Dr. Francisco GARCÍA-GARCÍA
Complutense University of Madrid. Spain. fgarciag@ucm.es

Dr. Francisco-José GIL-RUIZ
Complutense University of Madrid. Spain. franciscojosegilruiz@ucm.es

Digital journalism and empowerment. Informative trends in Google news throughout 2017

Periodismo digital y empoderamiento . Tendencias informativas en noticias de Google a lo largo de 2017

Abstract

This paper's main objective is to examine digital journalism in two steps. Firstly, a literature review was conducted on present-day digital journalism. In addition, its relationship with citizen empowerment was analysed. Secondly, an exploratory study was performed on Google news (in Spanish) to ascertain the topic trends around empowerment and ICTs during 2017. The survey sample comprised 332 news items, divided mainly between Spain and Latin America. The results reveal a predominance of news items where the author's name is not indicated over those which do. Furthermore, there exists a slight prevalence of news items which do not show links over those which do. The main trends shown by the sample were Development, Internet, Politics and governance, Security, Job positions, Gender and Education.

Resumen

Este trabajo aborda el periodismo digital obedeciendo a dos frentes: realizar una revisión bilbliográfica sobre la actualidad del periodismo digital y su relación con el empoderamiento ciudadano, para luego realizar un estudio exploratorio sobre noticias de Google (en español) para extraer las tendencias temáticas referentes al empoderamiento y las TIC a lo largo del año 2017. La muestra de análisis se compuso de 332 noticias, divididas, principalmente, entre noticias de España y de Latinoamérica. Los resultados muestran cierta prevalencia entre las noticias que no muestran el nombre de su autor o autora sobre las que sí lo indican, así como un ligero predominio de las noticias que no incluyen enlaces sobre aquellas que sí lo tienen. Las tendencias con mayor presencia a lo largo de la muestra son *Desarrollo, Internet, Política y gobernanza, Seguridad, Puestos de trabajo, Género y Educación*.

Keywords

Digital journalism; empowerment; ICTs; informational trends; Google news.

Palabras clave

Periodismo digital; empoderamiento; TIC; tendencias informativas; noticias de Google.

1. Introduction

It is well-known that the Information and Communication Technologies are developed in a steadily and swift way, changing the way we see the world, dramatising it, as said by Debord (2002), throughout consumerism. Today, the information is consumed as any other good, and the more information we consume, the better we know the world (presumably). But, what are we informed about by the media? Can they really condition what we think or should we be concerned about?

Regarding these questions, it is a must to count on an informative register of the changes that involve the TIC in the citizenship. Therefore, we propose a study which addresses such a thing, where there can be classified the contents of a wide sample of news and, thus we can obtain more accurate data about the existing trends in the journalistic information we consume on the Internet.

Firstly, we will accomplish a bibliography approach which will go deeply into the journalism today, turned to the digital side, in order to reflect on it and on the informative empowerment. Such a revision will support, on the one hand the importance of digital journalism today, and on the other hand, the study focused on a sample of news in a digital format, where we will try to determine the thematic informative trends linked to empowerment and the TIC through the year 2017.

2. Theoretical framework

2.1. Information = Internet?

Information flows in social networks, it lights up the screens of our devices. It is digested and given back in the world, in the shape of rebroadcast, comments and follow up. Information is what makes the Internet what it is. Journalism has an essential role at reaching the awareness humans require to take part in their environment. As Castells says "the Internet is the fabric of our lives [...] Now, it constitutes the technological base of the organisational base which characterises the era of information: the network" (2003: 15).

According to Torres Parra (2007:152), the Web has the capacity to host the cultural imagination of the whole planet, so Lipovetsky and Serroy are right when saying "for the first time, the culture we have has not been produced by a social and intellectual elite but by *everybody*, without frontiers between the countries or the social classes", and they refer to the fact that the human being is tied to screens for all their lives: "The *homo sapiens* has turned into *homo pantalicus*; today he is born, lives, works, loves, enjoys, travels, grows old and dies surrounded by screens which prove it, when he is a foetus, in the ultrasound scan" (2010: 78-85).

Journalism, together with the professional and the corporate realms, which shape it, have changed, current change –the one which is taken to the citizens. But as Lipovetsky and Serroy say again (2010:89), freedom is threatened by such huge amount of information; we lack direction in such an ocean of information. In this respect, it is a must to mention Han when he considers that so much information is not positive in a society of transparency: "Frequently, the less you know and the less information you have produces more. The negativity of leaving and forgetting can have a productive effect. The society of transparency does not allow gaps in information or of vision" (2013: 17). For the same author (2013: 23), more information does not mean more truth; some direction is necessary in order to give sense to the information, thus the bringing of information to the masses increases the defects.

This makes us wonder what advantages the present informational kingdom brings. the internet facilitates many tasks but the decentralising conditions are likely to mislead us, to blur the lines between what is important from what is not, and even worse, the truth from the lie. Thus, according to Han, mistrust comes up: "The transparency is a state where every no-know is eliminated. Where the transparency is ruling, there is no room for the trust. Instead of «transparency produces trust» should be said: «transparency destroys trust»" (2013: 91). Habib (2012: 16-19-190) presents parallel ideas to those mentioned: what reigns is the now, the simultaneity, changeability, where communication changes into object and, where the transformative communication becomes necessary so as to balance the status of authorities and individuals.

Nevertheless, due to the same reason as the Internet implies concerns and risks, their responsibilities with the citizen cannot be omitted; as Álvarez García, Gértrudix Barrio and Rajas Fernández say (2014), the Web 2.0 has generated a more committed citizenship with their environment, what has led into initiatives in the Network able to press for the correct data processing[1], something similar to what Gertrudis-Casado indicates, Gértrudix Barrio and Álvarez García (2016: 41), when they mention the empowering possibilities of the citizens through the *Open Data* linked to the *Open Government* and to the free Culture thanks to the reuse of the information which has come from public institutions. But this does not free us from the necessity of certain formation: Grijalva-Montalvo and Moreno-Candil (2017:32, 37) warn about the

importance of educating the "media citizens" to be critical when demanding from the politicians as well as to fight, as said in this study, for democratic spaces and less violent. Technology propels us to find our space in the world; the digital narrations change the users into potential radio stations, what generates changes in the social structures in every scale. According to Sánchez-Carrero (2012: 72), the audience, far from having a passive role, now they have decision power in the companies and in their plans, and in the journalistic realm, Izquierdo is also optimistic: "(…) no journalist could have dreamt twenty years ago of having millions of readers all around the world, as   happening with the leading digital newspapers" (2013:56).

This is just a small proof of how much the Web 2.0 is offering. The user is the cornerstone, and with him, his tastes, his needs and preferences. Cebrián Herreros (2008) pointed out several ideas of 2.0 in the processing and use of information, such as it is travelling through the social networks, where the users are

> […] those who establish interest and assessment of each piece of information, data or exposed idea. Versus the selection and assessment of the information that the traditional media have been doing or the web 1.0, the informative flood of the society rises with interests and values that every user, individually and not in an altogether consensus, decides (Cebrián Herreros, 2008:347).

The author adds that the messages acquire expressive dimensions thanks to the multimedia options available on the Web 2.0, opening the communicative process to users who are either recipients or emitters of information, as well as the horizontal users regarding the conditions of getting informed, and the interactivity, which promotes the exchange of roles and will blur even more the hierarchy of information consumption (2008: 348-349-353). Thus, a collective mental space is consolidated with its own codes and resources through the computer network (Delany and Landow, 2006: 63), but that social space of the net brings a power, it is the communication (Castells, 2009: 85). The current user has the capacity of being informed, although the huge amount of information which surrounds him could stun and confuse him meaningfully, even though he could develop eclectic reading abilities described by Cordón as "the one which does not only go through varied ways of intervention, but the one which circulates through different formats without a solution of continuity" (2016:21), connected to the exposed convergence by Jenkins (2008) when diversifying the impact in different channels and formats. Nevertheless, as seen before, the user can also use and select the information to lead his action and take his place in the world as a citizen with his rights. It is feasible to think that the the Internet has reached everywhere, since, as Serrano-Cobos, says "the big figures related to the use of the Internet is getting slow, as if all the users who could be on the Internet, were already connected" (2016: 844)[2]. What is really shocking is the capacity of self-communication, the generation of a scheme that binds together messages, expressions, cultures (Castells, 2009: 87-88).

2.2. Journalism on the Internet

From the professional point of view, Flores Vivar defines the cyber journalism as

> (…) the creation and the development of the journalistic information on the Internet which uses resources, tools and proprietary applications (of software) or with free access to produce contents in multimedia environments, multi format and multiplatform. It is the following stage of the digital journalism, concept started in 1995 and still used at present (Flores Vivar, 2017:38).

Logically, journalism on the Internet is linked to technological advances so, there is "mobile journalism", where mobiles and tablets are at the same time working tools and recipients of information (Triviño, 2015, in Díaz, 2018:106). Rost (2011: 199-200) presents the four stages of online journalism: in the first one, he points out the participation in corporative or institutional webs, with little efficiency, importing letters of readers of printed journals; in the second one (since 1999 approximately) forums and surveys are consolidated, which means greater participation of the users, although they are not linked to the news of the media; the third one (since 2006 approximately) includes the development of the interactivity through blogs, comments below the news and channels of "citizen journalism". In this stage, says the author, the citizen is mixed with the journalists to build the current news; and the fourth one (since 2009), where the media uses the social media.

Connectivity does not only link us with online journals, it also links pieces of information between themselves, creating a network of information thanks to the Internet navigation and the effectiveness. The hypertext has revolutionized the way we read and navigate between texts[3] (the eclectic reading we have already mentioned), defined by Arias-Robles and García-Avilés as "a structure built from the links which connect texts and multimedia contents through the interaction of the user and the digital and multilineal environment and" (2016: 64.) According to Clément (2006: 79), the digital one is a hyperspace since it is a

space of great depth and multiple dimensions, so our way to interact with the digital technology is far from the physical paper, and the digital journalism should apply such ideas.

Our daily reading of digital publications is not lineal or ordered: often, from one piece of news we leap to other either for interest or because it calls our attention, or because of the topic ... informative reading is not hierarchical: there is a hierarchy, result of the hyperlineal reading of the hypertext, which Aarseth (2006: 97) differentiates from homolineal and heterolineal, typical of the text in codex format. This is our journalistic reading at present (or at least a remarkable one), and as when we are reading we consume information, the way we read determines the *modus operandi* of the journalistic activity. In this respect, we have to mention Arias Robles and García Avilés (2017:39), who study how the location of the links in the news mean different reactions in the reader. For example, those which are inside the text, and mainly at the beginning, get better results either in web statistics or in content comprehension. On the other hand, those on the margins, promote the subjective perception.

Our culture is moved in unstable guidelines, the restless, the accelerated and the simultaneous. Concheiro (2016: 119) bets on the "instant" as a way to escape from those speeds we are subjected to at the moment, as movement comes from stillness and vice-versa. But, in the middle of the "shitstorm", as Han says (2014), where everything is information and opinion, there is not much room for that *instant*: some news is published and in seconds it is out of date because the rhythm of the media rides on the events of the life. As we are reading some information, we are clicking on another, no *instants* to reflect, looking forward to more topicality. In this context, according to Benaissa Pedriza (2017: 134-144), the "infoxification" is produced and also the approach called "slow journalism" as an alternative to that brief journalism of concentration of headlines, renaming the concept not as a genre, but as a competent process for any type of journalism.

Journalism depends to a large extent, on the impact headlines have on the digital networks, and it affects the professionals' labour. We consider, as well as Carrillo Pérez (2015) that journalists are responsible to evaluate and organise the reality of the citizens, and the principles that move journalists should be those which keep him facing the reality and not facing the monitor[4]. These are ideas to be taken into account by the educational institutions.

In this respect, we should quote García Santamaría, Clemente Fernández and López Aboal's study (2013: 151-156-157), who claim that the formative process of the new journalists has changed in favour of the isolation of the journalist and point in their conclusions the changes of the companies of the news and the future formative necessities of the journalists in the technological realm especially, in the case of those responsible for the media. As a matter of fact, according to Renó and Renó (2017: 1479), those changes reached Universities in the United States and Canada, where in some universities the students of Journalism have classes of algorithms, programming, etc. In Spain, on the other hand, Gómez Calderón et al. (2017: 196), present, among others, the adverse opinion of experts about the training on journalism whilst the University has lagged behind in the training of professionals.

The technological changes drag the individuals to new fronts. Social networks mean one of them as they are the carriers of the news of the media (new and traditional), therefore, the information of interest will intermingle with the trivial one. The following words hold this statement in a devastating way:

> Unimportance is reached when writing news with key headlines and words addressed to indexation and not to readers in the human form. The journalistic style is affected, the narrative structure and the contents too and, finally, the visibility intended to get, thanks to the algorithms of the search engines, is lost in practice by offering too simple information, not captivating at all and less attractive in the global configuration (Benaissa Pedriza, 2017: 136).

Once more, mistrust is given a leading role. The author (2017:137) refers to *fake news*, which easily spreads on the social networks, awakening the urgent necessity of verification[5]. Amorós García (2017:35) defines *fake news* as "(...) fake news facilitates in the spread or deceit or deliberate disinformation to obtain a political or financial aim" (2017:35)[6], and presents some clues about them, highlighting: 1) *fake news* work reaffirming prejudices and personal opinions and 2) facilitates the pleasure of the acceptance of others. Dafonte-Gómez points out in his research the perception of the social networks as "the main source of disinformation and fake news", due to the deliberate organisation of the media, agents and users willing to participate in it, either for shortage of media skills, or for "militant interest" (2019: 60).

Lotero-Echeverri, Romero-Rodríguez and Pérez-Rodríguez (2018: 297-298-313) emphasize the prevailing post-true, where we benefit from the technological platforms to distribute dubious information and tackle the action called *click-bating*[7], *an example of which places Buzzfeed,* half focused on the impact of the news "with a hook' presented as a headline in the home page, as the following ones: «14 questions I have, about the degree in Journalism now, as I am a journalist» (...)." They describe the checking journalism as

the simplest method to fight against and ensure misinformation and ensure the veracity in an easy way before sharing contents.

The agglomeration of speeches generates confusion between truths and lies because the citizen now has tools to make himself heard on its own. The informing world wins at the same time it loses. According to Izquierdo (2013:76), it is good that the journalist feels the citizens through the social networks, but not the fact of taking place of the noise it produces. Keeping such a distance can become complex, what is the best source to follow? De Pablos (2018: 306-307) criticises the fact that journalism today does not work on the street as much as it used to, and with what is called "Source journalism"[8] the sources thus creating the journalist's work. Rodríguez Gómez and Favaretto Louzada (2017: 215-218) echoed the changes brought by the social networks. Due to the amount of the sources where the information is poured, quality journalism is affected since not everybody wants to pay for the information as there are free online options. One of his conclusions says, in fact, the Spanish professionals of his study reckon the power of dissemination in the nets, albeit not for information quality channels to be sold. Besides, again in the case of Spain, they point out the necessity of a change dealing with the cost-free status of the information.

Dealing with changes, Marín-Casanova (2018: 181-183) remembers that traditionally a literate person was the one who was good at humanities, the one who "(…) is aware of the necessity of reading and what to read." But this has changed, the techniques (and with it the technologies) have changed from a means to an end. Where does the value of the information remain? How to reach the truth, even when the media which theoretically tells it, is contaminated with the bad accelerators of reality that hinder the reflexion? The questions are not recent, Romero-Rodríguez, De-Casas Moreno and Caldeiro Pedreira (2018: 77) point out that the current defects on the information already existed in 20th century, the only difference is that the information used to be centralised. The overload of information, according to the authors, do not make us be more or better informed.

But the Internet does not only bring informative chaos; also depth. Salaverría (2016: 196) indicates the importance of the first blog linked to a period in Spain (La Voz de Galicia), blog supported by the correspondent in the war of Irak, David Beriáin in 2003, named *Diario de Irak*. This would be, according to Salaverría, the beginning of blogs connected to Spanish newspapers, followed by elmundo.es in 2004. For Tuñón (2017:146) bloggers are an essential source of information in democratic and non-democratic countries in as much as they represent the citizen journalism, which can be defined with the following quotation:

> "(…) a process of dissemination of information by the citizens for the citizens; it is, there is no criteria or agencies of regulation, there is not either a previously defined language by someone. There is no editor or *gatekeeper*. It is an anarchic way to publish news, the essence of journalism since its emergence (Gillmor in Renó and Ruiz, 2017: 54).

Renó and Ruiz (2017: 66) are in favour of this journalism when thinking that the information belongs to the citizen. The journalist should live with his sources in a different way from the one he used to. From Suárez-Villegas' research (2017: 103) there are less enthusiastic ideas, since the figure of the citizen journalist is far from the journalist in terms of professionalism: the journalist must seek the news, and not wait for the citizen to give him, although the interaction between them is always positive.

The *big data* is another information tool, although it does not assure an unquestionable truth either. As says Pérez (2015:38), working with data is still subjective, regardless of the scientific dimension that it gives the journalism; the *big data* stresses the necessity to know the measure of the data and the source. According to the author (2015: 85), the main difference between data journalism and the traditional one is that the data journalist could find information even before the established powers, so that the time employed interpreting loads of data is essential. In this frame of data, Sampedro bets on the open code journalism, where the journalist includes the data that supports information and adds:

> Open code journalism transcends the function of controlling the power. In the digital societies it has an incalculable value to build a collective tale of the humanity in the present moment. It reminds the journalist of that task of contemporary historian, attributed to the greatest ones in the profession. The Cablegate was a register of warlike incidents and diplomatic correspondence which should have only been read by the addressee. If Wikileaks had not existed, this data would have remained hidden for decades. we would not only have been unable to react, but a fake version would have kept in the place (2014:248).

For Flores Vivar (2017: 74), the Wikileaks case is "leaking" journalism, and not investigation. The investigation, we understand, will take place in the correct interpretation and verification of the data. Ideally, the citizen journalism would connect with the free code, according to Sampedro (2014:249-250), the new journalism would lean on disseminated nodes of filterers and analysers who would be used to verify information,

eradicating the secrets and the pacts of silence of the powerful and giving place to an allied anti-establishment movement which would control the powers without taking the place.

Journalism has many challenges ahead dealing with its current digital realisation but it counts on tools to perfect itself. As an example of Flores Vivar (2017) we emphasise in a general way some of them, such as the transmediality, the *mashups* (informative maps), the drones (there are journalists specialist in drones), or the Virtual Reality, without forgetting the social networks, according to the author they should be taken seriously due to the impact in the survival of the digital media. However, all this does not reduce the personal treatment. For example, Ortiz (2019:21) says that 76% interviewed journalists, for his research, consider distant press conferences cannot replace face-to-face.

In short, journalism is deep in a multiformat and multiplatform informative storm: lies, leaks, algorithms, prejudices, honesty, verification, transparency, secrecy, technology … and all of it in constant evolution and recycling. We consider that, if this storm is of use, it is to strengthen the journalistic work and the citizen himself.

2.3. Informative Empowerment

Within the digital journalism, we are interested in how it boosts the empowerment through the Communication and Information Technologies. As says Díaz (2018: 111-112), with the mobile performance, the users echo the news, generating dialogue between the media, journalists and citizens, becoming actors with full rights in the journalistic ecosystem. But, according to Vizcaíno-Laorga, Catalina-García and López de Ayala-López (2019: 566), it is not enough to have access to the TIC; they say that the informative use by the user is essential to participate later in the net (cyber activism). This connects with the vision of the communicational empowerment mentioned by Aguilar-Idáñez and Buraschi (2018), understood as a process of shared dialogue which includes the acquisition of media competences to intervene in the society in order to be not only critic users but agents for a change. Attention should also be drawn to the following quotation:

> The objective of critical, participative and transformative communication is not persuasion and transmission of information but the construction of new meanings through dialogue from the core of the community. In this context, people are not just mere receivers of information but, they take active part in the construction of the messages (Aguilar-Idáñez; Buraschi, 2018: 75).

We note that the empowerment in this context does not only refer to "know to do", but to "know not what to do". As if it were the hero's route, the citizen must find himself and with his environment, overcoming steps towards his own self-realisation. Figure 1 (Gértrudix and Álvarez García, 2014) shows empowerment as a process that starts from our own decision making, it gives access to information and availability of options to choose. All this makes the capacity to know and understand information, allowing us to make an informed choice and have an opinion about such a topic. It will lead to have capacity to act and execute our chosen action, it will mean the ability to change the individual or collective world. There are seven steps the citizen must take into account when administering the information. The current affairs are basic for the world the citizen creates around him, or at least, for the world he wants to create. In respect of journalism, taking the digital context into account, full of textures, reaching the summit of the process looks completely utopic, but no doubt, guidance is necessary for any "user-citizen".

Journalism must essentially be a tool which talks about the social changes through the present moment, and likewise, it encourages knowledge for the sake of the citizen's empowerment. This is what any mass media should get. Cortina (2004: 20-23) points out in terms of ethics, mass media must «try to generate a mature and responsible public opinion», ideally split in others: 1) Increasing the citizens freedom with corroborated information and responsible opinions and interpretations, so that the citizen can distinguish between information, opinion and interpretation; 2) allowing free expression regarding the opinions and critics of the powerful; 3) encouraging the thought of the public opinion to avoid manipulation; and 4) entertaining, since we also need spare time.

Figure 1. Empowerment expressions.

Source: Gértrudix and Álvarez García (2014).

Regarding the citizen, we consider the first expression the most directly related to direct empowerment, to the value of the freedom of the individual when responsibly undertakes the information received and extracts what is important for him and his community. Once this is achieved, it is easy to suppose that the rest of the items come up, because that freedom will give sense to information, Mateos (2013: 74) says it cannot come from technology, but from the subject: "The sense comes from the subjects and the symbolic relationship established between them and the context. It is contingent. And volatile (…)"and it is a capacity, according to Harari (2018: 287), that people need now in order to differentiate what is important from what is not. Arun (2019) explains the dangers of the TIC as the rumours which spread in WhatsApp come to violence and lynching in India. Disinformation, as we can observe, can have tragical consequences, this is why there is a need of "sense", simple and complex at the same time. The network demands, as Carr says (2010: 163-134), constant multitask, so that it is difficult to stop and wonder about the consumed information, even more, taking into account the comments of the author about the flexibility and the easiness that information is updated online. For Han (2014: 89) such accumulation deforms information. It is coherent to think that such accumulative multitask encourages critical scarcity and, despite the fact that the *fake news* mean a recurrent topic today, they have always been part of the human reality (Harari, 2018: 258 and ss.; Romero-Rodríguez et al., 2018: 78). What is more, Harari says (2018: 267) that fictions are necessary for the power; that is why he sees impossible a world where only the truth rules.

Anyway, we must watch that technology can give us more freedom, so we have to be aware of it, climbing up empowering steps and never leaving everything in the hands of algorithms. Parisier (2017) points out how algorithms fit our web searches, customizing the results over the time. This is called "bubble filter", an invisible filter which we cannot access and thus acts without human intervention. The author (2017: 67-68) says that the user/consumer is not free of intermediaries, although he thinks the opposite and one of those intermediaries is Google, which determines, in the case of the news, those who have visited the site previously will automatically be connected to the item determined by their browser history.

Thus, with regard to the freedom of election of opinions, Harari says that the algorithms can mean a loss of capacity to choose the subject trusting more in the algorithms than in his instincts, "(…) and while we trust more and more in Google to get answers, our capacity to search information by ourselves decreases" (2018: 75). Algorithms customise our searches and although they seem comfortable to shop online, maybe by becoming more informed, this comfort is not appropriate at all because it standardises the digital citizen, removing alternatives from his interests:

Even though the Internet can offer new opportunities to grow and experiment with our identity, the economic aspect of the personalisation presses towards a static concept of one person. Although the Internet holds the possibility of decentralising knowledge and control, in practise, it concentrates control over what we see and what opportunities we are offered by much fewer people than before (Parisier, 2017: 216).

In short, algorithms can complicate the critical sense of the citizen when they automatically reject out of their circle the information which is different from their routine. This is a consequence of the use of TIC, which also absorb the journalistic activity; journalism has become part of the tasks the user consumes from the screen and given the routine character, it is important to highlight how he is susceptible to become empowered thanks to the journalistic information he is provided, although it is filtered by algorithms. Journalism, as we have observed, is related to the freedom of decision of the citizen, with his critical mind[9].

As MacDonald (2018: 120) said, we need some explanations and the understanding of why. By examining the news we CAN approach how journalistic tendencies refer to empowerment and TIC, in order to be aware of the form and the content of such stories. In an ideal world, they would be used in an integrating and constructive manner, making sure that the subject can have a point of view that qualifies them to take responsible decisions and contradicting as much as possible the following words:

> Responsibility is an action linked to certain temporary and mental conditions. It presupposes, firstly, the binding nature as well as promise or reliability, it binds to the future. These ones balance the future. On the contrary, the current mass media encourage the lack of binding, arbitrariness and short term. The absolute primacy of the present characterises our world. The world scatters as a simple series of available presents. And meanwhile, the future gets stunt as an optimised present. The summation of the present annihilates the actions which take time, such as taking on responsibility or promise (Han, 2014: 90).

The informative empowerment implies, in our view, being able to stop at the responsibility, a pause, mentioned by Camps, as necessary: "(…) the time of the media –and each media has its own: the press, the radio, the television, the Internet have different times– it dominates the political one, the discussion one, the reflexion one, which should be slower times" (2004: 46). Having said this, we can summarise the empowerment necessity with one of Cortina´s quotations which can support everything said up to now: "A citizen is the one who knows what media to choose, not the one who lives deceived by it."(2004: 28) Taking into account what is mentioned in this section, empowerment is supported on the informative-communicative realm, about the concepts of freedom of choice, on the necessity of sense and responsibility. Everything in spite of the algorithms and focused on the action of dialogue and social change.

2.4. Information Trends

At this very point of the study, the information is practically endless in terms of theme, since the digital world covers everything. Knowledge in on the screens, it is accessible but it also implies conflicts and journalism in this context is not an exception: as says Seijas Candelas (2011: 280) the digital journalist will have to use a universal language to get to every possible corner in the planet. The fact that the Net has so much memory can be counter-productive for the information. We will see some of the last years' reports:

On the *Digital News Report.es*, 2017 (Vara Miguel, Negredo and Amoedo, (3-5; 55)[10], the traditional media were still the channels the users trusted the most, although youngsters were led much more by the social networks. On the *Digital News Report.es*, 2018 (Amoedo, Vara-Miguel and Negredo, 2018), you can see how the social networks are still in vogue with regard to informative ecosystem. However, fake news is worrying more than half of the ones surveyed in Spain, a bit relevant if we consider what has been mentioned some pages before. Regarding technology, Garcimartin (2017) cited 8 out of the 75 tendencies of the report of *The Future Today Institute* 2018 (Webb, 2017-2018), such as the interface changes into one based on the look and/or voice, the importance that the journalist understands Artificial Intelligence, the Net decentralisation (according to the geographical location, the users will see some contents and not others), the necessity of counting on journalists who know about algorithms and data, the digital vulnerabilities as an answer to the companies merging, the searches through voice and the available content without the necessity of being connected. The tendencies presented on the report 2019 *Trend Report for Journalism, Media and Technology* (Webb, 2018-2019) do foster what has been seen before, where we stand out the Artificial Intelligence, the computational journalism, the *Blockchain*, the new interfaces (voice, chats, video and audio), education (again, the bet on the updating of contents reference to technology), the personalisation of contents, or the Mixed Reality[11].

The information, the treatment and reception therefore, change. Peña (undated) offers alternatives to the problems the world of journalism must tackle, offering hopes to the sector in terms of sponsorship, subscription (the user could pay for quality journalism), demand and security (use of *Blockchain* to avoid fake news). Some described aspects also appeared in the report of Törnwall (2017: 3-4; 8-22-23), for example, when referring to the personalisation of information in exchange for a price, or for the fact that companies adapt their contents to *Smartphones*, but what impresses is their predictions, such as the printed versions will disappear, or that companies substitute journalists for machines to lower expenses. Dealing with robots, it should be noted the work of Sánchez Gonzales and Sánchez González (2017), where they deepen in the use of *bots* for the story and disseminating of news through *Politibot,* launched in 2016. This *bot* Works in Telegram, and enables a dialogue with the machine which results in personalised information, of course, quoting the source in every case. Let's point out that according to the data of the research, the expectance of this information tool is positive[12].

Dealing with social net trends, Newman (2018: 8-9-17) points out two stories which caused a great impact in the social networks in 2017: On one hand, the accusations and reports which led to the movement #metoo, and on the other hand, the social movement which reported on the fire in London informing through *hashtags*. This announced that during 2018 we would go on suffering from lack of information[13], an example of this is the research from the University of Washington where one of Obama's speeches is manipulated[14].

These are just some broad examples of the changes seen or those to come in later years. The model of business fits the new contexts, feeding hopes and concerns. By way of example, some conclusions are emphasised from the research of Campos Freire, Yaguache Quichimbo and Ulloa Erazo (2017: 55-56): as well as negative trends in some traditional media, the surveys to media managers of mass media from Latin America show optimistic data regarding the business evolution in the next 3 years, opening the way to alternatives of sponsoring the press. All this encourages to keep on working on the reality of digital journalism, and it is actually what this research is about.

In the following part of this study, we will tackle the information tendencies on news published throughout 2017, so as to offer an information portrait of this year. A remarkable precedent is the recent study of Colle (2019) about the information of that very year as regard to the awareness about fake information, focusing the attention on news which tackle topics connected to a social network, *politics and fake news*. In this case, we will focus on the implications between empowerment and TIC.

3. Objectives and Methodology

3.1. Objectives

In the first place two general objectives are raised:

- Deepening in the digital journalism and in the empowerment it implies for the citizen.
- Detecting the information tendencies linked to empowerment through the TIC along 2017.

This last objective is made of several specific ones:

- Applying Google as a tool to consolidate a sample of analysis of news in Spanish through online search of news dealing with empowerment and the TIC.
- Classifying information contents in Spanish appreciating theme categories, authorship and links.
- Defining the most important information trends throughout 2017, either for the annual level or for the monthly level in Spanish speaking countries.

3.2. Methodology

It is about an exploratory exercise analysing a sample of 332 pieces of news, in order to extract data about the form and content of each one, and this way detecting the tendencies present in informative contents 2017. The sample, made between February and March of 2018, is made of news in Spanish throughout 2017, the protocol followed to elaborate it is the following:

- Performing the search in Google of "empoderamiento TIC". Therefore, the language used was Spanish.
- Narrowing the search to "News"[15].

- Delimiting the date, in each case, about every month in 2017, from January to December, from the first to the last day in every month (example: 1st-31st January 2017)

- Selecting those pieces of news whose information fit better the key words indicated in the search, avoiding duplicity, so that they could be classified into the following categories, in a direct or transversal way according to the content of every piece of news.

Concerning the key words of the search, "Empoderamiento TIC" refers to the way those pieces of news, it is the Technologies of Information and Communication, deal with the capacity of influencing the life of the citizen whilst it enables them to take an active part in the society. Taking into account what has been studied in the theoretical frame, this action would let us delve into the information that tackles the relationship between society and TIC.

In dealing with the content, the news was sorted according to the current theme following an *ad hoc* list realised for such a thing, taking into account that all of them mention, in one way or another, citizen integration and evolution: *Apps, Big Data, Competences, Culture, Development, Economy, Education, Facebook, Future, Gender, Google, Artificial Intelligence, Internet, Youngsters, Environment, Open Data, Politics and Governing, Jobs, Virtual Reality, Social Media, Robotics, Health, Security, Smartcities, Smartphones, Vulnerability, Whatsapp, and YouTube.*

At the same time, when classifying the news of every month in tables, we also took some data, to be treated in the results:

- The mass media each piece of news was published, as well as the country of origin.

- The presence or absence of the name of the author of the information.

- Whether there are links in the body of the news, it is words or sentences (hyper)linked to other web contents (videos or images are not taken into account)

- The URL of the news for ease of reference in the Appendix.

4. Results[16]

One table was generated per month, where all mentioned data was included. Each one can be consulted in Appendix 1 of this study. Appendix 2 shows the recount and percentage tables of every month.

The total number of analysed news is 332, as shown in Table 1, where the news IS itemised into nationalities: 187 made by Spanish media, 140 by Latin American countries (the precedence of the media has not been determined in 19 cases, yet they have been added to Latin America), 3 from the USA, and 2 from the Republic of South Africa. Therefore, news from the Spanish media prevailed during 2017, taking 56.32% of the analysed sample. It is surprising, however, two pieces of news coming from the Republic of South Africa.

In 142 pieces of news the name of the author of the news clearly appears, while in the rest (190) IT does not, despite highlighting those cases where the attribution of authorship is on the team in charge of the media itself (examples: staff, wording). Therefore, the percentage of news not signed by the author is higher (56.62%), what can be against the journalistic transparency.

In the 332 pieces of news, there are links in 155, and none in the remaining 177. In order to catalogue it as "with links", we only had to take into account what parts of the text were linked to other contents through hyperlinks, without taking into account images or videos. Then, the news without links exceed those which do have, in 53, 31%, A fact that plays against the hypertextual sense of the information, where the links can work to illustrate certain aspects of the information offered encouraging in some way, the consideration of the sources which hold what the news says.

Table 1. Final figures of the recount by country, author and presence of links

FINAL FIGURES		
FINAL NUMBER OF NEWS	**332**	
PER COUNTRY	**TOTAL**	**%**
SPAIN	187	56,32%
LATIN AMERICA (in some cases (*) the country was not specified)	140	42,16%
USA	3	0,90%
REP. OF SOUTH AFRICA	2	0,60%
PER AUTHOR	**TOTAL**	**%**
SPECIFIED	142	42,77%
NON SPECIFIED	190	57,22%
PER LINKS PRESENT	**TOTAL**	**%**
WITH LINKS	155	46,68%
NO LINKS	177	53,31%

Source: Prepared by the authors

Concerning the outlined items or topics of every piece of news, we find a distribution with the sum of the recount of the whole year 2017 together with its individual respective percentage in respect of total of the sample in **Table 2**. Since in every piece of news several concepts could agglomerate, every category is shared with others, so the total sum of the percentages cannot be 100%. Every category, therefore, is referred to its publication throughout the whole sample of news, without taking into account the coincidence with others.

Having said this, the most remarkable categories, over 20%, are: *Development* (50,60%), *Internet* (45,48%), *Politics and Governing* (34,63%), *Security* (31,92%), *Jobs* (27,10%), *Gender* (21,08%), and *Education* (20,48%).

The categories whose presence is minimal, below 2%, are: Artificial Intelligence (1,80%), Virtual Reality (1,20%), Open Data (0,60%), and the lowest, YouTube and WhatsApp (both 0,30%).

The thematic trend in the news of the analysed sample, therefore, shows clear predisposition to the treatment of empowerment and the TIC in terms of *Development*, it is, of application of social changes on day-to-day through the technology, in different moments and aspects of life, in particular in this case, in its digital aspects (the categories shared importance with others). Something similar happens to the *Internet* and its applications in the day to day of the societies of the sample, because, as a category, it is easy to add many others, since it connects to more competences and objects. Another important tendency is *Politics and Governing*, referred to those news where organisms of power are related to technological empowerment, category which can also be related to the rest of the most important tendencies of the sample, such as *Security*, essential in virtual environments where we are realised every day, and the Jobs, related to the technological impact on jobs, companies and institutions.

At last, regarding the remaining predominant tendencies, the *Gender* is presented as a line that deals with the inclusive side of technologies in different realms of life, and it is easily related to *Education*, to individual and collective evolution (from the point of view of technology) of students in the digital world.

Concerning the lowest tendencies, it is interesting to point out that maybe the most popular technological aspects, as the one referred to as Artificial Intelligence, such a topic in popular culture, for example in cinema, has so little impact on the study. The same goes with the *Open Data*, an essential element for the autonomy of the citizen when taking decisions and performing arrangements on his own. Lastly, such popular terms in use, as day-to-day as YouTube and WhatsApp are hardly present in the sample, and we can see how little the algorithm connects these concepts with those of empowerment and TIC, at least, in this sample.

Table 2. Total figures of the count per categories applied to the news

FINAL FIGURES		
TOTAL NUMBER OF NEWS	332	
PER CATEGORY (individualized. The percentages do not add up to 100)	TOTAL	%
Artificial Intelligence	6	1,80%
Jobs	90	27,10%
Internet	151	45,48%
Apps	28	8,43%
Big Data	53	15,96%
Vulnerability	57	17,16%
Development	168	50,60%
Social Media	16	4,81%
Education	68	20,48%
Competences	40	12,04%
Robotics	12	3,61%
Health	41	12,34%
Youngsters	55	16,56%
Gender	70	21,08%
Politics and Governing	115	34,63%
Culture	11	3,31%
Future	16	4,81%
Environment	11	3,31%
Smartcities	10	3,01%
Security	106	31,92%
Smartphones	11	3,31%
Virtual Reality	4	1,20%
Youtube	1	0,30%
Facebook	8	2,40%
Open Data	2	0,60%
Economy	9	2,71%
Google	13	3,91%
WhatsApp	1	0,30%

Source: Prepared by the authors

In reference to the main tendencies in every month, we can see in Table 3 the most repeated categories in every case, showing individual percentages according to the sample in every month, since the categories are usually shared with others.

Those months whose main tendency is below 50% are February (41,17%) and December (42,42%). The highest percentage is in September (75,60%), followed by August (70%). The rest of the months varies between 50% (July) and 64,70% (March).

The most repeated monthly tendency is *Development*, present on 6 occasions: February, June, July, August, October and December. The tendency of the Internet is predominant in July (besides Development) and September. The rest of the categories are only the main tendency in just one month: *Jobs in January*, *Gender in March*, *Youngsters in April*, *Politics and Governing in* May, and *Security in November*.

Table 3. Figures referred to the main tendency in every month of 2017

MAJORITY TENDENCIES PER MONTH IN 2017				
MONTH	TOTAL MONTH	MOST REPEATED CATEGORY	AMOUNT	%
JANUARY 2017	18	Jobs	7	38,88%
FEBRUARY 2017	17	Development	7	41,17%
MARCH 2017	17	Gender	11	64,70%
APRIL 2017	16	Youngsters	9	56,25%
MAY 2017	23	Politics and Governing	12	52,17%
JUNE 2017	16	Development	9	56,25%
JULY 2017	30	Internet and Development	Both 15	Both 50%
AUGUST 2017	20	Development	14	70%
SEPTEMBER 2017	41	Internet	31	75,60%
OCTOBER 2017	48	Development	27	56,25%
NOVEMBER 2017	53	Security	31	58,49%
DECEMBER 2017	33	Development	14	42,42%

Source: Prepared by the authors

In Table 4, for its part, the months are divided concerning only the data of nationality, authorship and links. The following can be outlined: respect to the nationality, throughout the sample, Spain has a higher volume of news in 7 cases (January, June, July, September, October, November and December), versus the 5 cases where the higher volume corresponds to Latin American countries (February, March, April, May and August). Concerning authorship: the months where there is no name of the author are the ones that prevail, and hold 7 months (January, June, July, September, October, November and December), versus those 4 where there is a name of the author (February, March, May, August). In April we can find the same amount of news in both categories.

Concerning the absence or presence of links, the news with no links prevail, it happens in 7 occasions (January, February, March, May, June, October and December), versus the remaining 5 ones whose higher volume of news is the one with links (April, July, August, September and November).

That by way of global comment, the analysed sample presents tendencies referred to the technological improvement in several social dimensions in terms of *Development*, and the protection versus threats to *Security*. *Youngsters, Education* and *Gender* represent means of implementation of this empowerment in TIC, while the category *Jobs* can be dealt with the opportunities and the changes this ecosystem offers to the entrepreneurial and labour market. The *Internet*, the other category taken as transversal to practically all the rest of them, because the empowerment in the TIC is given, we understand, through the use of the Internet in different stages of life.

The prevailing trend of the *Development* in the sample is, from our perspective, hopeful, because we consider it links the technological evolution to the social development, having obviously an impact on other themes proposed in the methodology, quoted in the former paragraph. Information and Communication Technologies are directly connected with the citizen, with his way of knowing and interacting with the environment, and by extension, with his empowerment, since the information analysed leads you presuppose, at the very least, the orientation towards actions of social improvement.

On the other hand, the selected sample answers Spanish news in more than half of the cases respect to the rest of nationalities found. Spain has, in this study, a greater flow of information in the topic studied, and as it can be observed in Table 4, Spain is the nationality with the largest volume in the sample in 7 months of the year. Nevertheless, in more than half of the cases, the lack of use has been detected throughout the news, it is evident because of the whole of the sample (53,31%), as well as the sample divided into months (7 months have more news without links than with them).

Furthermore, it is relevant the A high percentage of news where the author of the news is not specified (56,62% of the sample), at the same time it is felt in the monthly volume of this category (7 months)[17]. This fact is noteworthy, because as we are living a moment where transparency is so desired, any content should specify its origin, either human or through *bots* (connected to what has already been seen in the theoretical framework). Also, in 19 occasions it has been impossible to access to the nationality of the media, considering them as Latin American because of the topic of the news. In Appendix 1 you can access to every piece of news through the URL.

Even though the news which was not hyperlinked could be due to many reasons (for example editorials), the author´s identification of the information should be included as far as possible, because the preparation is subjected to responsibilities and/or merits, therefore, it is expected to be signed or under an alias.

5. Conclusion

The objectives of this research have been met throughout its development, since there has been a deep approach to the main dimensions and challenges of digital journalism along the theoretical frame developed. Connecting also, citizen empowerment, the TIC to the information activity and recapitulating in a general way, some of the most outstanding tendencies according to several sources. In this way, we have tackled digital journalism from the theoretical point of view, in order to later, get through the treatment of the content itself through a sample of news related (by Google) with the empowerment and the TIC.

Due to this, in the second part, we have collected data of interest about the informative offer in the contents about empowerment and Technologies of Information and Communication (TIC) throughout 2017 in Google *news*. The news analysis and its cataloguing of different items implies a valid tool to determine the communication tendencies about specific topics once the facts have been indexed in the network. The *Development* is the most repeated theme throughout the sample, mentioning the technological evolution within the necessities of the society. Accompanied by the *Internet*, *Politics and Governing and Security*, all of them over 30%, something coherent because the Internet is the key of the social and the technological evolution, it is necessary to follow certain limits and promises which preserve the user-citizen's freedom.

The TIC are the present and future of the citizen empowerment and by this type of studies there can be comparisons, corroborating and contrasting tendencies along months and years. This raises awareness of the changes and necessities which are transformed in time. This exploratory work confirms it so.

As a final reflexion, let's highlight that freedom, from the point of view of empowerment, does not have to be understood as something given or forecast but as an orienting beginning in the winding and changing ecosystem in the theoretical frame of this study. Such principle must remain intact and constant despite the changes the TIC implement, in this case, in the information realm. The media, in permanent evolution, must encourage the self-fulfilment of the citizen, and the TIC can mean, even with every threat and/or counter-indications, useful tools for the exercise of freedom.

Dealing with the difficulties in this empirical research, of exploratory nature, it should be noted that when quoting the sample of news some information which was susceptible to be analysed as it did not fulfil, according to the author's criteria, the required topic requirements. The results comply with a sample which comes from only media, this is the Google search engine, a search pattern ("TIC empowerment"), and one language (Spanish). Since the research is focused on news in Spanish, we decided to focus the results in a generic way, without quoting regarding the tendencies according to nationalities. For future investigations, more search sources should be used, with more patterns and including other languages, a teamwork able to tackle such work. On the other hand, the associations between themes and the news, can differ due to every reader's perception. Although, the authors have realised associations as coherently as possible, they are aware of the present subjectivity in this methodological action.

Another aspect to be noted is that the indexing of the news is changing, this fact explains the different results with respect to the sample after realising the searches again. In this sense, we can refer especially to what Parisier (2017) said: the personalisation of the searches. Once they were repeated, they did not give the same results, and this implies that not all the news previously collected, appeared in the searches after the analysis, what complicated the repetition of the study itself. For studies similar to this, it is recommended to have this aspect taken into account and to take precautions to avoid the sample "changing" during the process[18]. Nevertheless, it is also worth noting that, thanks to this algorithmic factor, possibly the sample has resulted to be more consistent, since while taking it, the searches could probably fit better the profile of the required news for the study. This type of paradox means a challenge when facing the digital engines, and no doubt, controlling it, is actually empowering.

The digital and technological world is continually changing, and the fact of having studies to proof the historic journey through informative publications is an adequate channel to study and understand the present moment. Journalism is no doubt changing with the world but it is important not to forget the role of the journalist, shown in the following quotation:

We do what we do to try and let people know what happens to other people and why. Just this mission justifies our existence. Because, if we know that, we are helping the society to become aware of the fact that every individual is part of a bigger group, with similar interests and problems, and together can do something to advance towards the improvement of their conditions. Mass media are there to connect, join and articulate (Izquierdo, 2013:121).

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Notes

1. Document with no page numbers.

2. The author receives this statement from Meeker (2016).

3. Delany and Landow (2006, p. 43) place the electronic text as a milestone in the technology of information.

4. Document with no page numbers.

5. Benaissa Pedrera (2017), in this point, refers to an article in *ABC* (2016) where Facebook refers to the problem of these contents. Available in https://bit.ly/2CaCY3t

6. The original source is in bold.

7. Regarding this concept, the authors quote Palau-Sampio (2016).

8. In this point the author refers to *El periodismo de fuente* (VVAA, 2003)

9. In this respect, it has to be borne in mind the declaration of the UNESCO in Grünwald (1982), where the focus was on the necessity of fostering the critical comprehension of the phenomenon of communication on the side of the citizens. (Aguaded-Gómez, 2013, p. 117)

10. According to the authors, it is based on the Reuters Institute Digital News Report 2017.

11. Ossorio Vega (25/09/2018) summarizes some keys of the report.

12. In the conclusions, we can see "(…) 90,55% is satisfied (66,03%) and very satisfied (24,52%) with the distribution of the information on the part of the *bot*. The coverage of information which is personalized, agile, accurate and without political bias due to the sources (own and external) is what features the *bot*. Likewise, the information is complemented with graphs, images, gifs and *podcast*." (Sánchez Gonzales and Sánchez González, 2017: 80)

13. It is noted the following comment from the author: Paul Bradshaw predicts that AI will be implicated this year in a piece of fake news or a hoax.

14. In reference to the case of the University of Washington, the author provides with the following link: https://bit.ly/2Ck9slx

15. Rovira, Capdevila and Marcos (2014: 19-20) say that Google news is "the edition that makes the Spanish market of Google News, a news aggregator and search engine which automatically and constantly tracks information from the main online mass media in line with the geographic scope of the user. This service launched by Google Inc. in 2002, was in test version until 2006 and until June 2012 there were 72 regional editions for specific geographic sectors, Spain among them. The aggregator is available in 28 different languages and works starting at an automatic algorithm of aggregation which every 15 minutes tracks more than 25.000 digital media, out of which it feeds the database and transfers the news of the last 30 days in the server." It should be noted that, as Jiménez de Luis (2018) says, this service has had limitations in Spain. His article also tackles interesting advances which will be applied in this platform, such as the fight against fake news.

16. The percentages of the tables have not been rounded. We have kept the first two decimals in each case.

17. Let's remember, as specified on Table 4, the month of April contained the same amount of news where there is an author, as in the ones which it is not specified. This month does not count in this statement.

18. In this respect, other alternatives are offered in the following article by *El Tiempo*: https://bit.ly/2KOWjKv