

Emerging Information Systems and the Design of "iVoz": A Case Study of Enterprise Social Systems

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Abstract

The development of emerging information systems is crucial in two directions. First, these systems increase the accessibility of information to be used by the enterprise social systems. The improvement in the accessibility of the information has a direct repercussion in the reduction of economic costs in the business firms. Second, emerging information systems are a touchstone in the organisation of the new enterprises, because the new models of organisation require the enhancement of information and communication technologies. In this way, emerging information systems influence the structure and dynamics of enterprise social systems, making it possible to achieve goals never before imagined. This paper analyzes a new enterprise social system developed by the Spanish newspaper La Voz de Galicia, called "iVoz". It is analyzed here to what extent it has contributed to introduce a change in the organization, which has repercussion in three aspects: 1) the model of media company; 2) the structure and dynamics of the daily work of journalists; and 3) the ways in which citizens can access and use information.

Keywords

Emerging, Information Systems, Social Systems, Organisational Change, Information Technology, Local Journalism

1. Emerging Information Systems and Organisational Change

Among the emerging information systems is "iVoz," which is leading an organizational change in a well-known business firm. The existence of this intranet software platform comes from seeking two main aims: 1) to increase the accessibility of information used by the enterprise social systems of a Spanish newspaper (*La Voz de Galicia*); and 2) to contribute to a new model of organisation of this business firm through the enhancement of information and communication technologies (ICTs), the ICTs that are used in the daily work of the journalists.¹

Both aims have been considered in the design of the intranet software platform "iVoz", which is a new and original system for operation and editing of information on different mass media platforms. 1) This innovative technological application of *La Voz de Galicia* enables journalists covering all information fronts: writing news, tagging, categorizing news, inserting multimedia content, and publishing news directly in the digital newspaper, through their personal computer or mobile phone. 2) This new information system "iVoz" has changed de facto an enterprise social system from the point of view of its internal organization as a business firm. As a matter of fact, this new model of organization has changed the way of working of the newspaper on its tasks: the way of informing on what is happening in the world, on how to explain the events of that reality, and the forms of influencing public opinion.

Through this emerging information system there is a very important change: there is now a different way on how the information of the newspaper is prepared. So far this business firm had a number of people working in an information network to produce content. Nowadays, these people work in a different way as a network: 1) They need to get several news content (regular paper, a digital version, social networking, etc.) instead of just one news content; 2) They are asked for working on different media (text, audio, photo, video); 3) They should do the tasks in real time; and 4) This group of professionals has to take into account a very important novelty: the existence of a real interactivity on behalf of the audience of the newspaper.

These variations regarding how the information of the newspaper is prepared involve organisational changes in the structure and dynamics of the business firm. *La Voz de Galicia* has revised its models of management and production, but also has modified its tasks and content. In this regard, "iVoz" is a unique and valuable proposal, if we consider what Robert Picard has pointed out on how to distinguish the news media companies from the rest of the news providers (Picard, 2012: p. 123). Moreover, with the organisational changes introduced by "iVoz", we can also think of the future of journalism. This intranet platform seems to match the objective of seeking to integrate all of the tools that supply the digital world, to improve it and renovate journalism for the generations to come (Jones & Salter, 2012: p. 152).

By means of the use of "iVoz" by the firm La Voz de Galicia, which is a cente-

¹In this case, besides consequences for a new managerial agency for this business firm, we can find an interaction between technological innovation and scientific creativity. This interaction belongs to an artificial setting, where the main aim is seeking new possibilities for the agents working in this entreprise. The general characteristics of the interplay between technological innovation and scientific creativity are analysed in Gonzalez, W. J., "The Roles of Scientific Creativity and Technological Innovation in the Context of Complexity of Science," in Gonzalez, W. J. (ed.), *Creativity, Innovation, and Complexity in Science*, Netbiblo, A Coruña, 2013, pp. 11-40.

narian newspaper specializing in local information, a twofold variation is now manifest: 1) The emerging information system has changed the processes of working on the information available, and 2) It has made a multilevel change in the structure and dynamic of this business firm. Moreover, these aspects have brought about two consequences: *La Voz de Galicia* has become the fourth Spanish newspaper, and it has double the volume of Internet traffic in just two years. All has obtained through the design of a new business model, with a strong commitment to this information and communication technology.

2. Theoretical Framework of the New Design

This reality—the emerging information system of "iVoz" and the organisational change introduced in the business firm—requires a theoretical framework. It is a technology platform that emerges in response to a specific professional need. Now it is necessary to interpret this phenomenon through a theoretical framework that gives meaning and allows see new business and organizational opportunities. The key factor is that "iVoz" involve a new design within an artificial setting. This new design belongs to the realm of communication, as an intentional phenomenon that is shaped by aims, processes, and results.

When studied by the Communication Sciences, two complementary aspects of the phenomenon are shown: 1) the communication phenomenon, as such, is the origin of our own scientific discipline, by achieving the task of "scientification" (Niiniluoto, 1993); and 2) the Communication Sciences orient this same phenomenon toward the future through prediction and prescription (Gonzalez, 2007, 2015, 2018, 2020; Gonzalez & Arrojo, 2015), which offers patterns in order to guide or strengthen this phenomenon.

In this regard, Communication Sciences are Applied Sciences of Design (Arrojo 2007, 2013, 2015a, 2015b).² These sciences seek the solution to specific problems in the field of communication, where the environment is marked by a clearly artificial component.

The Sciences of Design are oriented towards an enhancement of human possibilities, and Artificial Intelligence has a clear role to develop these sciences (Gonzalez, 2007). Thus, the sciences of design can guide the information systems when they want to reach new aims, according to new process in order to get new results. In addition, they commonly use information and communication technologies.

De facto, the technological development in the information and communication technologies (ICTs) has stimulated an authentic revolution in information access for users (Küng, Picard, & Towse, 2008). Following the interaction between the sciences of design and the information and communication technologies, there is change in the structure and dynamics of complex systems related to information. Moreover, this technological development in the realm of information has favored new applications of these sciences of design (Arrojo, 2015c, 2017,

²A general framework of the sciences of desing can be found in Simon, H. A. (1996), *The Sciences of the Artificial*, The MIT Press, Cambridge, MA, 3 rd edition, 1996.

2019; Gonzalez, 2013, 2017).

From the beginning, the new information system—iVoz—was conceived in terms of problem-solving within the entreprise system of information and organization. It was a combination of the creativity of the design for accessible communication with the support of technological innovation (a new intranet platform). In addition, "iVoz" involves a new business model. In this firm "iVoz" is a new system of working with and editing information on various platforms, which looks for a specific design of proximity and an ease of technological use. Thus, in this interaction between the sciences of design and the ICTs, the design of the new information system "iVoz" includes "internal" and "external" aspects.

On the one hand, the design has been made thinking of new aims, processes, and results from the informative point of view; and, on the other, the application of "iVoz" in a concrete enterprise involves new possibilities of real organisational changes. Furthermore, in the present historical setting—a clear economic uncertainty for the traditional businesses of communication—the new systems of production of journalistic content, of distribution and consumption are renovating the traditional model. In order to be competitive economically, the media should evolve differently. A way of generating a greater informative value is specialization in concrete geographic areas (Picard, 2012: p. 129).

Within this context, the intranet platform "iVoz" includes the expertise of a new design and the technological knowledge to serve the interests of *La Voz de Galicia*, which is business firm specializing in local journalism. As a technological tool, "iVoz" allows the editing and working with information on various platforms and in real time, working with very specific geographical zones. This intranet platform seeks to reach a very high potential in its specificity within the information market. Moreover, this is already the case. In fact, several things have been accomplished with this instrument: 1) it offers new possibilities for more direct communication for the press; and 2) it involves a new business opportunity for newspapers within the evolving scene of digitalized information. Nowadays the public wants to be informed of what is happening at a global level and also in their neighborhood, and to do so immediately and in a manner that is trustworthy. Technological support is the vehicle that allows the objectives.

3. The Need of a New Focus in the Case of La Voz de Galicia

Before the new design introduced by "iVoz," there was a long professional activity of journalists. The historical framework that led to new aims, processes, and results is given by *La Voz de Galicia* as a successful business firm because of its policy of editions. This entreprise produces 13 daily editions of the newspaper, covering the region of Galicia (in the northwest of Spain). This approach to producing news pieces is supported by an editorial line, which is set up locally. Thus, the organization as a firm is distributed in 20 distinct working centers. Thus, only one third of the staff works in the central editorial office. Since it began in 1882, *La Voz de Galicia* has become the main source of news communication in the region, because it has offered local and regional information of proximity to its potential consumers.

This newspaper has been able to maintain this prominent position in the market because of its capacity to adapt itself to the new settings, marked by technological developments. In the new digital setting, this capacity of adaptation is crucial: "how a firm adapts and innovates in the implementation and operation as a startup are crucial factors in development and sustainability of emergent online news enterprises" (Naldi & Picard, 2012). In this regard, during the period in which this enterprise was working in its new intranet platform, mainly thinkig on its digital edition (in 2011), *La Voz* was the first printed daily source of general information in the region as well as the fifth in all of Spain (OJD). Simultaneously, this enterprise produced the daily digital leader in Galicia. In the beginning of 2012, 161.000 unique users visited the site, looking at more than 33 million pages each month.

At that time, in this enterprise only 20 people were working on the digital version of the newspaper. They were limited, basically, to putting the print version of the newspaper onto the website and updating the headlines that developed over the course of the day. However, the social and technological developments meant that this was clearly insufficient. A new design was needed and a new technological tool was conceived to support new informative and organisational changes.

The new information system—iVoz—adapts two fundamental characteristics of the printed version of *La Voz de Galicia*: 1) interest for local and regional news; and 2) the existence of an internal organization with 20 working centers coordinated through one central office. The objective of the background design was to develop a system that allowed reporters and photographers of *La Voz de Galicia* to handle every stage of producing the news. The task is done using their personal computers or mobile phones through a simple and intuitive process.

Meanwhile, the hope was that the reporters, specializing in themes or concrete geographic regions, could publish, automatically, a multimedia news story from the very place from which the news was coming. In order for this to happen, various phases needed to be completed: 1) searching the systems that handle existing information in the market; 2) the analysis and evaluation of their technological tools; and 3) the design of a new system of communication.

4. Enterprise Social System Implementation

After an intensive search and analysis of information management systems developed by other national and international media, they discovered that he system that most approximated what they were looking for was the tool *Eu reporto*, developed by the Brazilian newspaper *O Globo*. This tool uses a system that allows readers to send news to the newspaper, but this is not a planned application for the journalists. After this initial phase of analysis, the newspaper made the decision that it was preferable to develop its own intranet platform. Thus, it could be adapted uniquely to *La Voz de Galicia*, for their policy of multiple editions and for their decentralized structure as organisation. The first step was to begin the process of putting up a new website. In June 2011, the decision was made and the date of the launch of the website was determined to be January 4, 2012, coinciding with the 130th anniversary of the birth of the print newspaper. They had six months to develop the project.

The redesign of the website was established around a base of 30 categories (including sections and editions) and more than 4.000 tags were given (of which, only 1.500 were typically used). This allowed for internal navigation among sections or by tags. This new web structure allowed the news, once tagged, to automatically enter the sections or editions chronologically. In some sections, like the cover, or sports, the news was published manually in order to be able to position them on the page by relevance of the event, instead of positioning it according to the time it was published.

Regarding the software of the information system, the redesign of the website carried the development of the "iVoz" system in two directions: first, it made a web application that was accessible to every desktop and laptop computer used by the editorial office, and second it created a native application of the Apple iOS operating system (the operating system of the iPhone), in order to be able to work with iPhones from any locale from which a newsworthy fact might arise.

With this computing support, the first system allowed immediate elaboration and publication of the news, and to do so from any device that had the program installed. However, the characteristics of the portable devices limited its usage in covering specific events. For this reason, they were also looking for a tool that worked on the mobile phone, given that its use is much more versatile, as much in time as in space.

The mobile device chosen was the iPhone, for various reasons: 1) A financial agreement was reached with a telephone company, acquiring the 250 terminals that were needed for a competitive purchase price; 2) the quality of the terminal was greater than in other cases; and 3) in order to constitute a bonus for the reporters and photographers. At that time, the intangible value of the iPhone constituted a compensation for the effort of adapting to the new technology that was required.

In both the full web and iPhone versions, the program works with two information managers: 1) the SGdeVOZ, a system for storing and working with texts and images, which is common for all the businesses of the corporation ("Corporación Voz de Galicia"); and 2) SedVoz, which is the unique web manager for this system. It works in the following way: the writer (i.e., the journalist) sends the news in XML format through a post with all of the files. These files are saved on the phone. It is made in a way that the user can return to revise and send the information, if necessary.

All of this information comes to a server, where the sent files are stored in an

incoming directory or folder. They are then redirected according to their content. When the reporter sends these materials, he or she can decide whether or not he wants the information to be published automatically on the web in the corresponding section or category (as a function of the tags that have been introduced). He or she can also send the information as a draft. In this case, an editor in the central office will have to receive the materials and edit them for later publication on the web.

The beta version of the "iVoz" app was tested during the 2011 Spanish general elections. The procedure that was ultimately put in place was finished in March 2012. It happened with the distribution of 250 terminals among the reporters and photographers of the staff.

5. The Organizational Change in the Editorial Office

Undoubtedly, the new computing program within the intranet platform by itself hardly could modify the habits of those in the editorial offices, over the course of years. In order to achieve new professional practices based on the application of the communication sciences, many pieces were still missing, one of which was a true cultural change in the business, from top to bottom. In order to promote new patterns in professional practice, they began to work on developing a training course for editors. The new technological tool arrived in the setting of a process of change in the organisational practice of reporters. Only by these means could they begin to modify their work habits and even the language they used in crafting their stories.

The printed newspapers began to see clearly that the future of the industry was in video, social media, and mobile applications. In the words of the editor of *The New York Times* Arthur Sulzberger Jr., "our future is on to video, to social, to mobile. It doesn't mirror what we've done. It broadens what we are going to do" (Haughney & Chozick, 2012). It is significant that in August of 2012 an international communication media like *The New York Times* had named the departing director general of BBC as their new president and CEO.

From a professional point of view—which should be a scientific application, the first steps are being taken to be able to change the editorial system of the news to fit into the digital environment. This will probably be done in a definitive manner. But the new medium available, by itself, does not motivate the needed change in the editorial office. In light of all this, there are many important variations. Up to the moment of implementation of "iVoz", the digital newspaper *La Voz de Galicia* had a staff of 20 with which to complete their task. Now, the newly supported computing allows integration of a staff of more than 200 editors and photographers of the daily journal for the digital edition.

Through the contribution of a great number of individuals working in the news media, the digital setting is changing to give rise to new phenomena. Now, perhaps more than ever before, it is necessary to emphasize the information. This brings about a *good journalism* in the strictest sense of the word. This is why one

must work with a strong cast of expert journalists.

Here is where printed content enters the scene. In effect, what is important is not merely being the first one to report the news, but to do so as clearly and precise as possible. Furthermore, one must contextualize the news, give adequate explanation, and analyze the possible repercussions that these events might have in the future. This assumes a contribution of knowledge, not merely of "information" on its own.

In this case, the "iVoz" becomes a wager for immediacy and for local journalism, given that it makes possible an immediate update of the most relevant news content for the public audience. In this respect, in an internal analysis done in May 2012—one month after the implementation of "iVoz"—the first indicators of cultural change in the editorial office were noticed. That May the official website of *La Voz* published a total of 10.622 news stories. 36.5% of these came from updates specifically for the web. The 6.745 remaining (63.5%) came from the direct dump of text published originally in the print version of the newspaper.

Together with a greater participation on the part of the journalistic professionals, and a greater accessibility, a higher level of versatility has been achieved. News is updated most frequently in the local offices, in what the web identifies as "editions." This is due to the unique configuration of the entity of *La Voz*: it possesses an editorial office centrally limited and a few very active local offices. With the new digital medium there is a clear support for that local journalism of proximity.

In this case, the new intranet platform has allowed change the internal organization of the company. "iVoz" implementation has led to new management agency that have immediate effect on a larger 1) savings in terms of time; 2) in production costs; 3) rationalization of material resources; and 4) effective distribution of work. This is a technological instrument that has allowed the internal reorganization of the company as such, and which opens the way to new organizational and business opportunities.

6. First Results after the Implementation of "iVoz"

One year after the implementation the new digital medium, *La Voz de Galicia* practically doubled their Internet audience. By the end of 2012 they reached 4.6 million users, 94% greater than prior figures. These data made this page the web leader of its type. The Voice's website, *Lavoz.es*, added 68% of their audience from the Galician region audited by the public procedure (OJD). These figures represent four times more users than the second in the classification, the daily *Faro de Vigo*. These figures also put *La Voz* in a position to be the sixth daily source of Spanish general information, after the websites of *El País*, *El Mundo*, *20 minutes*, *ABC*, and *La Vanguardia*. (Figure 1)

These figures were extracted from census measures audited by Nielsen and certified by the Office of Confirmation of Diffusion of the Press (OJD), like those that offer *Comscore*, the new reference measure for the advertising market

D 1.		
Ranking in Spain	Elmundo.es	11.027
	2 Elpais.com	11.018
Unique users of the top ten	3 20minutos.es	9.592
Spanish	Abc.es	7.897
newspapers	5 Lavanguardia.com	4.030
In thousands. Global data	6 Sa Voz de Galicia.es	2.366
domains without external	7 Elperiodico.com	2.014
aggregations. Font: Comscore	E Laverdad.es	1.996
	9 Ideal.es	1.897
	Publico.es	1.776

Figure 1. Number of unique users of the top ten Spanish newspapers.

in Spain since 2012. For those responsible for the online newspaper, these numbers represent "a backing of readers in support of the plan of digital integration put in progress January 4 of last year" (*La Voz de Galicia*, 19 Jan. 2013: p. 24). (Figure 2)

For Tomas Garcia, who is responsible for digital editing of *La Voz*, "iVoz" is a wager for the immediacy and the local journalism that has allowed the 13 editions of *La Voz* to have the capacity to achieve, in real time, the news that happens in any place in Galicia" (interview on 24 Jan 2012).

In March of 2013 more than 50% of the users type directly in the field to access the news and do not access it through search engines. This work "has allowed connection with a readership between 25 and 44 years old that already connects from a mobile device 24% of the time and that is already interested in what is happening in Galicia. But there is also a connection for readers who arrive at La Voz in order to understand any event at a global level" (*La Voz de Galicia*, 19 Jan. 2013: p. 24). In order to confirm this information, the data from some of the most-viewed news stories of 2012 is provided. Among which are some stories of an especially local character, but other stories that have a global reach also appear, like the stratospheric leap of Felix Baumgartner or the end of the world announced by the mayans.

In August 2013, Klout, meter influence in social networks, placed in *La Voz de Galicia* in front of the main Spanish newspapers. It gave 85 points, on a scale of 100—ahead of *El País* (84), *El Mundo* (80) y *ABC* (80) (*La Voz de Galicia*, 19/9/2013). This American gauge analyses over 400 variables from the integration with popular social networks like Twitter, Facebook or Google+. In the criteria for diagnoses Kluot the number of followers or messages are not valued. It takes into account the very real influence on the community and on the Web.

These first data on the results obtained by lavozdegalicia.es, through its new informative editorial design, have been corroborated again in the treatment and follow-up (by the audience) Angrois rail accident in Santiago de Compostela, on July 24, 2013. A local event with international significance. In covering this event *La Voz de Galicia*, on its website, has far surpassed the rest of the media in both

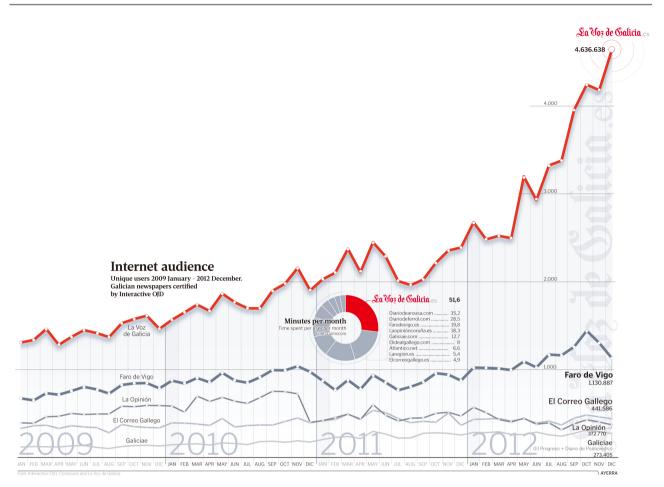


Figure 2. Evolution Internet audience La Voz de Galicia 2009-2013.

the responsiveness, and the impact of its information (number of unique users and page views).

According to Nielsen data, which are reflected in **Figure 3**, on Wednesday, July 24—date of the accident, lavozdegalicia.es was the first to inform users of what happened. That same day exceeded by 125% the rest of the regional media together in unique users. The next day, the number of unique users of lavozde-galicia.es exceeds 303% of the sum of the other regional media.

Font: Nielsen

But besides the volume of unique users, the other indicator that marks the importance of monitoring the coverage of the event is the number of page views. The day of the accident, lavozdegalicia.es exceeded by 387% the number of page views of all Galician media together. The next day the figure rises to 837%.

This means specializing in local information also became an information referent, concerning national and international level, for two main reasons: 1) its historical expertise in a specific geographical area, which allowed him to obtain a more complete information than their competition, and 2) immediacy and accessibility of their information with the new model developed through "iVoz".

During the three days after the tragedy about 2.24 million users from around the world flocked to lavozdegalicia.es to find out what happened (Nielsen). Of

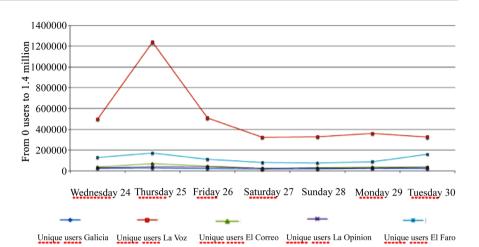


Figure 3. Unique users of galician newspapers the week of the Angrois accident.

those million users, 519,000 residing in Galicia, the rest came from other parts of Spain and abroad. These data are consistent with several hypotheses: 1) people value the immediacy, 2) accessibility to information, 3) the contextualization of news, and 4) the quality and accuracy of the information.

But the breadth of coverage and immediacy of the information would have been impossible if it were available a technological tool in the service of this new communication model. Neither would have been possible if it had not produced the cultural change in the staff. The data show that the public has come to appreciate that differentiality and chose this medium for information. The rest of the Galician digital media, despite the relevance and impact of the news, kept a flat line on the number of users.

The results of the website in early 2014 followed a positive trend. In March visits increased by 20% over the previous month and 12.7% year growth was recorded. (Figure 4)

La Voz de Galicia can be considered an example of how to use technological developments to design a new company, in a scenario of difficult economic viability for traditional media companies. A newspaper specializing in local information been known to use computer networks to search for the niche audience and give added value to the information. 1) The use social media to spread their content, loyal readers and bring them back to your site news. 2) The intranet platform "iVoz" has allowed the reader to offer quality information instantly, from the very place where the news comes. 3) The support of the newspaper paper has also evolved towards content that add value to information—more analysis. This has allowed *La Voz de Galicia* is the fourth newspaper of Spain, in 2014. 4) in a situation of economic crisis and outreach to media companies, *La Voz de Galicia* is the journal that is better resisting the widespread declines audience in Spain.

7. Success Factors

The media, in the context of the novelties introduced through the use of the

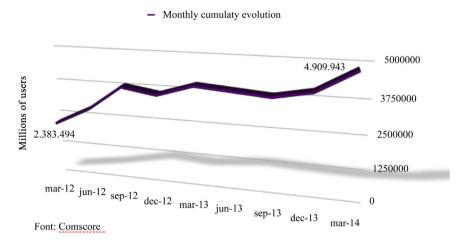


Figure 4. Evolution of monthly users of La Voz de Galicia.

Internet (Küng, Picard, & Towse, 2008) are immersed in a growing structural and dynamic complexity (Arrojo, 2020). This complexity is fostered by the constant interaction between the scientific creativity sought by Communication Sciences (Gonzalez & Arrojo, 2019), and the technological innovation that makes it possible. New communicative designs, such as "iVoz", are built on the basis of scientific creativity and the support coming from technological innovation, which includes the use of Artificial Intelligence (Arrojo, 2017). Thanks to this new design, three important achievements have been made 1) lowering production costs; 2) facilitating the work of journalists; and 3) meeting user demands more effectively. In this way, the development of systems such as "iVoz" opens up new business opportunities for local and regional media.

Until now, one of the primary problems with online news groups was the lack of human resources. A small group of journalists had the responsibility of updating the information that the bulk of the staff of the conventional newspaper had produced the previous day. This required that they offer impersonal stories, normally extracted from the large agencies, with little or no relevance for the reader.

The development of tools like "iVoz", together with the necessary process of convergence of the news groups, is painted as the only way to avoid a worrisome professional future. There must be an organization in which everyone works with new designs with the unique and common objective of offering the best information, independent of the medium through which the reader consumes the information. There must be news groups that are integrated and technologically connected. This should change the times of closing the news that must be marked by the unique media, but not the professionals who work on them.

Both ICT, in general, as well as the "iVoz" tool, in particular, make it so that journalists have a lesser degree of physical dependence on central editing. This is because every journalist can function as an independent cog in the wheel of the media. From there, they can invest more time in being on the street, in direct contact with their sources. This allows for a greater decentralization of the position of work: having a network of journalists technologically connected under the same editorial line, dedicating themselves to offering contextualized information.

Together with the advance in communication design—the internal aspect the external aspect must be told: the attention on the users. This is because one can answer the demands of the public through these mobile devices. In effect, the journalists can create pieces of information, publish, categorize, and disseminate them on the web. The people want to have information at their fingertips that tells them what is happening almost immediately in their nearest surroundings and around the world. The media should tell the stories of the world in a distinct way, one that puts the stories closer at hand, prioritizing local news without losing sight of the big picture.

Design is more complex than it has ever been before. In this new environment, journalists should be able to generate more complete content in their languages, using text, photos, audio, and video. Each of these integrated elements is what is known as the new "multimedia language," hypertextual and interactive. This is known as the hypermedia revolution, an expression coined by Cotton and Oliver in 1997 (Cotton & Oliver, 1997).

"iVoz" allows those responsible for the online newspaper Lavoz.es to do the same thing that *La Voz de Galicia* has done for the past 130 years: to bring news to their readers as quickly and efficiently as possible; "in the past it could take 5 days, now it should only take us 5 minutes" (Interview Tomas Garcia Moran, 2012).

Consequently, this is an application of Communication Sciences based on the professional scientific practice. It carries an internal dimension of advance in the communication designs and an external facet of greater attention on the users of the communication. This is possible because of the interaction with the new Information and Communication Technologies that have served to create the new instrument "iVoz", whose utilization has been quite satisfactory.

As for what the technology brings to information in this digital context, the answer is: 1) accessibility, it is possible to have the news in place to happen; 2) immediacy, at the same moment in which they occur, in real-time; 3) interactivity, the high degree of accessibility and immediacy generates a high degree of empathy and response from the user; 4) volume, a greater number of information well contextualized by not having to waste time on unnecessary travel and to have more professional staff also working for the digital environment is generated in addition to writing; and 5) integration of different specialties journalistic context, video, photos, infographics, etc. which results in greater clarity of information.

The technology allows the production of informational content more agile, with greater utility and service. Technological innovations also provide these files have a global distribution. They can be immediately accessible and great geographic distance.

8. Conclusion

The results obtained during the years 2012 and 2013 by the site lavozdegalicia.es show several things.

1) Users reward with their loyalty a high degree of accessibility to information.

2) There is a community aspect in the communication process. Users have the ability to interact, in real time, with the agents involved: the medium that disseminates it, the actors who carry it out, sources, other users, etc.

3) The public demands all kinds of content. Services and utilities that enhance the informative experience are sought. The most important thing is that each support (text, video, audio, graphics) do what they do best. Each story unfolds through each of the many possible supports, and the biggest stories tend to flow through multiple platforms.

4) The information professionals are not limited to tell what happens, now active in Social Media or microblogging environment. This helps to nurture the reputation of the brand they work for and increase their visibility.

5) The digital environment is an ideal place to develop niche local proximity information scenario.

The future of journalism, and in particular the local media, is linked to the need for a high degree of creativity in the objectives and processes. This is reflected in decisions such as allowing the implementation of an editorial system as "iVoz". It is a change in communicative designs made possible by technological innovation it fosters.

They are supported by technological innovations, which are constantly more sophisticated. Consequently, the traditional communication media looks towards alternative settings in which their professional exercise can be developed. Along with the new information and communication technologies (ICT), on the one hand, a production of the most agile local informative content fits in, with a greater degree of utility and service. On the other hand, these technological innovations allow for this content to have a global dissemination (being accessible immediately and at a great geographical distance).

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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