoría y práctica*. Madrid: Morata.

Stake R.E. (2005): *Investigación con estudios de casos*. V edición. Madrid: Morata.

Vara Miguel, A. (2014): Tendencias en el cobro por contenidos digitales. In Asociación de Editores Abcs Españoles (Eds.). *Libro Blanco de la prensa diaria 2014* (pp. 179-190). Madrid: AEDE.

Vocento Media Lab (2017): “¿Oyes hablar mucho de la estrategia digital del Washington Post? Aquí te la resumimos”. In *Medium*. Retrieved from: <https://medium.com/@VocentoLab/oyes-hablar-mucho-de-la-estrategia-digital-del-washington-post-aqu%C3%AD-te-la-resumimos-3b9283a3879>.

ABC.es (2009): *ABC.es lanza la primera aplicación para Google de un medio en España*. 18 May 2009. Retrieved from: https://www.Abc.es/hemeroteca/historico-18-05-2009/Abc/Nacional/Abces-lanza-la-primera-aplicacion-para-google-phone-de-un-medio-en-espa%C3%B1a_92979654365.html

Vocento (2018): *Presentación Corporativa*. Retrieved from: <http://www.vocento.com/vocentocom/wp-content/uploads/sites/5/2018/05/Presentaci%C3%B3n-corporativa-def.pdf>

Webb, Amy (2018): *2018 Tech Trends for Journalism and Media*. Future Today Institute. Retrieved from: <https://futuretodayinstitute.com/2018-tech-trends-for-journalism-and-media/>

Yin, R.K (1998): *Case study research. Design and methods*. Newbury Park (CA): Sage Publications.

Zerfass, A; Tench, R; Verhoeven, P; Verčič, D; & Moreno, A (2018): *European Communication Monitor*. Brussels: EAC.

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