New technologies and future of newspapers

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This essay analyses the impact of new communication technologies on the future of newspapers. In examining current arguments in the literature, it argues that while Internet technology gives it an edge over newspapers in terms of immediacy of news coverage, audience reach and greater interactivity with readers, these characteristics should not be perceived as evidence of the demise of traditional newspapers. The authors contend that the future of newspapers is bright because there are inherent qualities that traditional newspapers possess which would enable them to withstand the Internet news revolution.

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This essay examines the debate surrounding the potential impact of new technologies on traditional newspapers in the 21st Century. Using the Internet as an example, the essay compares the situation in developing African countries with the western world. Specifically the essay examines the various ways the Internet technology has impacted news consumers, including the ethical and professional challenges posed to journalists and non-journalists practising on the web. Other issues discussed include: how the new technologies have impacted the credibility of journalists as well as the credibility of online news; and how the Internet threatens the future of newspapers. The essay also identifies opportunities available to newspapers to withstand the Internet challenge. It concludes that, despite the obvious advantages the Internet enjoys over traditional newspapers, the future of traditional newspapers remains bright.

When radio emerged in the 1920s, speculation was rife that radio would destroy newspapers. When television emerged in the 1950s, there was widespread speculation that television would displace radio, newspapers and the motion picture industry (Thottam, 1999: 216). That did not occur. But Kyrish (1994) has noted that current predictions about the information superhighway have taken the same optimistic tone as cable television received in the United States two and a half decades ago. In each case, Kyrish argued, advocates depicted the

technology as 'revolutionary', "predicting that traditional methods of work, play, learning, and commerce would be transformed" (Kyrish, 1994). To what extent has the Internet transformed traditional newspaper practice?

In the new electronic environment, is an excellent journalist still as reliant on contacts or are computer skills now more important in achieving the journalist's goal of ensuring the public is well informed? A good journalist now must possess basic computing skills. Ewart (1997), for example, has documented how sub-editors' ability to sub has now been displaced by their ability to operate computer programs. However, reliance on technologies also has its drawbacks, one of which is that sub-editors lose their natural word skills. Today's journalism graduate and indeed tomorrow's journalist must hold the requisite academic qualifications and must also be technologically well-informed.

The View Outside The West

Do new technologies increase wider access to news from developing countries? Journalists in Africa in particular are divided on this question. Some journalists in Africa believe the Internet has enabled them to gather news and information much easier now from African countries and the rest of the world than they used to do in the past (Obijiofor, 2001; Obijiofor et al, 2000). The Internet, for example, opens up a variety of news sources for the journalists, including the official web sites of established newspapers in developing and developed countries, as well as radio and television news on the web. Senior newspaper editors in Nigeria, for example, have argued that the cost of accessing news on the web is much cheaper than the cost of subscribing to leading western news agencies (Obijiofor, 2001). In essence, it is cheaper for a news organisation to subscribe and access news on the web than it is to subscribe to the news services of a western wire service.

However, it should be pointed out that the relative inability of some African countries to establish a strong presence on the web means the journalists are still compelled to source African news from established western news agencies and cable channels. The new technologies may have facilitated faster access to news about Africa and other foreign countries but disparity remains in the level of Internet accessibility in some African countries (Obijiofor et al, 2000). Thus, the more African countries establish their presence on the web, the easier it is for journalists to access news about those countries. In this regard, the paucity of the new technologies in many African countries has reduced the capacity for information sharing among African journalists.

In a comparative study of Singaporean and Nigerian

journalists' perceptions of the new technologies, Obijiofor (2001) found that journalists in the two countries hold different views in regard to the impact of the Internet on journalism practice. Singaporean journalists believe the Internet has enabled them to focus more on regional news, particularly the positive news genre in developing Southeast Asian countries that do not receive prominence from western news agencies. As the deputy foreign editor of the *Straits Times* (Singapore) explained in an interview:

"The [western] agencies tend to focus, for example, on human rights angle or prostitution in Thailand and other negative news... There must be more in Thailand than prostitution. The new technologies allow us to go into each country to see what else is out there, to determine the news ourselves rather than have the news determined for us by the western news agencies" [Personal interview](Obijiofor, 2001).

It must be noted that Singapore is not a developing country. However, the level of technological development in Singapore may have informed the way Singaporean journalists perceived the new technologies. Nigerian journalists on the other hand believe the new technologies have enabled them to diversify their sources of news and also to rely less on the major western news agencies (Obijiofor, 2001).

Consumer perspectives

One obvious impact of the new technologies is the empowerment of news consumers on a global scale. The Internet has enabled news consumers to make decisions regarding what they want to read or hear, when to read that information and to choose which medium to patronise. Anyone who can access the Internet is guaranteed almost as much information and data as professional journalists have. In essence, media consumers who feel dissatisfied with the quality of service provided by a particular news medium could readily look for alternatives elsewhere. The notion of loyalty to a particular news medium has become untenable. To a large extent, this is already happening.

Credibility of online news disseminators

Variety of news sources, it seems, is not always a good thing. As Kruckeberg (1995: 80) argued, "Emerging use of telecomputer technology as a 'news' medium will significantly add to the confusion, not only about what constitutes news, but about who reasonably may be considered a bona fide and credible journalist." One of the many areas of concern about the Internet is that it has given rise to the proliferation of 'pseudo-journalists'. This refers to untrained and unprofessional people who regard themselves

as journalists and who argue that they are driven to publish on the Net because they believe they are providing a public service, in the same way that professional journalists do.

Challenges of journalistic professionalism

Indeed the growing emphasis on ethical journalism practice would define who should be regarded as a journalist in the new electronic environment. Kruckeberg (1995: 81) further argued that, in the new electronic environment, "the role of the journalist and that of the press as an institution are destined to be changed in significant ways, with accompanying ethical ramifications." In fact Green (1997) has demonstrated that new technology, in particular the Internet, has increased the ability of journalists to rely more on anonymous sources without identifying their sources, with both undercover journalists and sources role-playing behind anonymous email and chat-room addresses. A recent study of journalists in Nigeria and Singapore showed new technologies are seen to promote complacency and unethical practices among journalists through over-reliance on the technologies (telephone, facsimile and the Internet) rather than relying on the well-tested news gathering techniques of personal interviews and face-to-face contacts with sources (Obijiofor, 2001).

As new communication technologies become major drivers of future journalism practice, the new technologies constitute the main tools with which journalists - professional and unprofessional - will commit professional 'suicide'. Plagiarising of online material is now a concern not only among journalists but also an issue in tertiary institutions. Also of concern is the growing incidence of manipulation of photos digitally. What are the consequences? Every unethical conduct such as manipulation of photographs or plagiarism impacts adversely on the credibility and integrity of journalists. Because some Internet articles carry no bylines, unscrupulous writers and journalists copy materials posted on the web and append their names as if they were the original authors. For example, a Brisbane-based newspaper, *The Courier-Mail*, once hired a columnist known as Helen Darville. Less than 24 hours after the columnist debuted, much of her essay was found to have originated from the Internet. There is now concern in the Australian community about growing cases of professional misconduct among journalists. These ethical issues impact negatively on the way journalists are perceived and rated by the public.

Some unethical journalism practices have been attributed to the speed of the new technology which reduces the time available for reflection - especially for reflection on ethical issues and decisions. These are areas we believe must be addressed and

journalists need to be as well-drilled in how to deal with these issues as they are in how to find the lead for an inverted pyramid news story. Additionally, journalism educators must include in their training curricular strategies that would enable their students make informed judgments about ethical challenges that confront them. Furthermore, the globalisation of news media, accelerated by advances in technology, increases the need for ethical practice. In particular, because so much content is available on the Web nowadays, journalists need to be able to deal ethically with the copy of others. *The Courier-Mail*, for example, is aware of such need and has issued instructions to its Web-meisters on how much copy can be used from various sources. Its instructions are quite restrictive, but laudable in their determination to deal fairly with the work of others.

Do online newsreaders believe what they read?

Sundar (1998) found in a study of online newsreaders that online stories with source attribution were rated highly by readers in terms of credibility and quality compared to stories without quotes. Against this background Sundar concluded that, "journalists' preoccupation with getting quotes for news stories is a psychologically valid concern". The author noted that: "poorly sourced stories on the Internet will be evaluated negatively by readers. Given the ease of digital publishing, online news sites often carry developing stories without complete and thorough source attribution. The present investigation suggests that such breaking stories, without appropriate source attribution, will not be taken seriously by readers". (Sundar, 1998: 63-64).

Weise (1997: 159-160) provides a cautious response to the question concerning online news believability: "For anyone trained in the tradition of investigative journalism, where tips come from sources, from research, from having an ear to the ground, from the relentlessly posed question, where facts are to be ferreted out and pieced together, it's a brave new world indeed. The Net is a place of intrigue, rumor and fabrication."

While well known and credible media organisations that have online sites such as *The Australian, Straits Times, CNN, BBC* and *New York Times* enjoy high credibility, web sites established and operated by less known individuals or organisations are hardly believed. Teoh and Al-Hawamdeh (2001) acknowledged this point in a recent report on the impact of the Internet on teaching and practising journalism. In their view, "having a familiar name clearly helps. Internet-only news sources such as Yahoo, Netscape, and America Online's News Channel get lower ratings than the web sites of traditional news organisations" (Teoh and Al-Hawamdeh, 2001).

The main reasons for the low believability of the contents of the web sites of less recognised sources could also be attributed to lack of ethical codes. It is argued that non-professional journalists who practise on the Internet have no code of ethics and are not obligated to any professional bodies as one would find in established professions such as law and medicine. This argument raises the question as to whether journalists can indeed be regarded as professionals. While considerable research has gone into defining the qualities required for professionalisation of journalism (for an Australian perspective see Henningham, 1996: 206-218), there is little corresponding research into online journalists and journalism. Brill (2001: 29) notes: "Only recently have attempts been made to form an organization of online journalists, the Online News Association. One of the organizers freely admits that his invitations to join were issued based on who I knew and whose e-mail addresses I had in my address book."

In other words, identification as an online journalist does not require the same stringent entry qualifications that apply to, for example, the Society for Professional Journalists, where employment at a recognised news publisher is only one of the qualifying requirements. If, as Brill contests, online journalists differ somewhat from "traditional" journalists in professional orientation, how is the difference manifested in their work? Recent studies show that online journalists are splitting into two disparate groups - one group that is essentially production-oriented and defines its work as quantitatively different from that of the "traditional" journalist; and a second group that is largely concerned with reporting and defines its work as similar to that produced by "traditional" journalists.

Evidence for the existence of the first group is contained in Brill's research, which found online journalists were less likely to analyse complex problems, investigate government claims or discuss national policy, were equally likely to want to get information to the public and to avoid unverified facts, but were more likely to let members of the public express views and to want to entertain their audience members (Brill, 2001: 35).

Additionally Green (2000: 106-107) reports that the introduction of pagination computer technology in some Australian regional newspapers resulted in news choices being skewed by the ease or difficulty with which a computer system handled a particular kind of page layout. While this example of technological determinism does not occur in an online environment, it has implications for online journalism.

Garrison (2001: 71), however, finds that computer-assisted reporting - with a large reliance on Internet newsgathering - is almost universal in US newsrooms, indicating the acceptance and

colonisation of online journalism skills by "traditional" journalists involved in reporting work. Garrison's study shows that between 1994 and 1998, the use of computers for reporting and the use of online newsgathering rose from about 60 per cent to almost 100 per cent. This finding supports the Middleberg/Ross Media in Cyberspace Study (2000: web page) which for the past three years has shown that journalists rank the Internet as their second most important resource. Garrison also finds, in a longitudinal study (2000: 500-514), that journalists' major concerns with online journalism dealt with issues of credibility and verification of facts, indicating that as US journalists began to move more and more into online environments in the years 1994 and 1998, they did not confront new issues, but rather the same issues in new environments.

The changes, therefore, have implications for both journalism education and journalism hiring practices, especially in non-US environments. While Garrison can confidently report that adoption of computer-assisted reporting and online journalism is almost universal in the US and Mayo and Leshner (2000: 68-82) find computer-assisted reporting stories are as credible as any others, Quinn (2000, vii) notes: "Few Australian news organisations and journalists have twigged to the realisation that the Internet and other aspects of computer-assisted reporting are revolutionising journalism." But because of the world's reliance on US technology, the revolution will occur in Australia and elsewhere just as it has occurred in the US.

Australian journalism educators, therefore, would do well to anticipate the change by including both computer-assisted reporting techniques and online production skills in their programs of study (in many cases institutions have already done so). News organisations themselves will inevitably find that they will have to hire employees who already have these skills. More importantly, though, news organisations will need to recognise that the existence of two disparate skill sets (reporting, and online production) exists. The existence of the two groups may partly be explained by existing news providers' desire to reduce online publishing costs by "cutting and pasting" existing content into the online environment. It is likely, however, that as more specifically online publications come into being, the disparity in the skill sets will decrease, because the demand for computer-assisted reporting skills will grow to provide original online content.

How Internet threatens the future of newspapers

Thottam (1999: 217) outlined three principal ways through which the Internet poses a threat to the newspaper industry. These

include loss of breaking-news function, declining newspaper readership owing to new technology-based leisure activities and the decline in advertising revenue. Drawing on data from the US, Thottam states that the percentage of adults who read newspapers has fallen from 77.6 per cent in 1970 to 58.7 per cent in 1999 (Thottam, 1999: 217). *The Economist On-line* (1999) suggests one explanation for declining readership is competition for people's time. It argues: "Over the years, technology and economics have produced more and more ways of occupying people's leisure hours: more television channels, more magazines, more theme parks, and now video games, chatrooms and all the other delights of the digital age".

However, some of these competitors such as television, magazines and theme parks actually preceded the Internet era. They may contribute to a decline in newspaper readership but we argue they do not constitute a key factor in readership decline. Furthermore, anecdotal and research evidence suggest the percentage of adult newspaper readers has been on the decline long before the emergence of the Internet.

Opportunities for newspapers

The preceding analysis presents a bleak future for newspapers. The future may be dim, but it certainly does not mean the end of the traditional newspaper. It would be presumptuous for us to join the bandwagon of false prophets. Newspapers possess certain survival qualities that could help them resist the storm of the Internet and the threat posed by the new technologies.

First, traditional newspapers are now matching the Internet news sources in their own game. Newspapers and even broadcast channels have also gone online to capture the untapped market and to draw back their traditional customers who might be wandering on the web in search of something different. As Teoh and Al-Hawamdeh (2001) pointed out, traditional newspapers with established names enjoy more credibility than the non-established Internet news sources. In an environment in which news is freely peddled, rumour tends to get more prominence than authentic news. Readers are left in the lurch: they can't distinguish between rumour and genuine information.

It has also been argued that the Internet is popular at the moment because most of the news materials are still free (Thottam, 1999). On this basis alone, many online users perceive the web as providing a free service. But all this is beginning to change. Hansell (2001) notes that while "most sites offering news and information are still free, ...a few have started to impose fees and more are considering doing the same." Hansell provides evidence to demonstrate that once fees are charged for Internet services, many

users are likely to drop off. This position is supported by the failure of online news providers who have charged for service. The most notable exception, the *Wall Street Journal (WSJ.com)*, has had limited success with fees and has had to balance the effect of subscription on readership against guaranteed income.

While the trend is for people to rush to the web for snippets of breaking news, it is also the trend that the same people will seek newspapers and other traditional and more reliable media for background information and analysis. This was clearly the case during the September 11, 2001, terrorist attacks on New York and Washington. Many people watched the events on cable and satellite television but many people also read the next day's newspapers for background details and analysis.

The Newspaper Association of America (NAA) reports some evidence that online publication actually increases circulation of the traditional version of the paper. While this was especially true during the September 11 tragedy, the NAA cites evidence that it may also be true in general (www.naa.org/presstime/PTArtPage.cfm?AID=3314). The future of the newspaper, therefore, may be a future in which a multimedia publication - not just online but also in traditional format - can actually thrive.

This also has relevance for the reference by Thottam and others to the declining readership of the traditional newspaper. While Thottam's reference to the increasingly time-poor future facing information consumers is important, a recent study by Xerox PARC indicates that the traditional journalistic function of gate-keeping will continue to be valued by audience members online. The study (quoted in Nielsen, 2001) concludes: "Users' most important Web tasks involve collecting and comparing multiple pieces of information, usually so they can make a choice" (http://useit.com/alertbox/20010415.html).

The most common function of users in the study was to "evaluate multiple products or answers to make a decision". This describes the gate-keeping function of journalists who must consider multiple sources of information before deciding to synthesise some of them into a single report for publication. Publications, both online and in traditional format, can save time-poor audience members time via the copy-tasting function. The popularity of online news sites as portals to the Web would indicate that audience members appreciate having journalists do much of the collecting, comparing and choosing for them.

It is premature to argue that online publication affects the sales (circulation) figures of traditional newspapers, with a concomitant reduction in advertising revenue, as news publishers find new ways to cross-subsidise both forms of publication and ways of counting online publication for Audit Bureau of

Circulations' purposes. The ABC circulation figures, both in Australia and the US, are the "official" figures, from which estimates of audience "reach" are drawn - an essential element in calculating advertising rates. The greater the audience reach, the higher advertising rate a publication can negotiate (usually within "bands" of circulation figures). In Australia, *The Australian*, for example, has begun to sell an edition of the paper in 'pdf' format, delivered via the Internet, to international subscribers and is negotiating with the Australian Audit Bureau of Circulations to have the international sales included in its official figures. And in the US, Murray reported in *The Digital Edge* (Sept 2001):

"Simply put, an electronic edition can be counted as paid circulation if the site contains the same name plate as the newspaper and consumers pay at least 25 percent of the basic rate charged for a home-delivered print subscription." (http://www.naa.org/TheDigitalEdge/DigArtPage.cfm?AID=2563)

Another point not mentioned often is the fact that people, quite simply, prefer the 'physical copy' element of newspapers. To some people, online news has the same fleeting element as radio and television. Owing to constant updating of news on the web, online users can't keep online material unless they print it out. But there is a sense of accomplishment people have in reading a newspaper and knowing that the news will not disappear before their eyes because they can always keep the newspaper copy for future reference.

Even in developing African countries, traditional newspapers still have an edge over online news in a number of ways. In the rural areas, for example, where a majority of the population reside, access to the Internet is a luxury. It is still cheaper to buy a newspaper than it is to access the web. For example, the cost of acquiring a computer, a telephone line, a modem, and subscription to an Internet Service Provider (ISP) in many African countries is equivalent to the total annual income of a university graduate (Obijiofor et al, 2000).

Beyond the problem of cost, there are other impediments to widespread use of the Internet in the rural areas of Africa. One of these is irregular supply of electricity (Obijiofor, 1995). Although it may be argued that laptop computers could be operated on batteries, the batteries still need to be recharged regularly. There is also the lack of telephone access in many African countries. Using Nigeria as an example, the Central Bank reported a total of 353,027 telephone sets in 1992. This figure pales in the face of Nigeria's estimated population of over 110 million people (see Central Bank of Nigeria Annual Report, 1992: 110). The picture is almost the same in many other African countries.

Undoubtedly, new technologies are impacting journalism

practice, but it is not on the scale being suggested. Newspaper readership is well and truly on the decline, but the trend started as far back as the early 1970s, long before the emergence of the Internet. Moreover, online publishing opportunities presented by new technology may in fact become the saviours of the traditional newspaper, as cross-subsidisation of the two forms increases and as publishers discover new ways of enticing readers and advertisers into both forms. New audience members who discover a newspaper online may well be persuaded to become subscribers to the traditional version as well.

As argued in this essay, there are still opportunities for newspapers to fight back, to position themselves in such a way as to successfully face the challenges of the 21st century. The basis for optimism is also underpinned by the powerful argument advanced by *The Economist On-line:*

"Even if the Internet destroys the industry's economics, the demand for well-researched, well-written news and analysis will not disappear. If anything, it may increase. The easier it is to publish, the more rubbish will get published, and trusted newspaper brands may become more valuable. The price of newspapers, however, is likely to rise, once the classified advertising that used to subsidise the copy has gone. How high prices go will presumably depend on how much a paper relies on classifieds. It is not clear that readers will want printed newspapers at any cost; it could well prove that they do not." (The Economist On-line, 1999).

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