



The Impact of Technology on Journalism

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Abstract: *The internet - the World Wide Web - has had a major impact on all levels of (information) societies throughout the world. Running the traditional monopoly to the centralization of the information power in a media like newspaper is one of the most sensible features in the information age. This article defines online journalism and discusses it in terms of key characteristics of online publishing –hyper textuality, interactivity, multimodality, policy and advertisement- and considers the current and potential impacts that this online journalism can have on the ways in which one can define journalism as it functions in elective democracies worldwide.*

In addition, it is argued that lack of responsibility and reliability is the concern subject in online community. One reason could be a lack of the number of professional journalists who are employing online version especially in third world and developing countries because the lack of a structured verification process or inaccurate reporting would mislead the public.

Encouraging the traditional journalists to work or be involved in online journalism as a new generation of journalism is still not possible, considering the recognition of the journalists' standpoints. It could help find some effective ways to encourage professional journalists to use the online version as a means to disseminate information.

Keywords: *Internet, journalism, online journalism, journalist.*

Introduction:

During the two last decades of the twentieth century the rapid changes in the information and communication technology (ICT) become much faster and more widespread and also cheaper and more sophisticated. ICT has been influenced in different aspects of people's life because "The Internet is not a monolithic whole; it is a network of user-created networks. As individuals use new ICTs to communicate in on-line environments, they become participants in dialogues, expressions, celebrations, rituals, performances, campaigns, caucuses, commercial exchanges and information transactions. These participants jointly create settings where people can assemble to undertake a variety of shared endeavors, ranging from communication, to trade, to education, to adventure" (Holma and Mcgregor, 2005, p; 272).

One such aspect of ICT is on communication media area that could change the function of media. With the knowledge of which, the media can be categorized into two groups--mainstream media and digital media, online media vs. offline media, old media vs. new media. The major difference basically appears to be between getting your news from a TV set, magazine or newspaper vs. obtaining it from a screen tied to a computer which is connected to the internet.

In light of multitudes of changes occurring in the media environment and its technologies, one of the most prominent tasks we face in defining the public interest today is questioning the nature of news journalism. Throughout the recent years, social media, blogs and online newspapers exceedingly raised the number of competitors reaching given audiences.

Considering the other dimension of the issue, online journalism can contribute to the discussion between different actors in society. It can facilitate changes and accommodate those who would not have voice in mainstream media. Thus, running the traditional monopoly to the centralization of the information power in a media like newspaper is one of the most sensible features in the information age.

What is Online Journalism?

Each day, millions of people turn their computers on and read or listen to the news without having to wait for their daily newspapers. Apart from bringing more changes to computer-assisted reporting, technology also alters the way journalists do their jobs. In addition, the use of Internet has also enabled journalists to have all the influential organizations worldwide at their fingertips (Singer et al., 1999). Among some researchers, there is an argument that the means to succeed in the area of new journalism is the same as the traditional news, that it also includes good writing, accuracy and the willingness to innovate (Arant & Anderson, 2001).

Pavlik et al., (1997) believed that online journalism is gradually developing through three stages. In the first stage, most of the contents from the primary publication are simply repurposed. The second stage involves journalists' creating news

contents for the sites, while the third stage is designing the original contents particularly for the web as a new communication medium.

In 1997, the researchers realized that most of the news sites were in the middle of stage one, while the other two stages were emerged. These days, it seems that most local news are still in the first stage, while there are many regional and national sites that are publishing original contents successfully. Kamalipour (2007) mentioned that the first electronic publication of the print press cannot be considered as online journalism. From his view point, electronic journalism is the most appropriate name for this kind of newspaper. Stovall (2004) also claimed that none of the news websites has used the full potential of the web yet. There are just a few news organizations that have exceeded the forceful updating in developing the original contents of their sites.

Generally, online journalism is defined as: the reporting of facts that is produced and distributed via internet. By the point of view of the traditional established media the new form of journalism has been discussed as an opportunity and a risk while the importance of this matter is the strength of traditional watchdog functions of journalism by giving reporters efficient ways to probe more deeply for information.

Online Journalism: Chances and Challenges

The new form of journalism has remarkably grown by the mixture of various media (internet and traditional journalism) in the mid-1990 (Li, 2006). It has, therefore, brought the new meaning of policy, user, content, and etc.

Some questions are upraised here. One such question is: How ICT elements could elaborate to maximize the effectiveness of using ICT in the field of journalism as compared to traditional ways of journalism? With using ICT in the field of journalism, changes in news happened in diversity of aspects. It expands the capability in gathering news by multimedia structure, immediacy (Redefining of time and space) and with interactivity nature of the Internet and the World Wide Web that makes it incomparable and powerful settings for democracy. Based on the following headlines, I will explain the effectiveness of ICT on journalism perspective as compared to traditional ways of journalism.

Structure of Journalism

The emergence of new communication technologies has changed the structure of newspapers. The quality of multimedia for online version is the main feature in online newspaper structure that increases the distance between print journalism and new generation because the design of newspapers has changed to multimedia contents, i.e. online newspaper design is fundamentally different from print version since the design in online newspaper covers the dissemination of messages.

Web design applications and techniques of the newspapers on the Internet demonstrate information reflected via the way the publishers structure the news contents (Li, 2006). Internet newspapers with different designs can produce different levels of gratification because web design is an important approach which can affect news retrieval efficiency (Li, 2006). One of the thinkers in the field of journalism uses two ways to define multimedia in journalism, which are both "ideal-typical". The first one is given a new story package by many media formats, like image, graphic animation and moving music that include hyper textual elements and interactivity, whereas the second one is using several media, such as SMS, MMS, e-mail, radio, television, print newspapers and magazines in order to give news story package on the website (Deuze, 2004). Generally, online journalism allows users to obtain additional information from the separate pages that they want to know.

Interactivity of Online Journalism

One-way communication and the lack of interactivity in traditional media were some concerned points of many researchers in 1962 because they believed that communication between journalism and audience was more limited. Indeed, the ancient mass media produced their messages largely independent from the audience (Folayan, 2004).

Nevertheless, with the emergence of new technology (i.e. the Internet), the lack of interactivity has been eradicated and this gives the audience the power that allows them a two-way information flow. Hence, online journalism as a new technology now is a medium that is fundamentally different from the traditional media because of the ability of interactivity. In addition, it has been recognized as a "critical concept in computer-mediated communication" defined as "a term that specifies the level of relationship among successive communication exchange, in which way third (or later) transmission is contingent upon how previous exchanges were related to even earlier transmission" (Li, 2006, p: 139). Thus, it is not just interactivity, it is also a kind of interconnectedness which subsets the logic of electronic media.

One of the scholars also identified some important factors that affect interactivity of online newspapers that include; ownership status, newspaper market size, quantity of technical staff for online environment and duration of time having the Internet presence site that helps journalists to become comfortable and experienced with the new medium (Zeng, 2002).

In the field of interactivity, one of the scholars also stressed that new media are important tools for developing countries in order to separate themselves from the developed countries. This is because; the one-way flow of interaction from the developed to third and developing countries would be changed towards equality (Banjade, 2006).

Immediacy of Online Journalism

When journalism is progressing into the Internet environment, it means that this new space has different features from the analogue media. The immediacy of online news is among other features of online media, which is in contrast with the analogue media.

The main content of immediacy is that there is no gap in between when information is obtained or prepared and formed by the news producer and when the data and information is transferred to the consumers. This status is possible because of the nature of digital information that can easily be schemed continuously. Although print journalism permits in-depth news story depth, the news is mostly not circulated until the next morning or evening. Therefore, unlike the print journalism, immediacy in online version has been a fundamental element and activity for delivering information quickly through the digital version.

Many studies on delivery have shown that digital news provided can publish supplementary and updated news (Li, 2006), because online publications do not have particular deadlines. Thus, they can upload news any time, which deliberately changes the meaning of time and space. For example, it makes it possible for journalists to change the headline news many times in one day (Arao, 2006).

Policy and Independency in Online Journalism

The term independence for press refers to newspapers, magazines and other communication media that have political and economic independence from the government and other private economic monopolies (Motamednejad, 1995).

The conception of independence has become a sector of great disputes in the current media world. It has been identified as "not depending upon the authority of another or other, not in a position of subordination, not subject to external control or rule, self-governing and free. However, in relation to the media, the idea of independent production presents a paradox: it is both simple and complex" (Wolk, 2001, p: 132). This means that news does not need to be served into the suitable mainstream media production. In contrast to the new form of journalism, the independence of press media is still questioned by some. For example, in Iran, most of the daily newspapers continue to be controlled by the government, political parties and wealthy individuals.

Although progress has been formed with some news media in responding to social needs, the majority of them have a close relationship with policy and power. It means that, politically, each has a sponsor; thus, sponsors are supposed to look for the specified viewpoint to be presented in publication. In addition, the reason that relates to the lack of appropriate media market and this condition is mainly the result of self-censorship by journalists and news organizations that mostly consider the financial status of newspapers and consequently the independence of media.

In general, journalists who use this new technology can relax and feel unrestrained from any proviso because one of the many great touchstones of journalism is that there is no fear and no favour (Wolk, 2001).

Furthermore, under the new technology label, the journalists can produce news with diverse approaches in order to create electronic democracy by using different resources. Nevertheless, there are many countries in the world that still use filtering because from their point of view, freedom (of speech) should not threaten the social, cultural and religious identities of the nations that may turn into (freedom of) unethical issues (Motamednejad, 2004).

Advertisements

In regard to the creation of online world, online journalism is faced with challenges regarding advertisements because most news sites will not survive without advertising. However, after six years of exploding web, a survey in 1999 found that a surprising number of news sites were already making money. In addition to the most important activity related to turning a profit, original news, editors and publishers also noted that, "survey making" is an important component of economic success (Li, 2006).

There are two types of advertisements that have become common on the web. "Ubiquitous banner ads" are the first general advertisements that typically emerge across the top of web pages. This kind of advertisements is more dynamic and seeking than the news itself because the advertisements create a stimulus for the audience, who click on them to find more information about the products. Instead of complaining about this general situation, online journalists have to pay attention to the elementary lesson before they make the news contents at least as compelling as or more than the advertisements. However, doing this will involve the investment of time and money.

The second type of advertisements, called "stealth ads", is in the form of links. For example, the advertisement can be a book review site that consists of a link to a bookseller, such as the Amazon or Borders from which books can be purchased (Wolk, 2001).

Weir (1999) noted that, online journalism is a new medium that has brought an opportunity to establish new ways for both content and commercial sides of the companies to work together. He pointed out that news will not be a business (unless a site has monopolized over something people want), and further stressed that, in these new situations, advertisers are often looking for the opportunity to develop "sponsor content".

Moreover, in 1999, another study found that 30 percent of people visiting the online news sites had bought commodities or services online. For instance, people who look for profiles in online journalism may want to check more than a link to a bookseller (Wolk, 2001).

Challenges of Online journalism

Although online journalism is definitely "a breed apart" (Deuze, 2003) in comparison to the traditional journalism, it has challenged the meaning of production capacity, policy, independency, difference of time and place and in particular, the interaction between the journalists and their audience. And some journalists around the world specifically those in the developed countries are enthusiastic in using online journalism but there are considerable numbers of journalists who have not adopted modern journalism, especially those in developing and third world countries while the press theories in these countries are mostly based on authoritarian or Soviet Union's models.

In this era, the press could be owned by a leader, a party or anyone who has real or absolute power or if the people own the press, the media is restricted by the communist party apparatus (Debeer and Merrill, 2009); thus, publishing news is seen as a model of accordance between the publishers and power sources in the form of monopoly given by those holding the power. The authoritarian and soviet theories are not enforceable to this dispute since each does not directly address the democratic systems (Washburn, 2009).

Based on the advantages highlighted earlier, the online environment offers an environment for the freedom of speech; thus, it could probably be the best alternative available for those who provide and publish news and information for others.

On the other hand, the limitation of professional journalists who are practicing or employing online version could pose a big challenge for the journalism society for two obvious reasons; first, most of the people in these countries (namely, developing and the third world countries) may use the new technologies to get or retrieve information and news due to the lack of censorships, governmental control.

Hence, newspapers published on the Internet are the best resources for the people to get real information. However, if they could not get or retrieve any online newspapers from their own countries, they might opt for foreign news resources which are mostly from the developed countries. It is important to highlight the fact that the flow of information from the West is very much with specific bias, and is unilateral and unbalanced.

In his global model of communication, Mowlana (1997) emphasizes the ways in which technology has redefined the concept of international communication which leads to unfair, unbalanced, and unidirectional direction or sources of information are mostly from the Western countries to Eastern ones such as Iran.

At the same time, the emphasis on the concept of accuracy which is a crucial norm that should exist in the norm of ethical journalism is challenged by the limited number of professional journalists in online journalism at present. This is simply because audience who searches for information would definitely opt for and obtain information required from the personal blogs or personal websites (many, if not all, are not based on the standards of journalism) available in their country if they refused to get the information from the foreign official news resources or newspapers due to language barrier and sources that they are skeptical about.

It is very important to note that the lack of professional standards, particularly the aspect of social responsibility, poses the greatest threat to media. As most of the bloggers act without any education in communication science as well as standards of journalism, they use the information based on their personal taste by which false information and public misleading would be resulted.

Consequently, people will see and regard online news as something which is from "outside" journalism, comprising of only a specific direction that has restricted or limited news standards, as well as lack of effectiveness, efficiency and social responsibility. These will decrease the trust by the public towards the media even further, and the people will definitely question the accuracy of the available blogs, particularly, the scholars and mainstream journalists who hold the belief that the lack of a structured verification process or inaccurate reporting would mislead the public.

According to Addis (2009), the Internet is still bound by the role of copyright and ownership. This is because many sites provide news which has normally been revised or rewritten, and although the time of the revision is stated, trace of the original version is usually not stated. More frequently than not, the false information dispersed is not corrected to ensure accuracy and clarity. Thus, the ethical aspect is always challenged. The same doubt remains, i.e. the application of standards to real life, and this makes the Internet no different than others as it still struggles to find its balance.

Consecutively, the emphasis on the concept of accuracy which is a crucial norm that should exist in the norm of ethical journalism is challenged by the limited number of professional journalists in online journalism at present. This is largely due to the fact that the bloggers are those without any relevant academic qualification in communication science and also those who are not familiar with the standards of journalism. These are the people who write or disperse information based on their own personal interests who could lead to dissemination of false information; thus, the lack of a structured verification process or inaccurate reporting would mislead the public.

Conclusion

New technologies can, by and large, provide new chances as well as threats to the current media. The newspaper industry has been extremely influenced and, accordingly, changed by the integration of internet and print journalism. Now, online newspaper can provide new services by internet that the traditional newspaper cannot due to hardcopy quality.

Obviously, online journalism has the following main features: the capacity of multimedia, interactivity and immediacy. Besides, the problems of censorship, propaganda, high production cost and lack of space for news have been solved by the use of online journalism. Another prominent factor to be taken into consideration is that the cost of starting online journalism, in fact, is way lower compared with that of print version, so these advantages of online version largely outweigh those of print version and all in all give testimony to stay in future.

On the other hand, what seems to be the concern subject in online community is the lack of responsibility and reliability since the number of professional journalists who are employing online version is still limited. Therefore, considering the recognition of the journalists' standpoints, encouraging the traditional journalists to work or be involved in online journalism as a new generation of journalism is still not possible. It could help find some effective ways to encourage professional journalists to use the online version as a means to disseminate information.

However, the parameters such as deficiency of academic and technological education might be considered the reason for the lack of journalists. As the result, every journalist has to learn and educate in multiple skills in today's digital age since the best journalist is someone who can simply gain more audience with good information and news.

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