The current study explores the perceived integration of the internet inside European newsrooms. We carried out a survey with 239 journalists working for 40 of the most-read outlets in 11 European countries. This study shows that journalists consider the internet a useful tool mainly for practical functions rather than to enhance the core values and functions of their profession. However, news production continues to be based on direct interaction, and journalists' professional identity is still anchored to print newspapers. Moreover, a lack of communication between publishers and newsrooms emerges. Professional and personal profiles and nationality play a relevant role in the development of attitudes toward the implementation of the internet in newsrooms.
advancements have a fast pace, however, these issues are still relevant as they interact with and affect the ‘material culture’ (Miller, 1998) of practices and routines of journalistic work that newcomers find in newsrooms.

In their analysis, Hallin and Mancini (2004) distinguished between the North European democratic corporatist model, the North Atlantic liberal model, and the Mediterranean polarized pluralist model. However analysis at countries level show high levels of heterogeneity (Elvestad & Blekesaune, 2008; Canel & Piquetty, 1998), and even if the ‘watch-dog’ ideal is often indicated as the blueprint of professional ethic and practices, it is continuously negotiated with societal background, journalism education curricula and newsrooms cultures (Sanders et al. 2008). Moreover, as Deuze points out, the internet changed: ‘that particular newsroom culture and the professionals involved’ (Deuze, 2003: 216). Following Deuze, it is possible to address the implementation of the internet in newspapers on two continuums: the first describes the permanence of unidirectional communication or the implementation of user-generated contents; the second distinguishes traditional journalistic cultures from those which recognize users as producers of news. Finally, Deuze underlines: ‘a news medium considering or implementing new strategies has to enable its organization to reflexively address the existing journalistic culture and rethink its location on the continuum between content and connectivity.’ (Deuze, 2003: 220). From these premises, we focused our attention on the perception that journalists themselves have of the way in which the internet has been adopted in newsrooms and we looked to situate these changes in the European context.

The theoretical framework of this study is provided by a variety of approaches. First, we look at the internet’s integration in newsrooms as a social process of appropriation of innovation (Boczkowski, 2004) in which the social negotiate with the technological. Second, we examined the repositioning of the various means of communication in newsrooms, in an attempt to understand if the rank of media proposed by Daft and Lengel (1986), corresponds in some way to those experienced by journalists. Finally we interpret the transformations that internet brought in newsrooms within the power relations between publishers, journalists and readers. The contemporary leading principle of these relations is ‘fusion’: editorial groups tend to create new international cross-media empires (Doyle, 2002), users become producers of news (Boczkowski, 1999), and infotainment is a widespread phenomenon. But in this framework journalists are increasingly excluded from the mechanism of governance and the role of technological innovation is far from being neutral.

Aims
The present research follows previous European studies, financed by COST1 (van der Wurff & Lauf, 2005). Its aim is to understand how the internet has been integrated in newsrooms and how journalists evaluate these changes. Our research questions can be summarized as follows:
RQ 1) What problems have been encountered by journalists? How do they perceive editorial strategies?
RQ 2) How has the internet affected journalists’ professional roles and practices?
RQ 3) Do these beliefs and attitudes vary as a function of country, gender, age, professional identity, familiarity with the internet and intensity of its use?

Method
Participants

The research applied to 239 journalists working at the online, print or both editions of 40 of the most widely read newspapers2 of Cyprus, Estonia, Finland, Greece, Ireland, Italy, Lithuania, United
Internet in EU newsrooms_Research Note

Kingdom, Slovenia, Spain and Sweden. For each outlet, a questionnaire was administered to up to five journalists of the print edition and to up to three journalists of the online version. According to their self-description, journalists were initially categorized as online journalists, print journalists, or print/online journalists; then, in order to obtain more balanced groups, online journalists and print/online journalists were categorized as journalists who publish on the web (web journalists). Countries were grouped taking into account three elements: the number of participants for each country, cultural background, and similarity of media landscapes. Bearing in mind that this simplification de-emphasizes inter-country differences, especially as regards the South-Central countries, we identified five main groups: Atlantic islands (UK and Ireland, N=67, 28.0%); Baltic countries (Lithuania and Estonia, N=29, 12.1%); Neo-Latin countries (Italy and Spain, N=54, 22.6%); Scandinavian countries (Finland and Sweden, N=46, 19.2%) and South-Central countries (Cyprus, Greece and Slovenia, N=53, 22.2%).

Our convenience sample comprises a majority of males (61.5%). The age of the respondents varies from 21 to 70 (M=37.9 SD= 9.9). Differences emerge across countries3: South-Central journalists are younger (M = 35.7) while Neo-Latin journalists are older (M = 42.3). Our respondents declare a mean of 14.1 years of work experience as journalists. Journalists from Neo-Latin countries have more work experience, while respondents from the UK and Ireland have less. Time spent working with the internet varies from just one to 26 years (M= 7.7 SD= 3.1), with no significant differences across countries.

Procedure

A questionnaire, jointly elaborated in English5 and translated by the researchers involved in the survey into their national languages, was submitted to the 239 participants. It had several sections of items to be evaluated on 5-point Likert scales. Data were exploited through analyses of variance. Moreover, in order to highlight underlying dimensions around which are organized differences and similarities between countries and between groups of respondents, a correspondence factor analysis was implemented on evaluations of different means of communication in newsrooms. With the same aim, the items related to the perceived usefulness of the internet were submitted to exploratory factor analyses (varimax rotation) and, after checking the reliability of the factors (Cronbach’s alpha), composite factor scores were computed.

Results

Professional role and familiarity across countries

Our data indicate that in 2005/6 only 11.8% of the 239 interviewed journalists considered themselves online journalists, whilst 24% declared a double identity (print/online journalists). Professional role differs across countries (.2 (8)=19.49, p<0.05). More than 20% of Scandinavian interviewees define online journalists. The percentages of print journalists are more relevant in South-Central countries (69.8%), while Atlantic Islands present a more fragmented picture (35.7% consider themselves print/online journalists). In the same vein, respondents from Scandinavian countries connect more often, while South-Central respondents go online less.
Implementation of the internet in newsrooms: editorial strategy and perceived critical features

In order to understand if journalists participate in the governance of their newspapers we asked journalists what do they know about the publishing profile of their newspapers. The years 1995 to 2000 represent the digital turning point, as identified by our respondents. But, within each media outlet, journalists’ answers on the specifics of their organization’s web publishing history are highly variable, indicating an absence of detailed memory about the transition from print to online editions. Nor, on the whole, do journalists appear to be informed about multimedia initiatives produced by their own organizations. This indicates an absence of internal communication that is striking.

Internet in EU newsrooms_Research Note

considering that we are focussed here on information industries, and it is exactly the opposite of that reflexivity attitude that Deuze (2003) advocates.

In contrast to the setting of editorial strategies, the implementation of the internet in newsrooms is a process that is familiar to journalists. The answer to our question on this issue can be summarized straightforwardly and in few words: implementation has not been difficult (Tab. 1).

Table 1

Even if differences on specific items can be pointed out, an exploratory factor analysis suggests grouping them within a single dimension (a = .82) that can be named ‘critical state of internet implementation’. The means expressed by the different countries on the composite score are significantly different (F(4,209) = 2.78, p<0.05; T210 = -3.64, p<.0001). Post hoc analyses (Scheffé criterion) confirm that the integration has been easier for Scandinavian (M= 2.06 SD = .75) and Baltic countries (M= 2.06 SD = .83), and more difficult for Latin (M= 2.61 SD = .94). Other countries fall in between. Similarly, on this dimension, web journalists score higher (M= 2.6 SD = .88) than print journalists (M= 2.1 SD = .86), t210 = -3.64, p<.001.

It is probable that web journalists who are to the forefront of change in information process in newsrooms are more aware of the difficulties that the implementation of a new socio-technical system implies.

Furthermore, the higher the age of respondents and the longer their familiarity with the internet, the greater is the awareness of the obstacles that have had to be overcome (respectively, r = .20; r = .14, p<.05). It may be that young journalists and that journalists who use the internet marginally have evaded problems that were encountered by their colleagues.

The integration of the internet in the communicative practices of European newsrooms

A second way to investigate the openness or closure of newsrooms was to explore the relevance attributed to the internet in comparison with other means of communication. Results mirror the order proposed by Daft and Lengel (1986) in their theory on the communicative richness of media. The means of communication used by journalists can be grouped into three sets
according to their rating. In the first, together with face-to-face, telephone and web search engines, we find personal e-mails and websites. Archives, colleagues and news sites fall in the second rank. The third set refers to less or not at all relevant means of communication. The oldest media (fax and telex) and public libraries are in this group. Interestingly, many of the innovations offered by ICTs at the time of the research (from SMS to newsletters, from blogs to chat) also fall within this set. These tools all refer to typologies of communication that require an interactive role to be taken by journalists. Our respondents seem not to savour the prospect of becoming the target of unexpected information. It seems that, while journalists generally are content to use the net as a tool, some doubt or ambivalence arises as to its more open or interactive features and components. At the same time, it is interesting to observe that the internet has not succeeded in reducing the importance of oral interpersonal communication (both face-to-face and telephone). Journalism is a relational profession, and a network of reliable relationships is necessary to produce good news. This may explain why colleagues are considered more important in gathering information than are news websites.

In order to obtain a synthesis of the situation articulated above, a correspondence factor analysis was conducted on the data. Three main dimensions emerge. A first factor, which explains 47% of the whole inertia, might be denominated ‘collective vs. personal journalism’. At one pole are placed Scandinavian journalists, who mainly use search engines to collect news, and refer to colleagues to gain insight and assistance. They show a collective vision of work practices. On the opposite pole, Baltic journalists describe an individual approach in which the main tools are the personal archives and personal relationships and sources. This position may be seen as underlining the inheritance of the communist regime, where pervasive control on communication led people to privilege personal relationships over shared official information.

The second dimension, which explains 25% of inertia, might be called ‘written vs. oral’. This axis registers an opposition between South-Central journalists, who emphasize the relevance of every type of archive, and the other groupings, who say that the most relevant tools for their profession are interpersonal communication (mediated or in co-presence) and the internet.

The third dimension, which explains 23% of the whole inertia, might be called ‘human factors vs. computer-mediated communication’. This dimension sees an opposition between Baltic journalists, who cite their colleagues as one of the main tools for the production of news, and Neo-Latin respondents, who show greater preference for the internet (including websites of sources and news sites). This indicates that Neo-Latin journalists seek up-to-date information, but also that in their environment they are less able to count on colleagues’ help or collaboration.

Internet in EU newsrooms _Research Note_

the inheritance of the communist regime, where pervasive control on communication led people to privilege personal relationships over shared official information.

The second dimension, which explains 25% of inertia, might be called ‘written vs. oral’. This axis registers an opposition between South-Central journalists, who emphasize the relevance of every type of archive, and the other groupings, who say that the most relevant tools for their profession are interpersonal communication (mediated or in co-presence) and the internet.

The third dimension, which explains 23% of the whole inertia, might be called ‘human factors vs. computer-mediated communication’. This dimension sees an opposition between Baltic journalists, who cite their colleagues as one of the main tools for the production of news, and Neo-Latin respondents, who show greater preference for the internet (including websites of sources and news sites). This indicates that Neo-Latin journalists seek up-to-date information, but also that in their environment they are less able to count on colleagues’ help or collaboration.

Table 2

Is the internet useful?

Once the internet has been integrated in newsrooms, is it considered useful by journalists? In short, our respondents consider this tool useful to their work (Table 3) but with variations as to its value as it relates to different functions. The internet is considered relevant especially as regards search and retrieval functions. Secondly, it is considered useful for deeper sources and for news background. However, the net is perceived as
being less important for traditional journalism that needs to verify facts and to investigate private business or local authorities.

Table 3

Exploratory factor analysis suggests reducing the items to two main factors, which we interpreted as ‘access to information sources’ (variance 29.3%, a = .76) and ‘investigative activity’ (variance 25.9%, a = .69). An analysis of variance showed that the mean expressed by the different countries on the first composite score (F(4,234) =2.96, p<0.05) and on the second composite score (F(4,234) =4.20, p<0.01) are significantly different. Neo-Latin journalists consider the internet less relevant to accomplish the crucial tasks of journalists than do journalists of other countries. Again, on both dimensions, web journalists consider the internet more useful (respectively M= 4.1 SD = .75 M= 4.1 SD = .84) than print journalists (M= 3.8 SD = .83 M= 3.7 SD = .92), t235 =2.38, p=.05; t235 = -3.12, p<.01.

Age, professional experience and intensity of use, however, do not reveal differences on the Internet’s perceived usefulness.

Conclusion

Journalism is a liberal profession that has been re-shaped through the implementation of information systems. The enhanced opportunity for planning and control offered by socio-technical information systems has corroded the freedom and the discretion of this profession, and allowed its re-positioning at a lower social level, along with rationalization of the organization of labour. However, this convenience sample shows journalists’ readiness to cope with the change to heavy internet usage, by domesticking this new technology. Technical issues were less problematic in the internet’s implementation than organizational and social issues. The net was seen as useful for the potential it offers to access sources of news and service information, and to publish news speedily rather than to enhance the core values and functions of their profession.

6

Internet in EU newsrooms\_Research Note

According to Daft and Lengel (1986), the differences in communicative richness between media are contingent on the ability to receive an immediate reply, on the number of channels and signals used, and on the personalization and variety of language. Their rank also holds in newsrooms and leads to a preference for personal communication. This highlights once again the relational nature of journalism, and that media richness shapes media usage in newsrooms. At the same time as incorporating new technologies in their work, journalists manifest a certain resistance to new editorial strategies that demand trans-media knowledge and competence. There are two important indicators which evidence this resistance. First, journalists’ professional identity remains strongly anchored to print newspapers and their self-definition as journalists’ print, online or print/online ‘ remains problematic. The second indicator is the serious communication deprivation which journalists experience, since their knowledge of the editorial initiatives of their various outlets is rather vague and thin. Contrary to the industrial trend of recent decades that stressed the importance of good horizontal and vertical information in business as a key factor of success (Galbraith, 1973), media groups seem either uninterested in information flow within
newsrooms or unable to address the issue. On the other hand, it can be said that journalists show little inclination to learn of the changes that have been taking place in their newspapers in relation to the internet. On the long run, these ambivalences may reveal a non-adaptive form of coping which may bring to a dissociation between everyday work and ideal norms and between workers and their organizations.

Finally, this research has shown that there remain ways in which, within converging norms, journalism is very much variegated. Journalistic practices and routines, but also attitudes and opinions across the five clusters of countries, are rather different. There is a principal difference between journalists from Southern and Northern countries, where the latter are more keen to recognize the usefulness of the internet as a tool, both to access sources of information and to support investigative activity. The internet’s implementation has been more difficult for our Southern respondents, especially the Neo-Latin ones tend to appreciate it less.

Given that ours was not a representative sample of European journalists, it must be stressed these results cannot be generalized. However, within its limitations, the study provides new knowledge concerning critical factors in the integration of the internet in newsrooms, the perception of the professional identity by journalists, awareness of the initiatives carried out by the editorial group for which respondents work, the re-positioning of media use in newsrooms, and the evaluation of the usefulness of this tool.

7

Internet in EU newsrooms_Research Note

References


Internet in EU newsrooms_Research Note

Table 1. Critical issues for internet implementation in newsroom

<table>
<thead>
<tr>
<th>Issues</th>
<th>South-Central</th>
<th>Neo-Latin</th>
<th>Atlantic</th>
<th>Islands</th>
<th>Scandinav. Baltic Mean (s.d)</th>
<th>Ease of use of technology</th>
<th>Attitude of journalists</th>
<th>Availability of technical support staff</th>
<th>Availability of training</th>
<th>Attitude of editors/managers</th>
<th>Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2.06 2.80 2.36 2.29 2.58</td>
<td>2.39</td>
<td></td>
<td></td>
<td></td>
<td>2.06 2.80 2.36 2.29 2.58 2.39 (1.16)</td>
<td>2.56 2.67 2.15 2.32 1.76 2.35 (1.33)</td>
<td>2.23 2.62 2.39 2.14 2.13 2.33 (1.20)</td>
<td>2.35 2.52 2.27 2.26 2.13 2.33 (1.51)</td>
<td>2.57 2.72 2.15 1.77 1.48 2.23 (1.32)</td>
<td>1.73 2.51 2.04 1.58 1.96 1.97 (1.23)</td>
</tr>
</tbody>
</table>

Note: Scale ranging from 1 (not at all problematic) to 5 (very problematic).
Tab. 2. Correspondence factor analysis. Means of communications by countries

1st dimension
Collective journalism
Coo. C.A.
Search engines -.45 .20
Colleagues -.42 .13
Personal journalism
Coo.
Personal archives .42
Face-to-face convers. .41
C.A.
.76
.19
Scandinavian
2nd dimension
Newsroom archives
Personal archives
Electronic archives
-.40 .30
Written
-.43 .20
-.48 .23
-.02 .10
Baltic .67
Oral
Face-to-face convers. .30
Telephone .29
Websites of source .32
.41
.14
.13
.10
South-
.47
3rd dimension
Human factors
Colleagues -.54
.66
.31
Computer mediated communication
Websites of source .30 .11
Www news sites .51 .28
Baltic -.51 .34 Neo-Latin .48 .60

Note. Coo. = coordinates; C.A. = absolute contributions
Table 3. Usefulness of internet features

<table>
<thead>
<tr>
<th>Group of Countries</th>
<th>Features</th>
<th>South-Central Neo-Latin Atlantic Islands Scand. Baltic Mean (s.d)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Searching for service information (phonebooks, addresses ...)</td>
<td>4.36 4.25 4.04 4.67 4.00 4.27 (1.00)</td>
</tr>
<tr>
<td></td>
<td>2. Accessing national government reports and other information</td>
<td>4.42 3.87 4.44 4.30 4.28 4.26 (0.87)</td>
</tr>
<tr>
<td></td>
<td>4. Investigating background info.</td>
<td>4.04 3.35 4.39 4.37 4.31 4.07 (1.11)</td>
</tr>
<tr>
<td></td>
<td>5. Accessing sources</td>
<td>4.33 3.89 4.07 3.80 3.79 4.00 (1.14)</td>
</tr>
<tr>
<td></td>
<td>6. Accessing local authorities reports and other information</td>
<td>3.77 3.32 3.73 3.91 3.83 3.69 (1.13)</td>
</tr>
<tr>
<td></td>
<td>7. Accessing corporate reports and other information</td>
<td>3.38 3.60 3.96 3.48 3.97 3.66 (1.17)</td>
</tr>
<tr>
<td></td>
<td>8. Verifying facts</td>
<td>3.51 2.90 3.44 3.80 3.43 3.41 (1.23)</td>
</tr>
</tbody>
</table>

Factors (loading features)

Access to information sources (2, 3, 6, 7) 3.93 3.64a 4.13b 3.96 4.69 3.93 (0.81)
Investigative activity (4, 5, 8) 3.96b 3.40a 3.96b 3.99b 3.83 3.82 (0.91)

Note Scale ranging from 1 (not at all useful) to 5 (very useful).
a, b Significant differences according to post hoc analyses (Scheffé criterion).

Notes

1 COST is a European programme of co-operation in the field of technology and science.

2 The newspapers involved in the survey are: Aamulehti, Anyksta, breakingnews.ie, Corriere della Sera, Dagens Nyheter, Delo, Dnevnik, El Mundo, El País, Eleftherotypia, Financial Times, Goteborgsposten, The Guardian,
3 Univariate Anova with factor between age: F(4,232) = 4.02, p<0.01. Scheffé post hoc criterion.

4 The seniority in the Neo-Latin sample is mainly due to Italian respondents, whose age is significantly higher than Spanish ones (M=46.5 versus M=35.1: T52: 4.82, p<.0001).

5 The questionnaire is based on the reviewed literature, on the COST A20 experience and on significant discussions between the researchers. Ari Heinonen had a major input in the discussion around the research design (cf. Heinonen, 1999).

6 Our questions were:

   - To which of the following publishing platforms is your newspaper producing journalistic contents (= produced by journalists)? Since when?
   - web online publication, pdf or other digital facsimile publication,
   - mobile devices (sms, wap, mms, pda), radio, television (analogue), teletext, digital tv (content other than for analogue tv), weblog, email (e.g. newsletters), newsfeed (e.g. RSS), telefax newspaper, other, specify.

7 Data were organized as follows: for each group of countries we counted how many times each tool was rated as relevant or very relevant; this frequency data was entered in the cells of the matrix country by means of communication (i.e. a 5 by 10 contingency table).