The Cyber Media in Latin America and Web 2.0

Los cibermedios en América Latina y la Web 2.0

ABSTRACT
Technologies 2.0 are changing the spaces dedicated to interaction and participation in cyber media. The goal of this research is to determine the adoption of cyber journalism features and web 2.0 in media in Latin America. To achieve this objective this paper analyses 19 digital media in the region, based on two studies held in 2010 and framed on the project «Cyber media in Colombia and Latin America», which is supported by the Universidad del Norte (Colombia) and recently by the Universidad de los Andes (Venezuela). The study uses the method proposed by Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010), which has been tested in previous research by the authors of this paper. According to the results, a good part of digital media in Latin America are incorporating web 2.0 tools, but there still exists notable quality differences in the ranking proposed between the best rated media (Colombia and Mexico) and the worst rated (Chile and Bolivia). This ranking allows, for example, to clearly identify how digital media in Latin America have important weaknesses in their general indicators, like accessibility mistakes, popularity and visibility levels; and in their specific indicators, in special those related to available resources for information deepening and interaction tools. As authors state in the article, showing these evidences of inequality can orientate future plans of Latin-American cyber media, especially if indicators related to users’ active participation are considered.

RESUMEN
Las tecnologías 2.0 están transformando los espacios destinados a la interacción y la participación en los cibermedios. El objetivo de esta investigación es determinar el grado de adopción del ciberperiodismo y de las web 2.0 en América Latina. Para ello se analizaron 19 medios digitales de la región, a partir de los resultados obtenidos de dos olas de recopilación de datos llevados a cabo durante 2010, en el marco del proyecto «Los cibermedios en Colombia y América Latina», realizado desde la Universidad del Norte (Colombia), con el apoyo de la Universidad de los Andes (Venezuela). El estudio parte del modelo de análisis propuesto por Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010). Los resultados apuntan que los medios latinoamericanos están apostando por la incorporación de herramientas de la web 2.0, pero que sin embargo existen notables diferencias de calidad entre los medios mejor calificados por el «ranking» del estudio (Colombia y México) y los peor valorados (Chile y Bolivia). Este «ranking» permitió, por ejemplo, identificar claramente cómo los medios digitales analizados en América Latina, aún siguen perdiendo importantes puntos en lo que se refiere a los aspectos relacionados con los indicadores generales, como por ejemplo los errores de accesibilidad, los niveles de popularidad y visibilidad de sus portales; y los indicadores específicos internos, en especial en lo que respecta a los recursos puestos a disposición para la profundización de la información y las herramientas de interacción.

KEYWORDS / PALABRAS CLAVE
Cyber media, cyber journalism, Web 2.0, index, develop, ICT, digital, media, ranking.
Cibermedios, ciberperiodismo, Web 2.0, índice, desarrollo, TIC, digital, medios, ranking.

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1. Introduction

The rapid transformation of digital media requires a constant monitoring of their quality and especially the influence that new tools and platforms have on content. The so-called Web 2.0 technologies are a good example of how the cyber media are struggling to offer their users spaces for interaction and participation (Briggs, 2007; Fumero & Roca, 2007; Flores, 2008), even in academic spaces (Codina, 2009). In Latin America, efforts are underway to develop the follow-up to this evolution (Castro, 2008). The monitoring in Colombia (Said, Arcila & Méndez, 2011) and in Venezuela (Said & Arcila, 2011) is worthy of comment especially if we take into account that this follow-up can contribute to the improvement of media practices.

This monitoring and follow-up of cyber media in the Latin American sub-continent opens up comparative strategies, new fields for the empirical verification of the theoretical-methodological proposals being developed in scientific literature (Díaz-Noci, 1997; Zamith, 2008; Palacios & Díaz-Noci, 2009) taking as reference designs which have already been tested such as that carried out by Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010). This article aims to contribute to this research line within the framework of the «Cyber media in Colombia and Latin America» project started by the authors in 2008 and developed at the Universidad del Norte (Colombia) with the support of the Universidad de los Andes (Venezuela). The classifications proposed allow us to have a clearer and more updated view of how fast media are adapting to the dynamics imposed by technology and, above all, what the deficiencies in this domain are.

2. Materials and methods

The objective of this work is to analyze and measure the development level of cyber journalism and the Web 2.0 in 19 countries of Latin America based on the comparison of the data collected between the periods of April-May and October-November 2010. The set of data shown and analyzed in this article will be articulated around a development index, which will serve for understanding and ranking Latin America within the digitalization process of communication media. This study was developed with the most accessed and visible digital media of the countries of the region according to Alexa’s «Web Ranking» (http://www.alexa.com). That is, 19 digital media of Latin America (one per country, except for Venezuela, which is represented by two) and two control media from Spain and the United States, for a total of 21 media. Even though there are many important differences between the countries where these media are produced, we consider a significant factor that our study collects the characteristics of the cyber media analyzed to be able to obtain a common measuring or reference point.

For the measurements developed in April-May and October-November 2010, «The New York Times» from the United States and «El País» from Spain were taken as control or reference. The selection of these two cyber media was based on the criterion that both are the main digital communication media in the world, according to Alexa’s Web Ranking.

The study used the analysis model for cyber media proposed by Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010) where a set of indicators are taken as references: 1) general, which measure the accessibility of the Web site, its visibility and popularity, among other aspects which all web sites of digital media must have; 2) internal specific which account for the deepening of the information, the interaction tools used in the digital media as well as the personalization of the information and those elements that should be included in the site of a digital medium; and 3) external specific related to the impact of the social webs in digital media, where the loyalty mechanisms of users through the Web 2.0 and other tools available in digital media are measured as well as the diffusion mechanisms of the contents generated in the digital media.

The study analyzed the main page and all the sections of the 21 selected digital media. The data measurement was developed on alternate days (from Mondays through Sundays) during the two months of analysis: the first one from the 25th of April to May 25th and the second one from October 4th to November 5th of 2010. During these periods repetition and verification measurements were developed which guaranteed the consistency of data.

3. Results

3.1. General indicators

3.1.1. Access

There are three adequacy levels of Web pages according to the access possibility of the contents emitted to people with impaired vision, hearing or movement or those using limited capacity technology (electronic agendas and mobile phones): A, double A (AA) or triple A (AAA). Each of these levels is regulated through the fulfillment of the standard norms elaborated by the Web Accessibility Initiative (WAI) of the
World Wide Web Consortium (W3C). The adequacy levels correspond to: web sites «without» errors or with a «reduced» number of them (less than 45); sites with a moderate number of errors (45-85); sites with a «great number» of errors (85 to 200) or with an «excessive» number of errors (more than 200).

According to the data obtained, most of the studied media (including control media) had a great number of errors, showing up to a maximum of 1519 errors as was the case of «La Prensa» (Honduras). The exceptions correspond to «Las Últimas Noticias» (Chile) and «Listín Diario» (Dominican Republic) which reflected a «moderate» number of errors (51 and 83, respectively) and «La Prensa» (Panama) which was the only one to reach the category «without» errors or with a reduced number of errors (42). It is surprising, therefore, to see how the national diffusion digital media which are referents in each of the countries of Latin America are located in the last and lowest accessibility level which could mean that for them, the improvement of access to their contents is not a priority.

3.1.2. Visibility and popularity

The visibility and popularity of a cyber medium can be measured by the number of links received from other web sites, the number of pages published or indexed by this medium as well as by the number of visitors received by the site and the number of pages it serves. The averages obtained from the descriptive data extracted from the measurements of April-May and October-November of 2010 allow us to classify the analyzed Latin American digital media with a high level of visibility and popularity as we observe how 73% of the digital media of the study presented in 2010 an average value of 7 to 8/10 points, according to Google’s PageRank. From the world popularity point of view, according to «Alexa’s TrafficRank», the digital media with the highest number of visitors was Globo (Brazil) which was ranked 102 at world level, very near from «New York Times» which was ranked 92. On the other side, «El Deber» (Bolivia) was the least visited and is ranked in position 35,361.

According to the popularity of the analyzed digital media at national level, data allow us to identify digital media with a high popularity (they are located in the Top 10 of the most seen portals in each country) as for example «Globo» (Brazil), «Las Últimas Noticias» (Chile) and «ABC» from Paraguay. The rest of the media obtained a medium popularity. The data referring to the links and indexed pages received lets us see the impact that each of these media have from internet, highlighting that a group of these media have a high number of indexed pages in «Yahoo! Search», (100,000 or more) and they also have a high number of links related with their contents (with a difference of 500,000 or more pages related with respect to the indexed ones). This is the case of «El Clarín» from Argentina, «El Tiempo» from Colombia, «La Nación» from Costa Rica, and «La Prensa» from Honduras.

3.1.3. Access to information

Part of the general indexes related to digital media is their capacity to offer fast and easy access of users to information. For this study, four aspects were taken as referents: they have simple search, advanced search, online newspaper library and a sitemap.

The results are rewarding (Chart 1) since along with observing the generalized presence of the simple search tools in all the media analyzed, in most cases, the use of other tools, such as advanced search, online newspaper library and sitemaps are also found to a greater extent. At the same time we can also state that during 2010 an improvement process was observed when making use of the applications considered in this part of the study. We noticed a slight
increase between the first and the second measurement in the use of the advanced search and the online newspaper library.

3.2. Specific internal indicators

Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010) consider a total of 25 indicators to analyze the degree of adoption of cyber journalism and the Web 2.0. As in our former studies (Said, Arcila & Méndez, 2011; Said & Arcila, 2011), these indicators were increased to 37 and they were divided in three categories: deepening of the information, interaction tools and personalization of the information. The total number of indicators measured in this section was decided based on the fact that the presence or absence of certain resources in the web portals of the analyzed Latin American media was not only important, but also to measure the degree of use of computer graphics, multimedia, podcast and other aspects. Except for the numerical indicators which were used to measure media and other descriptive statistical procedures, affirmative answers in the indicators formulated as questions will show us a positive trait, while a negative answer will show a lack that should be provided by each media analyzed.

3.2.1. Deepening of information

The results let us see how, in general, the evolution of digital media analyzed in Latin America in 2010 shows a low deepening of information context and generally centered in the use of news links of the same section and the inclusion of photos/digital graphics as a contextual element of published contents. The rest of the resources related with deepening of information show a very low use level if we take as referent the data observed on both charts at the moment of comparing the use of these tools with the median of the news published on the main page of these media, during the two measurements made and what was observed on the digital newspapers taken as control media (www.nytimes.com / www.elpais.com).

3.2.2. Interaction tools

With the aim of measuring the use of the interaction tools available on the cyber media we have partially followed the recommendations of Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010), with respect to the use of a set of indicators, such as: the statistical follow up of news, the use and creation of blogs, the inclusion of comments on the web portals, availability of Web 2.0 tools and the existence of forums among other aspects included in the 18 indicators used for approaching this section.

The results obtained in this work (Chart 2) along with the opportunity to observe the variations made on the portals of the media analyzed during 2010, also allow us to highlight the low-moderate level of use of the interaction tools. Of the 19 digital media analyzed, 58% («El Clarín» from Argentina, «ABC » from Paraguay, «La Prensa» from Nicaragua, «El Universal» from Mexico, «La Prensa» from Honduras, «El Tiempo» from Colombia, «El Salvador» from El Salvador, «La

Chart 2. Evolution of the use of interaction tools.

* These media presented an improvement in the use of tools for the deepening of information in the II-2010 compared to the I-2010. ** These media presented a draw back in the use of tools for deepening the information in the II.2010 when compared with the I-2010.
Nación» from Costa Rica, «El País» from Uruguay, «Noticias24» from Venezuela, «El Comercio» from Peru) used at least half of the tools considered in this study. The other 42% do not use them or use them poorly.

Even though Rodríguez-Martínez, Codina & Pedraza-Jiménez (2010) only proposed the measurement of the use of the interaction tools in digital media, we have considered pertinent to analyze the participation levels exerted by users in the media analyzed through the inclusion of comments and news voting in spite of the clear limitations of a study like this, centered in the analysis of the media rather than on the news; additionally of the potential variations of the participation levels generated by the appearance of a news which will promote an increase in comments and the votes of certain news published and socialized by a given digital medium analyzed in this study.

The data in Chart 3 show the low levels of participation of users of the digital media analyzed concerning news published. We can see how the media studied mainly aim at offering users the option of introducing comments in their news and not in the evaluation of the news contents by the users. We see how only 21% of the media analyzed have applications oriented to voting for evaluating contents. It is also worth mentioning the total lack of participation tools in some of the media analyzed as for example, «Las Últimas Noticias» from Chile, «El Deber» from Bolivia, and «El Universo» from Ecuador; among others, during 2010.

### 3.2.3. Personalization of information

According to the data obtained, 57% of the digital media analyzed in Latin America present a medium level of use of tools that allow the personalization of the information by users and the most used options are the RSS, the sending of news by e-mail and the printing option. In 42% of the media analyzed we still observe a low level of use of this type of tools, which shows that a high percentage of media in the region have not been able to potentiate in their users the opportunity to have a maximum access to information.

### 3.3. External indicators

The capacities allowed by the Web 2.0 and the advances in ICT's open new opportunities for cognitive appropriation coming from the alternation of roles assumed by journalists and users. In chart 6 we can see, in general, a high level of use of this type of tools in the Latin American cyber media. In this respect we can say that according to the data obtained in 2010, these media seem to be applying a strategy of using the Web 2.0 as scenarios for participation, personalization and deepening of information.

### 3.4 Cyber media ranking in Latin America

Just as in the study we developed about Colombian cyber media (Said, Arcila & Méndez, 2011), the former results allowed us to design a new quality ranking and this time with a wider coverage. In this sense, this qualification tries to appreciate the...
degree of development of Latin American cyber media. For this measurement we did the following calculation: DC-AL (Development of Cyber media in Latin America) = IG (general indicators) + IEi (Internal specific indicators) + IExt (external indicators – Web 2.0).

All the sections that form the DC-AL give a value of X over 100 points which correspond to the total of points taken for the measurement (see Chart 4).

The weight of each section varied in relation with the number of variables taken in each one; the 100 points were distributed as follows:

- **General indicators (IG):** 26 maximum points, from which: 3 points correspond to accessibility errors of the digital media analyzed; being the highest point (3 points) for those media with an error range lower than 45; the media that presented 45 to 85 errors were assigned 2 points; the media with 86 to 200 errors were assigned 1 point in their accessibility while the media with more than 200 errors were assigned a reference value of 0.5 points. 20 points were assigned to all concerning visibility and popularity of digital media according to the «Google’s» PageRank and the world and national «Alexa’s TrafficRank», links received in «Yahoo! Search» and pages indexed in Yahoo! Search. Each section was assigned a maximum value of 4 points. 4 points were assigned to the presence of simple searchers, advanced searchers, digital media library and map of the web site in each of the digital media analyzed in this work.

- **Internal specific indicators (IEi):** 50 points distributed as follows: 28 points for the variables taken for its measurement with respect to deepening of the information, specifically the presence of updating hours, identification of authors of the news, average of news with internal and external links, digital media library, photos and videos, among other aspects. 15 points for the variables considered for measuring the level of use of interaction tools in the Colombian digital media analyzed.

Here 1 point was given for the presence of aspects such as the presence of tools for statistic follow up of news, blog disposition, web 2.0 tools disposition, among other aspects. 7 points for those variables that measured the personalization capacity of the information exposed on the digital media analyzed, as for example, the presence of RSS alert, sending news by e-mail, among others.

- **External indicators (IExt):** a total of 24 points distributed as follows: 23 points for those digital media that make use of the Web 2.0 to allow their users share and disseminate information in other platforms; 12 points for those digital media that only make use of the Web 2.0 to enable their users to add the information published in those portals; and 0 points for the analyzed media which do not make use of the Web 2.0 in any of their modalities.

Chart 4 shows us how the top 10 of Latin American cyber media is composed by «El Tiempo» from Colombia (80.46/100 points), «El Universal» from Mexico (78.97/100 points), «La Prensa» from Nicaragua (77.49/100 points), «El País» from Uruguay (75.98/100 points), «El Comercio» from Perú (75.65/100 points), «La Nación» from Costa Rica (75.14/100 points), «Prensa» from Panama (71.3/100 points), «La Prensa» from Honduras (70.96/100 points), «El Clarín» from Argentina (69.3/100 points), «El Universal» from Venezuela (69.3/100 points), and «ABC» from Paraguay (66.63/100 points).
This ranking allows the clear identification of how the digital media analyzed in Latin America are still losing important points with respect to the aspects related to general indicators, as for example accessibility errors, the popularity and visibility levels of their portals and the specific internal indicators, especially with respect to the resources available for the deepening of information and the interaction tools.

4. Discussion

The scenario observed in Chart 4 leads to the presentation of the state of cyber media in Latin America where it seems that the conditions for transcending are not given to realize the process of appropriation and transformation of the opportunities offered by internet and the ICTs in spite of the advantages mentioned by Briggs (2007), Fumero & Roca (2007) and Flores (2008). This is not only regarding how digital media are being produced in these countries (at least at the level of structuring of their web portals), but also from the lack of users interested in developing communicative processes emphasized in transversal production and knowledge nets, exchange of ideas and particularly the evaluation of the news published by the journalists of each media.

The classification developed in the ranking, to measure the development level of the cyber media in the region lets us complement the measurements developed by Said, Arcila & Méndez (2011) in Colombia and Said & Arcila (2011) in Venezuela, and to clearly identify the strong and weak points of these media to advance at the same pace of the opportunities offered by the ICT advances in internet. In this sense, even if we know that some of the most visited media of these countries are aiming at quality and citizens’ participation, as is the case of «El Tiempo» from Colombia (P=80.46) or «El Universal» from México (P=78.97). The difference between them and those in the lowest positions of the ranking is very big, as are the cases of «Las Últimas Noticias» from Chile (P=31.15) and «El Deber» from Bolivia (P=55.48). The evidence of these inequities can contribute to the elaboration of a Route Guide for the regional media, especially if we pay attention to the indicators referring to the active participation of users.

Notes

1 Check the Web accessibility test on (TAW) in www.tawdis.net.

References


