Four Dimensions of Journalistic Convergence: A preliminary approach to current media trends at Spain

David Domingo (University of Iowa, david-domingo@uiowa.edu), with Ramón Salaverría⁶ (head of the project), Juan Miguel Aguado⁵, Ma Ángeles Cabrera³, Concha Edo, Pere Masip, Koldobika Meso⁷, Ma Bella Palomo³, Charo Sádaba⁶, José Luis Orihuela⁶, Idoia Portilla⁶, Javier Díaz Noci⁷, José Larrañaga⁷, Ainara Larrondo⁷, Xosé López⁹, Xosé Pereira⁹, Manuel Gago⁹, Marita Otero⁹, Celia Fernández Rivera⁹, Jaime Alonso⁵, Pedro Antonio Rojo⁵, Guillermo López García¹¹, Mar Iglesias¹, José Álvarez Marcos¹⁰, José Alberto García Avilés⁴, Elea Giménez¹².

Abstract

Convergence is a very polysemous concept that has been used to describe various trends in journalism that have something in common: the blurring of the limits between different media, professional skills and roles. This paper proposes to analytically structure convergence into four dimensions: integrated production, multiskilled professionals, multiplatform delivery and active audience. This analytical grid can help in exploring convergence avoiding deterministic assumptions and allowing to map its development in different media companies as an open process with diverse outcomes. A sample of 58 Spanish cases is studied using the conceptual framework. Multiplatform delivery is the most popular convergence strategy, and in any given dimension developments tend not to radically change established professional routines and values. Integration and multiskilling dimensions seem to be closely related and mainly developed in local and regional media with small staffs. Delivery and audience strategies are more complex in national media.

Universitat d'Alacant,
 Universidad Complutense,
 Universidad de Málaga,
 Universidad Miguel Hernández,
 Universidad de Murcia,
 Universidad de Navarra,
 Universidad del País Vasco,
 Universidad de Santiago de Compostela,
 Universidad de Sevilla,
 Universidad de Sevilla,
 Universidad de Sevilla,
 Universidad de Sevilla,

1. Convergence, a multi-dimensional concept

In the last decade, the development of the Internet as a news medium, digitalization in audiovisual media, corporate concentration and the declining circulation of traditional media persuaded both academics and professionals that convergence could be the savior of journalism in the 21st century. However, empirical research dealing with actual convergence projects suggest that there is no single solution when putting this idea to work; there are as many definitions of the concept as newsrooms exploring it (Silcock and Keith, 2006). The professional culture of different media backgrounds, business priorities, the attitude of individual journalists; several factors have a decisive role in shaping the evolution and fate of convergence projects (Singer, 2004; Boczkowski and Ferris, 2005; Klinenberg, 2005), and studies reveal that the consequences of coordinating the production and distribution of content are not always positive for news quality, professionals satisfaction or even business results (Cottle and Ashton, 1999; García Avilés, 2006; Ketterer *et al.*, 2004).

In this paper, we propose articulating the polisemy of convergence into four dimensions that synthesize the different meanings attributed to the concept and offer a more operational framework for the analysis of the phenomenon. The common ground for any process labeled as journalistic convergence is the blurring of the limits between different media –professional skills, formats, production strategies (Dupagne and Garrison, 2006; Silcock and Keith, 2006). Deuze (2004) adds another similar trend: the blurring between the roles of producer and consumer. We propose to analytically structure convergence into four dimensions that cover different phases of the communication process:

- Integrated production
- Multiskilled professionals
- Multiplatform delivery
- Active audience

Any of these dimensions of convergence can be developed in the media on its own, but in many cases they are part of the same convergent project. Even though the four dimensions can be intrinsically related to one another in the projects, an analytical separation can be much useful to identify the leading proponents and the resisting clusters in any given convergence process.

Breaking up the concept of convergence into four dimensions we aim to neutralize technological determinism and a usual mindset in the industry that states that full integration is the necessary final

step of any convergence project. We want to avoid classifying the experiences into a "continuum" such as the one proposed by Dailey *et al.* (2005). This model assumes that any form of convergence that is not full integration is just a stage in the process. We agree with the criticism of Deuze (2004: 140) to this approach: "Such models tend to ignore that convergence does not have to be a linear process, that it may fail, or that it leaves some parts of the organization untouched". With a four dimensions model, each of the dimensions can have a different level of development, making convergence an open process with many possible different outcomes, which is what empirical research suggests.

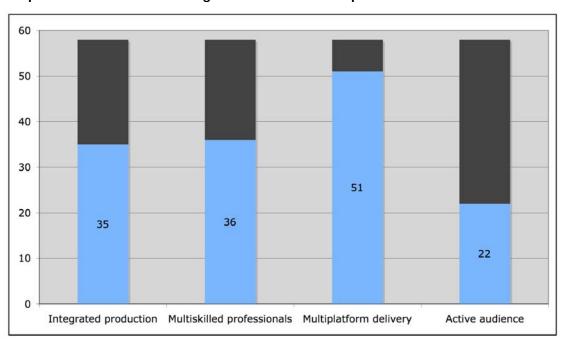
We consider that every single project has its own contextual factors that shape the development of convergence dimensions and produce positive and/or negative outcomes in the process. Corporate and technological convergence play a transversal role in the evolution of each of the four dimensions (Salaverría, 2003). Nevertheless, we want to avoid oversimplifying the analysis: journalistic convergence should not be regarded as just an "effect" (Dupagne and Garrison, 2006) of corporate or technological trends. Technical innovation is always based on professional and economic decisions (Boczkowski, 2004a) and journalists adapt new tools to their own expectations, skills and routines. Therefore, journalistic convergence must be discussed not as a technology-driven process, but as a process that uses technological innovation to achieve specific goals in specific settings (Boczkowski, 2004b; Domingo, 2006), and that is why each convergence project can have a different outcome.

This paper discusses relevant parameters to analyze each of the four dimensions and offers preliminary results based on the study of 58 Spanish media companies that sum over a hundred media ventures (newspapers, magazines, television and radio stations, news websites) with some sort of convergence process under development. We followed the suggestion of Boczkowski and Ferris (2005) to take media groups as the unit of analysis in order to get a clearer idea of the relationships among different media. During November and December 2006, the research team¹ made a comprehensive selection of cases (from local to national scope) and coded the situation of each media group into an analytical grid based on the four convergence dimensions. Data was gathered using corporate information available at the websites and interviews with news editors when it was necessary to clarify some aspects of their convergence strategy. The results presented here can be regarded as a first picture of journalistic convergence in Spain.

-

¹ A group of 25 researchers form 12 universities and research centers have teamed up to conduct a 3 year research project on media convergence in Spain, starting in 2006. The project is funded by the Spanish Ministry of Education and Science.

Graphic 1 shows how among media companies exploring convergence; multiplatform delivery is the most common dimension. Multiskilling and newsroom integration are being developed, in different degrees of complexity, by more than a half of the cases, usually very linked together. Audience participation, the form of convergence that may challenge more dramatically the journalists' professional routines and values is the least pursued of the dimensions. Each of the following sections in the paper covers one of these convergence dimensions, the theoretical implications and the empirical data collected in our study.



Graphic 1. Journalistic convergence dimensions in Spanish media

2. Integrated production

The most relevant signs of convergence in this dimension are to be found in the reorganization of newsrooms, but obviously this is closely linked to the redefinition of professional roles (see section 3), technological innovation and the development of new news formats and languages. Theoretical and empirical literature has thoroughly described the potential models of integrated production. Authors differentiate between *low* degrees of convergence –when independent newsrooms collaborate more or less often– and more developed forms of integration, through coordination desks of separated newsrooms or the integration of all the journalists into one newsroom that produces content for different outlets at the same time (Dailey *et al.*, 2005; Killebrew, 2005; Quinn, 2005a). These last models assume that there is some sort of common planning of the news coverage delivered by every outlet. This would ideally foster a more efficient production that would use

every medium strengths to offer the most useful information in each of them at the right moment. Media groups may use these coordinated strategy to promote audience loyalty (Salaverría, 2003).

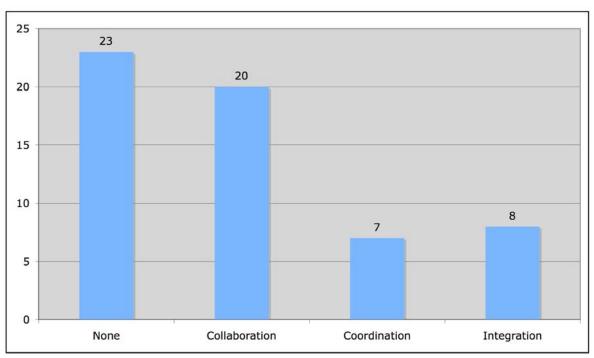
Researchers have pointed out that the integration strategy may diminish the diversity of approaches that the separate media take toward a community, may ignore intrinsic differences among media formats that contribute to heterogeneous journalistic discourse, and may make immediacy prevail over analysis (Huang *et al.*, 2004). Quinn (2005b) suggests that the key for any project to achieve positive results and avoid these risks is whether the process is based on fostering news quality or, instead, on cutting production costs. This second option, very attractive for media companies, seems to have an important negative impact in the product quality (Cottle and Ashton, 1999).

Digitization of the production processes has been the technological innovation that has supported newsroom integration. After the general adoption during the 1980s (and 1990s in Spain) of computers as the text processing and layout designing tool in newspapers (Boczkowski, 2004b; Masip, 2005), and the later incorporation of digital audio and video editing processes in the broadcasters newsrooms (García Avilés *et al.*, 2004), the current trend is the development of digital content management systems that allow the newsrooms to store any news materials into databases that make them available to every journalist and ease the adaptation process of the content from one medium to another. This can actually help in the acceleration of production cycles and the consolidation of a professional culture of immediacy that broadcasting news started but online journalism has reinforced (Kansas and Gitlin, 1999; Domingo, 2006). Online journalism is also leading another convergence trend that can have implications in integrated newsrooms: the development of a multimedia news language (Salaverría, 2005) that combines textual, audiovisual and graphic news genres into a new set of production practices that is still on the initial phases of its configuration.

The basic parameters we have set up to analyze this dimension of convergence are the degree of integration and the number and kind of newsrooms involved. 60% of the media companies analyzed have developed some sort of newsroom convergence. However, full multimedia newsroom integration (8 cases) and systematic coordination among separate newsrooms (7) are a minority, and a more informal collaboration is the most common option (graphic 2).

Most of the initiatives (30 out of 35 media groups having some sort of integrated production) were at a local or regional level, suggesting that smaller-sized companies may be more willing to explore convergence as a way to optimize the productivity of their small staff. It is relevant to point out that

many national multimedia groups are applying collaboration, coordination or integration strategies within their regional branches while they keep independent the newsrooms of their flagship national newspapers and broadcasters. Vocento is the paradigmatic case. However, after the main national free daily 20 Minutos decided to merge their print and online newsrooms in February 2007, other newspapers (La Vanguardia, El Mundo) and broadcasters (CCRTV) have announced their willingness to walk the full online-offline integration path.



Graphic 2. Degree of newsroom integration

Collaboration between independent newsrooms has been one of the most long-standing practices among local and regional broadcasters (12 out of 20 cases in this category). Radio and TV news staff share story audiovisual materials and some produce programs for both media. Collaboration is restricted to individual journalists; newsrooms stay separated in most cases, with no overall coordination. Multimedia groups (with print, web and broadcast ventures) and, again, broadcasters, are the ones that have explored stable coordination of different newsrooms. In the case of integrated newsrooms, besides *20 Minutos*, local newspapers are the ones with more experiences (4), basically because they opted to avoid having specific staff for the website. Two local multimedia companies and a national media company specialized in sports (*Marca*) are the rest of the examples of integration (table 1).

It is worth discussing in more detail the cases of 20 Minutos and Vocento. The free newspaper, owned by the Scandinavian Schibsted, has followed the international strategy of the media group.

The integrated newsroom produces news and service and entertainment content 24/7 in three shifts. The editors decide with any given story if it will be posted online and/or in the print edition. They may decide they want to keep a story for the following day newspaper instead of scooping it online. This new publishing philosophy has required a mentality shift in the journalists, to think on both media as their possible targets. The editors aim to have a coherent news strategy for both the paper and the web and want the journalists to start developing new content, such as mobile alerts, video and animated graphics, avoiding duplicated tasks and improving the overall quality of the products.

Table 1. Media involved in integrated production initiatives

	Print+web	Print+broadcast	Broadcast+web	Radio+TV	Print+web+ broadcast	Total
Collaboration	1	5	2	12	-	20
Coordination	-	-	-	3	4	7
Integration	5	-	-	-	3	8

Vocento is one of the biggest media holdings in Spain, the consequence of the merger of two multimedia groups in 2001. Their historical strengths were regional newspapers, but they have pursued a very aggressive strategy of diversification towards audiovisual and online media. In 12 different regions they own a newspaper, a radio station, a television, a web portal, a free daily and an advertising company. They have created the role of "multimedia coordinator" in each of the regions, in order to foster content sharing and common strategies among the different newsrooms. This strategy is technologically backed by a content management system shared by all the newsrooms nationally. Since 2006, this system allows different media in the same region, but also media from different regions to use stories produced by other newsrooms. This coordination never crosses the point of having journalists of one medium working for another one; the newsrooms stay completely independent.

3. Multiskilled professionals

Journalistic convergence can be also analyzed from the standpoint of the redefinition of professional roles and skills of reporters and editors. Scholars suggest that current trends can basically summarized in the idea of flexibility (Veseling, 2000). The ideal multiskilled journalist, as some authors have suggested to label them (Bromley, 1997) would be able to produce news for any medium using any technological tool needed in every step of the process. They would be able to adapt the stories to the language of each medium and develop the whole production process.

Besides this, journalists also may need to be flexible in the topics they are to be ready to cover.

Research has showed that multiskilled journalism has usually been promoted by media companies to justify job cuts. Digitization was already used in the 1980s to make many technical positions redundant in the newspapers, giving journalists more and more responsibilities beyond news writing. The same happened in broadcasting. This may empower the journalists to have a greater degree of control over the final product and guarantee a more coherent coverage of the same event in different media, but also can overwhelm them and provoke poorer performance than single-medium news production (Bromley, 1997; Cottle and Ashton, 1999). From the corporate perspective, the investment in technology can be naturally compensated by job cuts as digitization makes technical tasks easier to be dealt with by the journalists themselves (Quinn, 2005b: 29).

We have defined three different parameters to analyze multiskilling trends. The first category differentiates specific forms of multiskilling being developed (Micó, 2006):

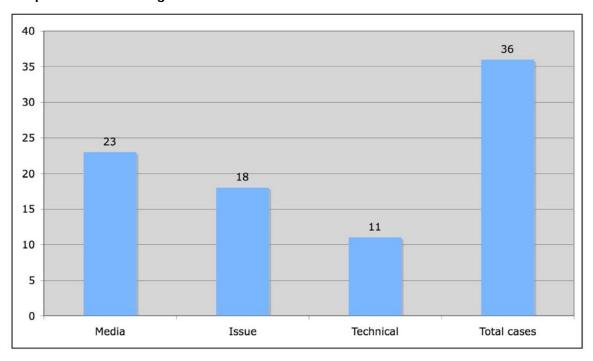
- Media multiskilling: journalists produce content for different media.
- Issue multiskilling: professionals report on news related to different thematic areas
- Technical multiskilling: reporters are responsible of performing most of all of the production tasks.

The degree of complexity of multiskilling is also considered, as well as the number of media involved. Moreover, we explored whether the professionals received training for the new skills they had to perform.

Multiskilling is being experimented by 36 of the media companies. Media multiskilling is the most common form (23 cases), and is found in newsrooms with some sort of integration. Issue multiskilling is found in 18 occasions. Most of the cases only have one of these two forms of professional convergence. Technical multiskilling (11 cases), instead, is almost every time found as a complement of media multiskilling (graphic 3). Only few media companies have adopted the three forms of convergence at the same time, having their journalists producing stories on any topic, for different media and performing most of the technical production tasks.

The cases are two local broadcasters and a mostly unique news agency (ACN) created in 1999 with a multimedia strategy from the very beginning. At ACN, every journalist covers a small territory and shots video, audio and photos, writes the texts and voice-overs on-site using a laptop, edits the stories and sends them online to the agency website. At the central newsroom, the editors check each piece before distributing it through the online database.

Graphic 3. Multiskilling forms



Most of the initiatives are found in regional media, with just one national media developing multiskilling strategies (again, the sports news company *Marca*). As newsroom integration, it seems that the smaller media seem to be more prone to explore this option, whether it is for necessity or for certitude. When analyzing which media are involved in multiskilling projects, it is clear that the process is transversal. Except for magazines, any other media format has a similar amount of cases. Online journalists are the ones involved in more media multiskilling, while radio journalists are the ones having to deal more often with issue diversity. Broadcast and online journalists are the ones usually dealing with technical multiskilling (table 2).

Table 2. Multiskilling forms and media involved

	Newspapers	Magazines	Radios	TVs	Internet	Agencies
Media	13	5	10	12	16	1
Issue	7	2	11	8	8	1
Technical	2	1	5	5	5	1
Total cases	18	7	18	18	21	1

There is an average of three different media involved in media multiskilling projects. The Internet is the one present in most of the cases (21 out of 36), and the newspaper-web relationship is one of the most popular. However, radio-television (and web) multiskilling is the most common combination. The broadcasting tradition on one side, and the text connection between newspapers and the web seem to draw an important line in the development of multiskilling. Just five cases have a

converging initiative that puts together print, broadcast and web. Issue and technical multiskilling involve less different media at the same time, one or two in most of the cases. They are mostly found in broadcasters. The degree of multiskilling is not very intense in most of the cases (table 3).

Table 3. Degree of multiskilling in each involved medium

	Newspaper	Magazines	Radios	TVs	Internet	Agencies	Total
Seldom	7	0	10	12	6	0	14
Often	8	4	6	6	11	0	15
Always	4	3	5	3	4	1	9

We also found that journalists seldom have specific training for multiskilling. In just four cases did the media companies offer some courses for their staff. This means that most of the journalists have to learn new routines and skills while they perform their news production tasks.

4. Multiplatform delivery

Distribution of content has been the dimension of convergence that more visibly has developed in recent years, even though journalism research has seldom paid attention to the implications of this trend. The maturity of the Internet and mobile communications, as well as the data-enabled digital television systems, have broaden the range of options for the citizens to access the news.

Digitization, again, has facilitated the development of multiplatform delivery strategies that aim to make news distribution as efficient as possible, ideally using the work of one reporter on an issue as the common source for any version of the story in the different outlets of the media company.

There seems to be a virtuous circle accelerating the development of multiplatform delivery technologies. All the actors seem to benefit: telecommunication companies and software developers foster new content services as a way to find new revenue opportunities; the media perceive multiplatform strategies as a way to reach new audiences and increase the visibility of their content; and the users may be attracted by the easy anywhere-anytime access to news.

Media industry observers predict an important shift from an offer-focused production to a demand-focused production (OPTI, 2003: 20). The model focused on the offer, prevailing during the 20th century, is founded in the idea that journalists define what content, when and how is delivered to the audience. In the demand-focused model, users have more control over the content that they want to consume, as well as the way and time to do it. RSS feeds, podcasts, video on demand and web 2.0

services are specific technical solutions used to develop this new delivery model (O'Reilly, 2005). However, it is yet to be seen whether this trend changes the production routines at all.

The key parameter to analyze this dimension is how multiplatform delivery is managed. Digital technologies let the process to be completely automated, having a database and software that repurpose to different outlets literal or shorter versions of the content originally produced for one medium. Another strategy is that a journalist does all or part of the repurposing; human intervention in the process can improve the quality of the result. And, in integrated newsrooms, every story can be originally produced already to fit different media at the same time. We also pay attention to automated delivery systems that may foster the demand-focused model.

Multiplatform distribution is the most prevalent form of convergence among the studied cases; more than 85% have some sort of multiple media content repurposing. This process is mostly done automatically (33 out of 51 cases), without the participation of journalists (table 4), but there are some newsrooms (14) that have journalists doing this task and others (9) opt for a fully coordinated production of content for multiple media. In fact, some media combine different forms of distribution, with specific policies for different kinds of content.

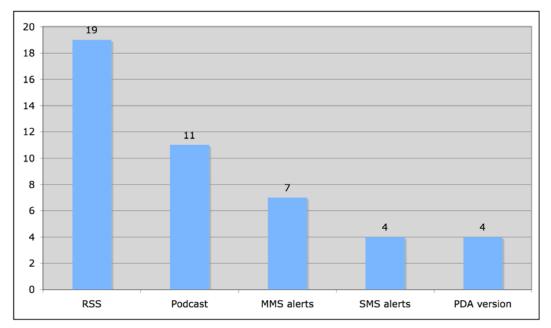
Table 4. Multiplatform delivery strategies

	Just this form	Combined with other forms	Total
Independent content for each medium	7	-	7
Scarce content exchanges among media	6	7	13
Automatic repurposing of content from one medium to others	23	10	33
Repurposing of content made by journalists	10	4	14
Coordinated production of content for multiple media by journalists	6	3	9

Over half of the cases involve just two different media. Webs are present in almost every multiplatform project; this fact underlines the mostly dependent status of online journalist to traditional media, as in many cases the repurposing of content is an automatic upload of text or audiovisual material to the web from the other media.

RSS feeds are the most popular automatic distribution content offered by the media companies, but it is still used by only 19 of the 58 cases analyzed (graphic 4). Other forms of digital delivery are

almost anecdotal. National media are the ones that have more services available, suggesting that technological development might be hindered by the smaller size of regional media.



Graphic 4. Automatic digital distribution systems

CCRTV, the public Catalan broadcasting company, is one of the exceptions to this rule. In fact, they have one of the most complex content repurposing systems. Radio and television programs are systematically available online both live and on demand. Broadcasting news texts are adapted for the web by online journalists, whom also check for agency wires to complement the stories. These online texts are automatically delivered to mobile phones and TV sets in shorter one-paragraph versions. In election days, result graphics are generated from a common database for TV and the Internet. All these multiplatform strategies are managed and developed by the Interactive division of the company, with very little involvement form the broadcasting newsrooms.

Another outstanding example of multiplatform delivery is Prisa, one of the biggest multimedia groups in Spain. In this case, it is also the online division, Prisacom, the one that has led the effort for content sharing among media. Prisacom manages the websites of the newspapers, radio and television networks of the group. All the sites share a single content management system that allows for the easy crossposting of content generated by any of the media. The online version of the newspaper *El País* is the one that most benefits from this strategy, as it offers video and audio as a complement of their text stories. The print and broadcasting newsrooms have their own pace and priorities and are actually located in different buildings, and are not involved in this multiplatform strategy.

5. Active audience

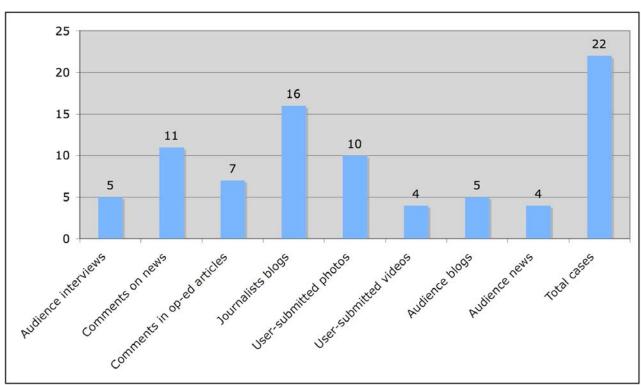
Current media trends do not only seem to blur the differences among the media, but also the distance between producers and audiences (Jenkins, 2004). The origin of this redefinition of the relationship between journalists and citizens can be found in the qualitative changes in the audience habits and attitudes (Livingstone, 1999), namely fragmentation, specialization and active participation. Digital distribution technologies discussed in section 4 allow for the customization of content and ease the production of news that is highly targeted to specific niche audiences (Tewksbury, 2005). But it is active participation what may have a greater influence in the redefinition of professional journalism.

Blogs, wikis and other self-publishing tools have eased the ability of the netizens to produce their own content and potentially reach a global audience. It is not the first time in history that citizens produce content besides the professional news media (Deuze, 2005), but until the Internet popularized free, easy and effective tools, journalists tended to ignore those rather marginal citizen media initiatives. In the last years, not only has user-generated content production rocketed, but also a culture of dialogue and collective deliberation around news has consolidated in the blogosphere (Deuze, 2006). Authors have stressed that this *citizen journalism* initiatives complement media coverage and actually can act as watchdogs of the performance of professional journalists (Atton, 2003; Bowman and Willis, 2003; Burns, 2006; Cooper, 2006). Others have highlighted the risks of the active audience: anonymity, lack of responsibility and ethical standards, involvement in the reported events (McBride, 2006; The Editors Weblog, 2006).

Whatever are he consequences of citizen content production, professional media have started to explore the possibilities of engaging their audiences not only in news commentary but also in news production somehow, with sections devoted to publish newsworthy user contributions (stories, photos, videos). Our analysis of this convergence dimension is a catalogue of the options offered by the media to promote their involvement. The implications of these strategies for the quality of the news are still an open research question that this paper cannot address.

Most of the participation opportunities for the audience are in the context of the media companies websites, even though this form of convergence is the least popular of all: just 22 cases out of 58 offer some sort of active audience tool beyond the old-fashioned forums and polls (we did not count these forms of participation, as they are usually apart from the news content of the sites.

Few websites offered options for the users to get involved in some sort of news production (stories, photos, videos). Beyond the web, only two free newspapers and a TV network would invite their audiences to submit news materials that would be published as user contributions. Comment opportunities for the audience are a little bit more usual, especially in journalists' blogs. These trends suggest that Spanish media are still reluctant to blur the barriers between professionals and citizens (graphic 5).



Graphic 5. Active audience participation services

National newspaper websites lead the exploration of user-generated content, but some local media are as active as them. Participation services are usually developed as a group of different options (three is the most common number), with some cases that have almost all the services (Prisa and Vocento are remarkable in this regard). This leadership of newspapers is also found in web 2.0 services, those that let users connect news stories to websites for the collective sharing of relevant stuff (such as Digg, Technorati, del.icio.us). Actually only five different media companies offer some of these options.

6. Discussion

The four dimensions of journalistic convergence presented in this paper allow for a realistic and comprehensive approach to current media trends. The case of Spanish media shows how this analytical model can be useful to locate the areas where innovation is being pursued in the profession under a contextualized approach.

Convergence trends must be interpreted taking into account that our sample concentrates on media companies that are already exploring this strategy. Other media companies should be surveyed to understand the reasons why they are not developing convergent projects. But in this "over-the-average" cases studied, there are relevant conclusions to be drawn. Few companies explore the four dimensions of convergence at the same time, and in any of the dimensions the majority tend to choose quite modest strategies that do not seem to greatly challenge the established professional routines and values. In production integration, collaboration among independent newsrooms is the most common option, while automatic repurposing is the prevailing multiplatform delivery option. Audience participation, when fostered, is usually limited to commenting on the journalists' work. Engaging in the production of stories is an option in a minority of media and is clearly separated from professional news. Media multiskilling seems to be the only dimension where journalists might be faced with actual challenges, but it is usually limited to print-web and radio-TV relationships where the common ground seems to be more than the differences.

The fact that most of the convergence initiatives in the integration and multiskilling dimensions are at regional and local levels suggest that the main driver of these processes is business related: making small staffs as productive as possible in a context of media convergence at the corporate level. A deeper analysis of these cases would let us know the consequences of these trends to the quality of news produced and the attitude of journalists to this management decisions.

Instead, the most elaborated forms of multiplatform delivery and audience participation are mainly found at national media, which suggests that this dimensions of convergence, that are based on heavy technological developments, require big budgets to be implemented. More specific case studies would reveal if there are other motivations for this difference besides the company size, such as different images of the audience (Boczkowski, 2004b) or competitors' strategies.

This preliminary empirical research shows how the theoretical concepts are interconnected in the real cases: 75% of the cases analyzed were developing more than one dimension of convergence at the same time (table 5). Nevertheless, the cases are very evenly distributed, being two dimensions the most common situation. Companies exploring two dimensions were mainly split in those exploring integration and multiskilling and those developing multiplatform and active audiences, thus supporting our previous hypotheses.

Table 5. Dimensions being developed simultaneously in the cases

1 dimension	15
2 dimensions	19
3 dimensions	14
4 dimensions	11

Further research is needed to be able to explain the dynamics of the development of convergence in different media settings. The four dimensions can be a useful guide both for ethnographic and survey studies, and micro and macro perspectives on the phenomenon. We also hope that this conceptual framework can be useful to ease international comparisons of journalistic convergence.

References

- Atton, C. (2003) What is 'alternative' journalism? *Journalism. Theory, Practice and Criticism*, 4(3), 267-272.
- Boczkowski, P.J. (2004a) The processes of adopting multimedia and interactivity in three online newsrooms. *Journal of Communication*, 54: 197-213.
- Boczkowski, P.J. (2004b) *Digitizing the news. Innovation in online newspapers*. Cambridge, Ma.: MIT Press.
- Boczkowski, P. J.; Ferris, J. A. (2005) Multiple Media, Convergent Processes, and Divergent Products: Organizational Innovation in Digital Media Production at a European Firm. *Annals of the American Academy of Political and Social Science*, 597(1), 32–47.
- Bowman, S.; Willis, C. (2003) *We Media. How audiences are shaping the future of news and information*. Reston, Va.: The Media Center at the American Press Institute. http://www.hypergene.net/wemedia/
- Bromley, M. (1997) The end of journalism? Changes in workplace practices in the press and broadcasting in the 1990's. In Bromley, M. and O'Malley, T. *A journalism reader*. London: Routledge.

- Bruns, Axel (2005) Gatewatching. Collaborative Online News Production. New York: Peter Lang.
- Cooper, S.D. Watching the Watchdogs: Bloggers as the Fifth Estate. Spokane: Marquette Books, 2006.
- Cottle, S.; Ashton, M. (1999) From BBC Newsroom to BBC Newscenter: On changing technology and journalist practices. *Convergence*, 5(3), 22-43.
- Dailey, L.; Demo, L.; Spillman, M. (2005) The Convergence Continuum: A Model for Studying Collaboration Between Media Newsrooms. *Atlantic Journal of Communication*, 13(3), 150-168.
- Deuze, M. (2004) What is Multimedia Journalism? *Journalism Studies*, 5(2), 139-152.
- Deuze, M. (2005) What is Journalism? Professional Identity and Ideology of Journalists Reconsidered. *Journalism. Theory, Practice and Criticism*, 6(4), 442-464.
- Deuze, M. (2006) Participation, remediation, bricolage: Considering principal components of a digital culture. *The information society*, 22(2), 63-75.
- Domingo, D. (2006) *Inventing online journalism: Development of the Internet as a news medium in four Catalan newsrooms*. PhD dissertation. Bellaterra: Universitat Autònoma de Barcelona. http://www.tesisenxarxa.net/TESIS_UAB/AVAILABLE/TDX-1219106-153347//dd1de1.pdf
- Dupagne, M.; Garrison, B. (2006) The Meaning and Influence of Convergence. A qualitative case study of newsroom work at the Tampa News Center. *Journalism Studies*, 7(2), 237-255.
- García Avilés, J.A. (2006) Desmitificando la convergencia periodística. *Chasqui (Revista Latinoamericana de Comunicación)*, 94: 34-39.
- García Avilés, J.A.; León, B.; Sanders, K.; Harrison, J. (2004) Journalists at digital television newsrooms in Britain and Spain: workflow and multi-skilling in a competitive environment. *Journalism Studies*, 5(1), 87-100.
- Huang, E.; Rademakers, L.; Fayemiwo, M.A.; Dunlap, L. (2004) Converged Journalism and Quality: A Case Study of The Tampa Tribune News Stories. *Convergence*, 10(4), 73-91.
- Jenkins, H. (2004) The Cultural Logics of Media Convergence. *International Journal of Cultural Studies*, 7(1), 33-43.
- Kansas, D.; Gitlin, T. (1999) What's the rush? *Media Studies Journal*, 13(2), 72-76.
- Ketterer, S.; Weir, T.; Smethers, J.S.; Beck, J. (2004) Case Study Shows Limited Benefits of Convergence. *Newspaper Research Journal*, 25(3), 52-65.
- Killebrew, K.C. (2005) Managing Media Convergence: Pathways to Journalistic Cooperation.

 Ames, Ia.: Blackwell.
- Klinenberg, E. (2005) Convergence: News production in a digital age. *Annals of the American Academy of Political and Social Science*, 597(1), 48-64.
- Livingstone, S. (1999) New Media, New Audiences? New Media and Society. 1(1), 59-66.

- Masip, P. (2005) Rutinas periodísticas e internet en la información diaria. *Trípodos*. Extra 2005: 561-576.
- McBride, K. (2006) The problem with citizen journalism. *Poynter Online*. http://poynter.org/column.asp?id=67&aid=97418
- Micó, J.L. (2006) Periodisme a la Xarxa. Vic: Eumo.
- OPTI (2003) El futuro de los medios de comunicación ante el impacto de las nuevas tecnologías.
- Madrid: Fundación OPTI, Fundación EOI.
- O'Reilly, T. (2005) What Is Web 2.0. Design Patterns and Business Models for the Next Generation of Software". *O'Reilly Media*.
 - http://oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html
- Salaverría, R. (2003) Convergencia de los medios. *Chasqui (Revista Latinoamericana de Comunicación)*, 81: 32-39.
- Salaverría, R. (2005) Redacción periodística en internet. Pamplona: EUNSA.
- Singer, J.B. (2004) Strange Bedfellows? The diffusion of convergence in four news organizations. *Journalism Studies*, 5(1), 3-18.
- Quinn, S. (2005a) Convergent Journalism: The Fundamentals of Multimedia Reporting. New York: Peter Lang.
- Quinn, S. (2005b) Convergence's Fundamental Question. *Journalism Studies*, 6(1), 29-38.
- Silcock, B.W.; Keith, S. (2006) Translating The Tower Of Babel? Issues of definition, language, and culture in converged newsrooms. *Journalism Studies*, 7(4), 610-627.
- Tewksbury, D. (2005) The Seeds of Audience Fragmentation: Specialization in the Use of Online News Sites. *Journal of Broadcasting and Electronic Media*, 49(3), 332-348.
- The Editors Weblog (2006) Citizen Journalism vs Professional Journalism. *The Editors Weblog Analysis*.
 - http://www.editorsweblog.org/analysis/2006/04/citizen_journalism_vs_professional_journ.php
- Veseling, B. (2000) "Flexibility the Key in the Multi-media World". *FANFA Bulletin*, November, p. 20-23.