



*25 de marzo apagón tecnológico
Jesús Ángel Pardo Álvarez*

Internet as an investigation tool for journalist in news rooms of the Colombian means of communication: opportunities and risks

Internet como herramienta de investigación para los periodistas en las salas de redacción de los medios de comunicación en Colombia: oportunidades y riesgos

Alex De la Paz

adelapaz@uac.edu.co

ABSTRACT

The main objective of this investigation was conducted to know, how the diffusion of the Internet innovation, its levels of access, knowledge and use impact in the newsrooms of means of communication and the journalism exercise in the context of the social development in Colombia. During the investigation a survey was applied to 300 journalists in seven cities in Colombia. Professionals of the area of social communication and journalism tied to means on line, printed dailies, television and radio were inquired. Having in mind a holistic vision, the investigation was triangulated, realizing interviews to social communicators of the most important news agencies of France and Spain; experts from the United States, Brazil and Venezuela; and some Colombian journalists were consulted during this phase too. In this explorative study was found that in Colombia is registered a wide penetration related to the use of internet as a tool of investigation in newsrooms.

RESUMEN

El objetivo central de esta investigación estuvo dirigido a conocer cómo la difusión de la innovación Internet, sus niveles de acceso, conocimiento y uso impactan en las salas de redacción de los medios de comunicación y el ejercicio del periodismo, en el contexto del desarrollo social en Colombia. Durante la investigación, se aplicó una encuesta a 300 periodistas de siete ciudades de Colombia. Fueron indagados profesionales del área vinculados a medios on line, de diarios impresos, de la televisión y la radio. Con miras a tener una visión holística, se trianguló la investigación realizando entrevistas a comunicadores de las agencias de noticias más importantes de Francia y España; expertos de Estados Unidos, Brasil y Venezuela; algunos periodistas colombianos también fueron consultados durante esta fase. Este estudio de carácter exploratorio, encontró que en Colombia se registra una amplia penetración en relación al uso de Internet como herramienta de investigación, en las salas de redacción.

**Magíster en Ciencias de la Sociedad, Dirección de Organizaciones Sociales e Ingeniería de la Educación de la Universidad Sorbona de París, Francia. Magíster en Desarrollo Social Comunicador Social-Periodista de la Universidad Autónoma del Caribe.*

Palabras Clave:

difusión de innovación, Internet, brecha digital, periodismo, salas de redacción.

Key words:

Innovation diffusion, Internet, digital gap, journalism, news rooms.

Recibido:

Febrero 2008

Aceptado:

Enero 2009

1. Introduction

Internet allowed millions of people participate in a democratic way around objectives and / or common themes sparking a global communicative interaction. The web also reduced the costs of exchanging experiences on a global scale by connecting people who lived realities dispersed.

The soul of digitization or postinformación era is the Internet. There are four qualities of this historic moment: decentralization, globalization, harmonization and motivation. The Internet is being articulated and informational cultural movements that are allowing development to propose desirable alternatives. The web opened up a new virtual world parallel to reality, where there is room for almost all occurrences of the human mind. But with the advent of the Internet on society was evident a new digital divide inequality. Clafin (2000) explains that the digital divide can be understood as the separation between people (communities, states, countries...) that use information technology and communication-TICS-as a routine part of their daily lives and those without access to them and that although they do not know how to use them. This phenomenon also affects the media.

This paper is based on research that sought to understand how the diffusion of Internet innovation, their access levels, knowledge and use

impact the newsrooms of the media and the practice of journalism in the context of social development in Colombia.

The bursting of the Internet in the newsroom, after its conversion in mass media journalism, is creating major changes in the way of practice, in the media. These changes will be discussed in later sections.

1.1 Internet created another world and a New Form of Journalism display

1.1.1 Background

The first contact the reporter had with computers was writing on a computer. The advent of Internet at newsrooms was added new challenges to journalism. The first Internet resource that became an important tool for investigative reporting was the email (Negroponte, 1995). Following the popularization of Internet resources for journalism, some studies reported a lag between journalists from Latin American countries.

Internet is creating opportunities and risks in the practice of journalism. The opportunities include: easier access to information sources, Internet in many dimensions equaled or surpassed the traditional media is democratized the audience (there is more participation, consume and produce content).

Among the risks are: consider the Internet a source because it can

weaken the discipline of verification and investigation, the Internet could foster social isolation and decline of certain cognitive abilities, the emergence of the Internet in newsrooms has generated some dependence on its use, changes in working hours, changes in the structure of journalistic writing that affect the quality of content.

The theory of innovation diffusion of Everett Rogers (1962, 1976, 1983, 2003) presents 5 attributes (relative advantage, compatibility, complexity, ability to be tested and observability) through which can be explained by the adoption of the Internet as tool in newsrooms.

2. Methodology

The research used a mixed approach (Creswell, 2005; Teddlie, 2003, Grinnell, 2005; Tashakkori, 2003). In the quantitative part was investigated by applying a telephone survey of 300 journalists from 7 cities in Colombia. The sample population was discriminated against for work experience, type of employment relationship, roles played by news coverage and type of advance.

In the qualitative part there were 11 interviews: media journalists from Colombia, communicators from leading news agencies in Europe (AFP and EFE), figures representing the sector of new information technologies and scholars in North America, Brazil and Venezuela.

This study sought to answer the following question: How can the spread of Internet innovation, their access levels, knowledge and use impact the newsrooms of the media and the practice of journalism in the context of social development in Colombia ?

The quantitative and qualitative approach allowed us to glimpse more meaningful penetration of this innovation in the social context. In the quantitative approach a structured questionnaire was developed by six questions that touched the essential aspects of access, knowledge and use of the Internet:

In the work of journalists, do you use the Internet to do the job?

How often use the Internet to advance journalism?

What are the most Internet tools used by journalists in their work journalists?

For which of the following using the Internet journalistic genres: news, features, opinion columns, interviews?

How important is the use of Internet in daily journalism?

What are the points raised by the journalists that could invalidate the use of the Internet as a tool in the newsroom?

3. Findings

The quantitative findings show that: -Internet has risen as more diffusion of innovation in newsrooms of Colombia, 99.67% of journalists probed stated that interacts with the global

network for his journalistic work.

"The e-mail (43.67%) and search engines (30.33%) are the network resources used most frequently by journalists in Colombia.

"The Internet has become an important investigative tool for structuring the news reports as gender (62.67%) and reportage (12.33%).

"The importance of Internet use in daily work as journalists privilege shows the network of networks over other research tools.

"The uncertainty in the sources (35.33%) and outdated information (30.67%) became factors that could invalidate the use of Internet in the newsrooms.

The qualitative findings show that:

"Despite being still in a time of transition, the current generation has more resources to publish that those newspapers 10 years ago.

"The media have gone from exclusive producers of consumer information assets.

-In the largest producers of news from Europe, the agency EFE and AFP journalists believe that direct consultation is indispensable sources for news.

Europe-TV Media Unit maintain Spanish international news agencies to produce their content. "For the production of television news internet has not been a primary source. Unlike what could happen, for example, in the case of print media ... we are still dependent as the first step of international agencies," said Rafael Diaz, Chief International Correspondent for Spanish TV.

He started the debate to lower the risks of using Internet. Some voices call for greater academic training from universities to the Internet, others simply say that the Internet should remain if any form of regulation.

"To overcome the digital divide in addition to the commitment of governments, business and philanthropy, we need to lead people not currently connected to the sites where the technology is available.

"Negroponte's proposal in the sense of producing \$ 100 laptops and allow access to this technology from people who have no resources is formidable, but before that happens we move the children to schools and libraries that already have such technology," said the creator of Microsoft, Bill Gates.

3.1 Triangulation

In this section we delve into a triangulation of quantitative and qualitative key findings discovered by the mixed method, designed for this study. But before starting this synthetic route, it should explain what a triangulation is and its main objective.

"The idea is that when a hypothesis or result survives the confrontation of different methods, has a higher degree of validity as if the sole test method (Sampieri et al. 2006:789). Obviously a triangulation seeks to achieve a greater sense of understanding of phenomena through data collection using methods and qualitative and quantitative techniques.

In this research, there is a predomi-

nance of the quantitative method, but it also produced a qualitative look for greater understanding of these issues.

3.1.1 A quantitative glance and qualitative findings

Internet has risen as more diffusion of innovation in newsrooms, the 99.67% of journalists probed stated that interacts with the Global Network for their journalism. A fact that underscores the strong penetration of this technology to develop content in the workplace of the Colombian community. One of the major qualitative results of this study is closely related to the above. Indeed in such findings are emphasized the benefits of the network to disclose contents easily in any social context. The experts discussed the call advocated democratization of content as a key aspect of the use of this technological innovation. "It's unbelievable but the 10 year old boy with his laptop computer has more technology in their power to publish newspapers which had 10 years ago," explained one of the academics, which shows that although we are currently in a time of transition, the Internet is appreciated as an important tool to produce content inside and outside newsrooms.

The experts consulted also reaffirmed that the media have gone from exclusive content producers to active consumers of information, which adds strength to the foregoing throughout this investigation.

In elaborating on the issue of using

this technological tool by the journalists surveyed, we found that the preferred applications of the network in Colombia are electronic mail (43.67%) and search engines (30.33%). This evaluation of Internet resources, also denotes a certain lack, or disuse of a variety of alternatives offered by the Global Information Technology for the development of journalism. In research on digital media in the region, Barrios (2007) noted with concern that limited Internet access, which still occurs in Latin America, can result in a gradual appropriation of information technology in production, among journalists and even their audiences. However, the levels of Internet penetration in Colombia newsrooms are consistent, and frequent use of email and web browsers to perform journalistic duties as consultation of sources in contrast to the views of professional communicators interviewed in the old continent, because in the biggest producers of news from Europe, the agency EFE and AFP journalists believe that direct consultation is indispensable sources for news. Result is surprising if one takes into account the technological level of the oldest newspaper house in France and Spain, is higher than that recorded in the media context of Colombia and the average in Latin America.

The holistic view of this study allowed us to appreciate another contrast, for while in Colombia, the respondents said the Internet has become an important investigative

tool for structuring the news reports as gender (62.67%) and reportage (12.33%) in Europe surveyed journalists insisted that journalism can not be done without direct contact with sources. This could mean that the confidence level that the Colombian and European journalists are on the Internet is notoriously uneven. While it is true that in France and Spain recorded higher levels of technological advances in the media against Colombia, so you can see, this gap in development, did not signal any difference in choosing whether or not the resources of the Network warnings against the use of Internet applications are higher among the European journalists interviewed. It is also possible that there is less concern on the part of Colombian journalists approached on the issue of font handling.

In the same way, another result of the survey conducted during this investigation shows the importance of long and often use Internet at work daily (93.00%). But there are circumstances which could invalidate the use of multimedia global network newsrooms, such as inaccuracy of information (35.33%) and outdated information (30.67%), became predominantly factors identified by reporters. Colombian Communicators interviewed agree with the above and add the Internet to be used with caution. Also showed fear of portals through which offends, involving surfers in dangerous situations such as prostitution or satanic sects.

Due to this, he awoke to force the

debate to lower the risks of using Internet. The experts called for greater academic approached from universities to the Internet, while others asserted that the Internet should remain free of regulation.

On the issue of digital divide is clear that beyond the commitment of governments, business and philanthropy, as expressed by the creator of Microsoft, Bill Gates, you need to get people not currently connected to sites where technology is available. The quantitative findings of this study show that the Colombian communities are connected, which could be appreciated as useful if you decide to employ an exit strategy to the digital divide similar to that raised by the creator of Microsoft.

4. Conclusions

The objective of this research was to determine how the diffusion of Internet innovation, their access levels, knowledge and use impact the newsrooms of the media and the practice of journalism in the context of social development in Colombia. From this perspective this study is very important for the practice of journalism, immersed in a momentous metamorphosis due to the bursting of the Internet in newsrooms. In relation to academia, research plays a guiding role, effective, permanent in theory, until it is revised and updated curricula and training processes for future social communicators, journalists. This study invites reflection and acquires special signifi-

cance to the charge of leading social development processes in countries where it has the digital divide, or are at levels of access, knowledge and limited use of new technologies.

Throughout the process of analyzing the results, we found significant evidence of numerous opportunities and risks posed by the use of Internet in the newsrooms. These changes also are affecting society in general, so it was appropriate to review also some concerns that emerged and that contextualize the central problem of this research. Many of these topics would be cause for future studies.

Web

4.1 Could be better used in newsrooms

Although there is overlap with other U.S. studies (Garrison, 1999) in terms of Internet penetration in the newsrooms consider one of the most relevant findings of this research the importance it gives Colombian journalist from using this technological tool. The 99.67% of the reported probed using it as an essential element of research. Also, it is telling that in a country with obvious limitations and inequities in access, knowledge and use of new technologies (see Annex 5 and 6) record a similar penetration of the Internet in newsrooms of major media capitals and Bogota, Barranquilla, Medellin and Cali, and other media newsrooms located in small cities like Monteria, Sincelejo and Yopal.

Similar results were seen with other

studies developed in Latin America (Franco and Guzman, 2004) regarding management of the limited variety of Web applications by journalists in the region. In Colombia most frequently used e-mail (43.67%) and search engines (30.33%). Clearly, Colombian journalists have not developed special protocols for conducting research via the Internet and use the resources that typically drive the common people. This situation was also reported by Garrison (1999) in a study advance online newspapers communicators in North America, this study was reviewed in the section on Theoretical Framework.

In terms of the theory of Diffusion of Innovations (Rogers. (1962, 1976, 1983, 2003)) and according to the results analyzed, the Internet penetration in the newsrooms of Colombia can be explained by the 5 attributes influencing the adoption of new technologies. First, the noted Colombian communities that have facilities to access new sources of information and press material, implying a relative advantage over other technologies or tools used for investigative journalism. For example, a conventional phone does not have the same attributes that the Internet investigative. For this reason, among the major findings of this investigation are that the journalists surveyed used one or more times a day (94.67%) Internet in their journalism.

Another attribute that led to the overwhelming adoption that we report today, is related to the com-

patibility of the global multimedia network and existing social values. Also, the gradual penetration level was very important because as we discussed in the research reported in chapter the theoretical framework, the technology arrived after overcoming journalistic context stages such as learning to use computers, the operation of certain software as word processors, spreadsheets, graphing and database storage. This led the journalists to use the computer as a tool. Being overcome this stage, successfully articulated, mainly in the U.S., the so-called computer-assisted journalism. "When the Internet burst into the newsroom, the journalists were already familiar with computers and the potential of innovation adoption by new users was extremely high.

A third attribute that facilitates or hinders the adoption of technological innovation refers to the degree of complexity that is seen. Precisely, this factor is one of the flaws that prevent the adoption in all areas and social groups on the Internet. In various chapters of this report, we referred to the social divide digital divide as one of the aspects that affect equitable development and positioning of new information and communication technologies. Despite this, in the newsrooms of the media in Colombia, not discovered so transcendent situations affecting the degree of Internet penetration as a result. Journalists who played various roles at the time of implementing the survey in seven cities

in Colombia, showed no variation in the use of the Internet.

As the digital divide has not significantly affected Internet penetration in journalism, proven ability to be "doing / using" which speaks the theory of Diffusion of Innovations, found support among Colombian journalists who have had the ability to access, use and understand the resources of this technological tool.

Canil (1999) interview with Nicholas Negroponte on ways to consume information, the Director of Media Lab (Massachusetts Institute of Technology, MIT), says that "serendipity", Greek word meaning "ability to discover things unintentionally" assist the consolidation of Internet research. Similarly, this ability present in some way the curiosity of human beings contribute to the levels of making / using continue apace.

This factor leads us to the last attribute of Rogers' theory, observability, since the fact that the reporters could see many of their peers using this technology allowed them to generate discussion around it, which at the time, stimulated more use and acceptance.

No doubt was left uncovered an important opportunity sustained by the high Internet penetration in newsrooms, but what action should be taken to meet this finding?, In what way should be capitalized on the fact that journalists in Colombia are connected? New research, for

example, could discover or design Computer network resources of the world that are tailored specifically to the practice of journalism. The high level of inclusion that is recorded in the country could be used for educational purposes to achieve a similar penetration into other social spheres. Understanding the small details of the diffusion process of Internet use in the newsroom, through a study predominantly qualitative approach could be a replica or model for nations of the continent or the world where penetration is not as high.

Regarding the high level of Internet penetration, a factor that has helped give substance to the frequency of use of this tool has to do with managing the schedules for the production and updating of content. While traditional media are tied to predetermined time, the new media are redoubling their efforts to transmit information continuously updated. In the era of social communicators postinformación much longer connected to the network of networks than any other media, either to "monitor" what happens to research new facts or news. The reporter must understand the digital age, now more than ever, you can not disconnect from the world of news, their working hours are 24 hours a day. You will pay a share of sacrifice to get used to working shifts completely untraditional. This new way of practicing journalism involves a risk that directly affects the health status of journalists. The work environment of media professionals has been described in pre-

vious investigations (Arroyave and Blanco, 2005) as stressful and generator burnout. Future research could explore new occupational hazards to which is subject journalist from the changes generated by the use of new technologies in newsrooms.

Moreover, to try to explain how journalists use that high level of connection to the Internet as exemplified by the following comparison. The genre of investigative journalism has had a great exponents in the history of the media in Colombia, there are names such as Gabriel García Márquez, Daniel Samper Pizano, Germain Castro Caicedo, Javier Darío Restrepo, among others of equal merit. It is paradoxical to find that today the list of journalists dedicated to research in depth is reduced, although there are powerful technological resources on the net to get information. Maybe that's not surprising that Colombian journalists use the Internet to produce news (62.67%) than stories (12.33%). The current media trend to report reality in fragments, was found in some studies presented in the review of the literature (King, 2006), a fact which agrees with the results discovered.

Further investigation might focus on determining why not practice journalism as before depth, where it is now equipped with powerful tools that could facilitate this. The option to use or not, this powerful weapon of research involves a chance that our country could also be a risk if journalists continue to present rea-

lities episodic, sometimes devoid of context and analysis.

4.2 Possible Solutions to Dangers of Internet

Another important aspect evidenced between the findings has to do with the democratization of content creation and distribution online, this feature of the age of stalled postinformación both among media professionals and academics consulted, say that it was that censorship is not viable now that a person, using Internet applications may disclose information as a means of communication. This position was supported by statements that consider the traditional television and print are dead, for now integrated into different shapes the consumer level. The above, is also consistent with studies reviewed in the section of the state of the art (Islas, 2008).

Going beyond the new world order posed Ramonet (2002) by referring to the risks of contemporary democracy, we could ensure that the presence of a new world, it was also necessary to be born a new journalism. On a planet where virtually disappeared divisions in blocks where there globalized economic policies, where there are international judges whose decisions are accepted by sovereign governments, was imminent emergence of a larger press corps global. Now all we are part of content production, about the exercise a greater degree than others, but the truth is that it has formed a new mechanism

of communication without borders, where circularly participate as issuers or producers of information, or focal point recipients, on a permanent, constant and immediate.

This should be investigated more carefully, taking into account also uncovered that people who have not studied journalism, but Internet users maintain a level of helplessness in situations that might endanger. While reviewing the state of art found 2 cases that raised concern. The first is revealed that the Internet can be a means of communication used to report death threats materialize (AFP, 2008). The second case is a publication that records the death of a teenager who simply used Internet applications (El Tiempo, 2007). This study warns that there is any regulation to prevent these risks, only those established by the surfer. Despite exposing this context, to impose any control on journalists and audiences generated disagreements. On this subject it is necessary to consider carrying out further research to even set some sort of parameter to use Internet journalism and socially without involving major risks to operating in cyberspace.

However, within the proposed regulations could find with surprise that among scholars probed raised the alternative of training all citizens in journalism to identify risky situations and participate in the publication of Internet content with higher quality.

You can not overlook the fact that this is what we consider a redefinition of the practice of journalism, so we ask ourselves who are reporting today? Why the hearings but have not yet received training in journalism and are exercising, we have recreated in previous sections of this research, as the media offer the possibility of interaction that levels will reach the publication of material regardless of the quality of product, for example, in the case of television allows the disclosure of cell phone images, printed in newspapers publishing photographs submitted by citizen reporters, media participation in online forums that allow any type of comments. This redefinition of the practice of journalism deserves to be studied further in future work, a descriptive research that involves several urban and rural regions of Colombia could shed light about it. Another study of quantitative approach to compare how the phenomenon occurs in some countries of the continent would also be enriching.

4.3 The Search for Digital Inclusion

Among the qualitative findings are reported novel approaches to cope with difficulties as the digital divide, generated mainly by inequalities in developing societies. The creator of Microsoft, Bill Gates, after being addressed, proposed to move people without access to Internet sites where the technology already, instead of waiting for technology to reach

their homes. This is an interesting solution, however studies consulted earlier in the section of the review of the literature Rifkin (2000), show that there are many places on earth where the concerns of its inhabitants revolve around the struggle for survival, get access a basic means of communication such as telephone, and utilities such as electricity.

It is clear that issues of access and training for Internet use capture the attention of experts, many of them revealed that the digital divide will be resolved soon through access that will occur, thanks to cheaper technology, labor market requirements and philanthropy. On the subject of education was exposed a truism, if new technologies are changing social aspects, as the practice of journalism, a solution to the problems that universities would also change how they teach. How to deal with this reality shows? Further studies could suggest important solutions in the field of training in Internet use at different educational levels and disciplines.

Despite the widespread interest of specialists, there are no immediate solutions to this problem. In the case of the media and to make specific reference to the bursting of the Internet in newsrooms, the picture is full of contradictions. As we explain, there is a surprising spread of this technology in journalism, but in some countries the traditional media have been affected to such an extent that many journalists have been dis-

missed from the newsrooms. One reason, for example, is the decline in print newspaper readership, in this situation environmental directives prefer to continue with the version on line and dispense with most journalists who work for the traditional version. Although this study did not inquire specifically about the latter situation, we note that some newspapers of Colombia counteract the competition between physical and virtual version using one of the advantages of digital media: the free. In September 2008 the publishing house El Tiempo, which has several publications including the largest daily circulation of Colombia, launched in major cities throughout the country, DNA, a newspaper printed for free distribution. Although it is possible that in future it is not free enough to cope with technological devices that allow audiences greater comfort when reading, virtual reality will remain a tough opponent that could wipe out paper media.

So far, in our immediate future the gap between "information rich and information poor" may persist while the media under economic and technological resources can not assume the risks involved in investments and create a new medium communication that does not report market value. Solutions to this rather optimistic scenario, but reality could be delivered in future research that delivers deeper new alternatives to counteract the digital divide.

4.4 The sources are not covered by the 5 senses

The routines of work in the practice of journalism are being redefined because the Internet offers a wealth of opportunities that facilitate the investigation from the newsrooms. Found with a library that seems to possess a nearly infinite wisdom has multiplied exponentially the possibilities to find information and sources. If this sum is not wasting time and save money by avoiding the transfer to distant sites, and instead be a news feed click again, then this tool and began to consolidate the dream of immediacy and ubiquity where they searched for decades journalists and traditional media.

In opposition to this is also clear that not being at the scene, limits the perception of journalism. It is easy to explain that when covering news through a computer connected to the Internet only using 3 senses: sight (because it is before a screen with graphical representations), touch (because it touches the keyboard) and hearing (if

are facing a multimedia file). In this case the 3 ways mentioned manners function differently, which they would if they were located in scenarios and real time. And if it is, for example, to cover the presentation and an exquisite wine tasting would be essential to use the taste and smell. The screen, keyboard and hard drive would not allow situations to interpret how are you feeling that require the physical presence of the journalist.

The European journalists investigated, showed their reservations about the possibility of assuming completely new routines to cover sources, created by the rise of the Internet to newsrooms. Was unexpected position of journalists in the old continent. The news agency speaking world's oldest, the EFE do not see the coverage of sources without the use of the 5 senses. "I think the journalist should continue to work with fonts, and use the Internet to the extent that you consider a reliable and credible source. I think the journalist should continue to use their direct sources to produce news, otherwise we can not. It would be journalism,

"said Rafael Molina Lopez, Head of Information and International Directorate of EFE. This reveals that not addressing the direct sources can be interpreted as an inappropriate way to practice. European journalists considered it appropriate to use the scientific rigor to check sources and create lists of trusted sites on the web to cope. Problems such as this deserve to be analyzed in further research to understand, if possible, or not to cover news events using only Internet sources.

We are facing a situation in which the diffusion of a technological tool has changed the working order of one of the most influential professions in the future of Colombia. The findings and considerations and concerns of people being investigated on social development issues as the digital divide, demonstrated the importance of knowing through this pilot research, risks and opportunities implicit in this redefinition of journalism, and Internet applications from the newsrooms.

BIBLIOGRAFÍA

- Agence France Presse. (2008, September 24). *He said he would commit a slaughter and he delivered*. The Universal International p.3B.
- Arroyave, J. and Blanco I. (2005). *How journalists perceive their profession: Between Exhaustion and Fascination*. Research and Development, 13 (2), 379-380, 384.
- Barrios, M. (2007). *Online newspapers in Latin America: Between the revolution, redefining and frustration*. Research and Development, 15 (2), 440.
- Canil, D. (1999). *The challenges of the new millennium*. Argentina: Aguilar.
- Clafin, B. (2000). *The ABCs and D of the digital divide* "Available at: http://www.labrechadigital.org/labrecha/LaBrechaDigital_MitosyRealidades.pdf
- Creswell (2005) Joint Approach. Available at: http://64.233.169.132/search?q=cache:liErSCraH20J:arosa.uprrp.edu/disertacion/enfoque_mixto.pdf+creswell+2005+dise%C3%B1os+mixed+research+hl=en&ct=clnk&cd=1&gl=co&lr=lang_en
- Franco, G. and Guzman J. (2004 April 25). *So is journalism "on line" in A. America*. Diario El Tiempo, p. 1-11. International.
- Franco, G. and Guzman J. (2007). *Radiography digital journalism and Web newspapers in Latin America*. Available at: <http://www.mariomorales.info/?q=node/884>
- Garrison, B. (1999). *Online Information Use in Newsrooms*. Available at: <http://com.miami.edu/car/phoenix1.htm>
- Grinnell (2005). Joint Approach. Available at: http://64.233.169.132/search?q=cache:liErSCraH20J:arosa.uprrp.edu/disertacion/enfoque_mixto.pdf+creswell+2005+dise%C3%B1os+mixed+research+hl=en&ct=clnk&cd=1&gl=co&lr=lang_en
- Islas, O. (2008). *The prosumer. The society's communicative actor of ubiquity*. Keyword, 11
- Negroponte, N. (1994). *Being Digital*. Argentina: Atlantis
- Ramonet, I. (2002). This article, published by the online magazine The Factory, No. 8, which is published in magazine Number with permission of the author, is the transcript of the lecture at the Center for Contemporary Culture of Barcelona, within the conference "Globalization of media "organized by Ontario's newspaper.
- Rifkin, J. (2000). *The Age of Access. The revolution of the new economy*. Barcelona: Paidós.
- Rogers, E. (1962, 1976, 1983, 2003). *The theory of diffusion of innovation*. Available at: http://www.horizonteWeb.com/Adopcion_de_Tecnologias.pdf
- Sampieri et al. (2006). *Methodology of the investigation*. Mexico. McGraw Hill.
- Tashakkori (2003) Joint Approach. Available at: http://64.233.169.132/search?q=cache:liErSCraH20J:arosa.uprrp.edu/disertacion/enfoque_mixto.pdf+creswell+2005+dise%C3%B1os+mixed+research+hl=en&ct=clnk&cd=1&gl=co&lr=lang_en
- Teddle (2003) Joint Approach. Available at: http://64.233.169.132/search?q=cache:liErSCraH20J:arosa.uprrp.edu/disertacion/enfoque_mixto.pdf+creswell+2005+dise%C3%B1os+mixed+research+hl=en&ct=clnk&cd=1&gl=co&lr=lang_en