

Analysis of Social Implications Resulting from the Major Paradigm Shifts caused by Adoption of New Information and Communication Technologies in the Mass Media Industry

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Abstract

The world has turned digital with the emergence of new information and communication technologies and these have had social, economic and political implications on the practice of journalism and mass communication. This paper seeks to discuss the social implications that have emanated from the major paradigm shifts caused by adoption and exploitation of new information and communication technologies in the mass media industry. The discussions are guided by the technological determinism theory. The paper establishes that adoption and exploitation of new ICTs has greatly transformed ways in which media content is created, produced, distributed, accessed and used and consequentially there have been diverse social implications especially because of shifts in the relationships between mass media producers and mass media audiences. The paper concludes that this situation will definitely continue to shift in ways that will be astounding and recommends that media institutions must continually prepare to face the same by establishing digital departments/positions as well as by equipping its staff with change management skills.

Keywords: New Information and Communication Technologies, Change in the Practice of Journalism, New Media ICTs, Professionalism in Journalism, Paradigm Shifts in Mass Media

1. Introduction

Recent years have witnessed proliferation of information and communication technologies (ICTs) that have permeated all societies and economies. Adoption and exploitation of ICTs has initiated and fostered global societal change and it cannot be emphasized that since advent of ICTs, societies are no longer the same in terms of social, economic and political developments. The world which today is in postmodernity era, is a digitized world whose main power no longer comes from economic productions or scientific discoveries but rather from information. As such the ease with which a society can engage in information collection,

processing, dissemination and consumption determines its power. This means that ICTs, which enhance information and communication abilities, are valued today not only by individuals with ambitions of rising into powerful leadership positions but also by institutions and governments that want to rise into the world's super-power positions. Mass media is one such institution. Adoption and exploitation of ICTs by mass media institutions in any country has had wide reaching social, economic and political implications especially because the press is such a powerful organ of any government (the fourth estate). Use of electronic and digital technologies by mass media can be traced back to the early and mid-20th century when the radio, TV and first computer were made. There has been evolution of these technologies with newer generations being created every few years so that due to the dynamic nature of ICTs caused by the sporadic growth witnessed in the industry, today the mass media creators and consumers are using *new ICTs which include both hardware (such as laptops, media pads, webcams and mobile phones) and software (such as websites, emails, blogs, microblogs, and online chatting apps)*. These new ICTs with their outstanding features and capabilities have profoundly impacted the practice of journalism causing major paradigm shifts in the industry. This according to Chari (2013) means that the way in which news is conceptualized, gathered, produced, disseminated or consumed is changing in the context of new communication technologies. A diversity of social implications emanating from use of new ICTs has compounded the paradigm shifts and dramatically led to newer trends in the practice of journalism and can be said to have redefined mass media in this age. It is in this context, that this paper seeks to discuss the major paradigm shifts caused by these new ICTs and the social implications thereof.

2. Study Objective

This paper seeks to discuss the social implications that have emanated from the major paradigm shifts caused by adoption and exploitation of new information and communication technologies in the mass media industry.

3. Theoretical Framework

This research was guided by the technological determinism theory which postulates that technology is a driver of social change. In the study, this theory is used to attribute changes in journalistic practices to technological innovations (new ICTs) and technology is either lauded for ushering unlimited shifts and opportunities to the journalism profession or blamed for various negative ramifications on the practice of journalism (Chari, 2013).

4. Research methodology

The study is a desktop review and discussion of various literature on new ICTs in relation to the mass media industry.

5. Findings

5.1 Shift from the traditional formats and mass access to new formats and individualized access

New ICTs have dramatically changed the way mass media channels communicate with/to their audiences. Dissemination though still en mass is now becoming more individualized, media and their audiences are moving from fixed news time to all-time news, and there are increasingly new formats and diversified access points. Movement from cinema halls to home theatres where movies are watched over TV sets or downloaded from the internet and

watched on personal computers cannot be denied. Nowadays, more people prefer to watch movies in the comfort of their homes as individuals, with family or company of few friends as opposed to film entertainment in cinema halls. Similarly, today, there is individualized and more flexible news access and thus one does not have to miss news if they are not seated in front of their TV set or do not have their radio set nearby. If news is missed at prime time, one can go to online streaming for the same content from online media outlets such as online TV versions and You-Tube. Additionally, radio, TV and the Internet have converged on the mobile phone and other mobile devices such as media pads. This means that one can watch news and consume a variety of other media products at their convenience as and at when needed through use of mobile devices. Consequentially, regardless of wherever and whenever media consumers are or whatever they are doing, they can have unlimited convenient access to mass media content and the society is therefore a constantly informed society - thumbs up to the new ICTs!

5.2 Shift from broadcasting to narrowcasting

Narrowcasting, also called *niche marketing or target marketing*, is based on the postmodern idea that mass audiences do not exist. The term came with electronic and digital evolution. It first entered the common lexicon due to computer scientist and public broadcasting advocate J. C. R. Licklider, who in a 1967 report envisioned a multiplicity of television networks aimed at serving the needs of smaller, specialized audiences. In Kenya, for instance, not all TV or FM stations are meant for every member of the population; vernacular, religious and culturally oriented TV and FM stations which have recently proliferated the country are a good example as only those who understand or are interested in the particular language, religion or local culture can consume content from a vernacular station. Cable TV is yet another example of narrowcasting. It is transmitted out to only a narrow group; those that have the particular means of picking it up. Similarly, the Internet, which is one of the major new ICTs, uses both broadcast and narrowcast models. Most websites are on a broadcast model since anyone with Internet access can view the sites. However, sites that require one to log-in before viewing content are based more on the narrowcast model. Push technologies which send information to subscribers are another form for narrowcasting as are electronic mailing lists where messages are sent only to individuals who subscribe to the list. Narrowcasting is also sometimes applied to podcasting, since the audience for a podcast is often specific and sharply defined.

Movement from broadcasting to narrow casting essentially means *new ICTs are causing the press to move from merely sharing quantitative information to the general public or a relatively large subset of the whole to narrowcasting where the press aims to share qualitative information to a targeted select audience*. Socially there is concern that narrowcasting causes stratification of mass audiences into social categories based on literacy levels, economic activities, social status, professional undertakings, religious orientations, cultural background among other criteria. As such, today a more divided mass audience, which could mean a divided society as a result of diversified opinion shaping, is likely as opposed to a unified mass audience.

5.3 Multiplicity of media channels and global access

New media ICTs have led to multiplicity of mass media channels. For instance, whereas traditional media have continued to thrive in the challenging digital environment, online versions of these media have emerged so as to enhance their survival. As such, it is common

today to find that for each TV channel there is an equivalent online TV. The same applies to FM stations and newspapers. This means that people *can access media on hard or soft copy, offline or online, manually or electronically*. Consequentially, amidst geographical marginalization, lack of expensive digital equipment or prerequisite access skills, majority of the world populace now have access to mass media. Online newspapers, online TV, web radio, blogs and other products of online journalism have enabled global access to news and entertainment. If local mass media channels lack certain vital information, new ICTs such as the Internet and the web enable access of such information from global sources. *Through use of new ICTs, there is so much diversity to choose from without geographical or time limitations that audiences are increasingly bombarded with media information overload*. However, expansion of access points from local to international has enabled people to be more open-minded and to view the world from a globally informed perspective rather than racial or ethnic stereotypes. Although this does not always have positive results, certain negative stereotypes can be broken when people are able to experience other societies over space. Further, Obijiofor, Inayatullah & Stevenson (2005) argue that without successful adoption and use of new ICTs in the developing world, future generations in these societies will continue to lag behind. This therefore means that global information access expands social and economic opportunities for people.

5.4 Global and Local Digital Divide and Social Stratification

Whereas development of a global information society has enriched people worldwide, adoption and deployment of new ICTs has not been equal across the globe. There is clear digital divide that has led to information disparities between industrialized countries and developing nations. As a result the world has information-rich and the information-poor countries. Most of the North is information rich whereas most of the South is information poor (Hamelink, 1997). The seriousness of the ICT-gap is clearly demonstrated by figures on the world distribution of telephony. *More than 50 per cent of the world's people who have never even used a telephone are from low income countries. The same applies same to deployment of computers and associated technologies*. Reducing the ICT gap requires a major financial effort for the renovation, upgrading and expansion of networks in developing countries and this is a big setback. Engrained in this international disparity, is local disparity especially in developing countries. In Kenya, for instance, there is clear ICT-disparity between the urban and rural folks. Most urban centres have mobile telephony and computer network accessibilities as well as electricity and other infrastructure that support deployment, adoption and exploitation of new ICTs. This is lacking in the rural areas. Such inherent disparities in the country have created unhidden stratification along social boundaries. *A stratified society has unequal access to opportunities and information* and is therefore not developing at the same pace. The rural seem to drag the urban and the urban cannot wait for the rural. *As such rural-urban migration continue to occur and overpopulation of cities like Nairobi results to other social implications include insufficient housing, growth of slums, increase of crime and other undesirable eventualities*.

5.5 Higher but blurred interactivity between mass media and audiences

Adoption and exploitation of *new ICTs have changed mass media from 'one-many' communication model to an almost 'many-many' model*. This is because with application of new media ICTs to solicit for stories, build stories, and get feedback the dividing margin of who is communicating to who (source-recipient) is becoming increasingly blurred. This is

more evident on newer media formats like blogging that are largely informal and where conversation is never ending making it difficult to attribute the supposedly conclusive end of any particular topic to a particular individual. Live radio and TV talk shows are other examples of high level interactivity between mass media and audiences. Such shows make it difficult for media to do framing. *Persuasion of behavior or attitude change on matters of social concern has therefore become more difficult* for mass media because on a many-many model, where people exercise their freedom of expression through new digital channels that are increasingly difficult to censor, organized information dissemination to attain a persuasive end is almost impossible.

5.6 Creation of Cyberspace and Virtual communities

New media ICTs have enabled creation of cyberspace and virtual communities. *People can talk, chat, blog, meet, plan, share and give urgent messages to each other virtually* through the use of personal computers, computer networks, and mobile devices platforms. For instance employees of related corporate organizations, human rights activists, senior citizens, alumni and many other groups have made impressive use of these new communications networks and virtual communities through installation of the WhatsApp messenger, Facebook, and other social media networks on their mobile phones. Therefore, people do not have to wait for mainstream mass media outlets to receive or share desired information. In essence this means that *adoption and use of new media ICTs has caused societies to change the way they relate with mass media entities and at the same time mass media institutions have changed their social interaction dynamics with the society.* Most TV and FM stations today can be reached by their audiences and can also reach out to their audiences via cellphones, emails, Facebook, Twitter, You-Tube and other online media in addition to the traditional formats.

5.7 Shift from traditional journalism to online journalism

Traditionally, journalism tools have been restricted to print (mainly newspapers) and broadcast (mainly radio and TV). However, with the emergence of ICTs, especially the Internet, journalistic paradigms have been changing and the traditional outlets face the bare reality that they cannot ignore the emerging technologies, techniques and trends. Online journalism has therefore emerged and news is produced, reported and distributed using the Internet and associated technologies. New media ICTs have posed a threat of extinction to traditional media, especially the print. Circulation in certain countries is dropping, advertising revenue shrinking, and as result the industry is experiencing layoffs, cutbacks, bankruptcies, reduced frequency of publishing and even complete shutdown of some papers. Traditional media are losing veteran journalists to the online newsroom. As such, media houses have been forced to devise ways to integrate new media ICTs and use them alongside or within the traditional media tools/formats or else fold shop as they face possible extinction. Consequentially, *new media tools that embrace extensive use of ICTs are increasingly being adopted and exploited.* These include use of blogging, microblogging, chatrooms, bulletin boards as well as creation of online TV, web radio, and online newspapers among others.

5.8 Citizen journalism and shifting professionalism

As a result of adoption and exploitation of new ICTs by people all over the world, traditional journalism is faced with the emergence of citizen journalism where ordinary folk gather, organize and report news especially in many new media formats such as blogs, podcasts and

streaming video. A professional Journalist is expected to use facts to describe events, ideas, or issues that are relevant to the public; gather information, and broadcast it so that the public remains abreast about local, national, and international events; but can also present their points of view on current issues and report on the actions of the government, public officials, corporate executives, interest groups, media houses, and those who hold social power or authority; by adherence to specified standards of journalistic practice. On the contrary, citizen journalism is the act of non-professionals playing an active role in the process of collecting, reporting, analyzing and disseminating news and information. They do what professional journalists have been doing without being bound by instituted guidelines. The powerful and affordable new ICTs supported by the principles of Internet freedom and net-neutrality have played a major role in the evolution of citizen journalism.

A new trend in journalism where traditional media organizations therefore no longer serve as gatekeepers has emerged. Information and mass communication has been democratized. Today, new ICTs have sped up and blurred the distinction between information-creator and information-receiver. Information flows are now broad, diverse, multi-directional and easily accessible. Anybody can set up a website and begin broadcasting content and availability of camera equipped mobile phones, coupled with social media viral distribution continues to put readers in a great position to generate news. Companies and individuals can publish anything from text or images to a video using high speed and broad bandwidth digital technology. They can then deliver these directly and wirelessly to computers or mobile devices worldwide. As such citizen journalism is changing the old journalism model by bringing new social dimensions between the media and its publics. It reflects a movement away from highly produced content to information that is local and more individually pertinent, and mechanisms need to be promptly devised to manage this growing body of content.

5.9 Shift from formal to informal news content

Similar to citizen journalism is the shift brought to media by the concept of blogging. Born by new ICTs, blogging is *conversational, social, networked, incomplete, open, and ongoing*. It is about process, not product. It is about a shared space. Usually, the approach used by journalists is to blog about an idea for an article, then blog a draft version, asking for readers' input – *and responding to it* – at both stages. The published or broadcast version can also be posted on the blog later, as the latest stage in its production, but again with an invitation for updates and corrections. A blogger can publish the 'uncut' version too. In short, in blogging, the story is never finished. Blogging is *personal and informal*, making it difficult for journalists who have been trained for years to be objective. However, this personal quality has a number of strengths: it allows a journalist to make a closer connection with readers, which in turn often helps build the journalist's understanding of the issues that matter to them. It allows a journalist to be more transparent about the news production process, building trust and news literacy. It also allows a space for reflection. This means that blogging has changed the way news is created, distributed and consumed. It has changed the social relationships between journalists and audiences – *from formal to informal; from objective to more of opinionated news*. It has also allowed the audience to have uncensored and unlimited input into news stories, making them active in both production and consumption of media products. *Gate keeping and other editorial roles are becoming a thing of the past. Active as opposed to passive audiences* are the order of the day except in developing parts of the world where access to new media ICTs is not yet a reality. Such critical shifts not only enhance journalism but also pose new challenges to the old journalistic models. They should be addressed

promptly through relevant policies and regulations to avoid eminent negative repercussions that result from 'uncontrolled press.'

5.10 Two-Way Instantaneous Communication and Audience Empowerment

One of the most popular expectations of exploitation of new ICTs by the press is empowering users of all kinds: citizens, consumers, workers, patients, students and government officials. This has been met because use of new media ICTs has enhanced *two-way instantaneous communications*. Also, today the press does not generate content all by itself to inform its audiences but that audiences are increasingly getting involved in content creation because they can easily reach media houses over mobile phones, emails, twitter, Facebook and other new media communication channels. As a result press-generated and user-generated content is increasingly redefining the *nature of social relationships* between the media and its audiences (King, 1998). This is especially witnessed through the use microblogging, a concepts arising out of use of new ICTs. Microblogging is a combination of blogging and instant messaging that allows users to create a short message that is posted on their profile. Websites such as Twitter also allow these messages to be delivered on cell phones. This allows micro-blogging to provide a quick way to communicate with a group of people. The appeal of microblogging is both its immediacy and portability. Posts are brief and can be written or received text, video or audio. Microblogging services have emerged as an important source of real-time news updates for crisis situations, such as accidents, bomb blasts, plane crashes, political protests, ethnic clashes, etc. The short nature of updates allows users to post news items quickly reaching its audience in seconds.

Microblogging services have revolutionized the way news and information are consumed. *It has empowered citizens themselves to act as sensors or sources of data which could lead to important pieces of information.* People now share what they observe in their surroundings, information about events, and what their opinions are about certain topics. From a mass media perspective, microblogging aids in social research and situational awareness. Microblogging also improves social and emotional welfare of mass media audiences as well as mass media workforce especially because it considerably increases opportunities to share information, helps realize and utilize expertise and talents, and also helps build and maintain common ground between coworkers and society members. As a result there is increased *participation in interactions leading to beneficial, transformative social change. Consultative decision making and problem solving is more common than before.* Mass media through use of ICTs have enhanced democracy because citizens can participate on talk-shows and contribute to governance decisions, critique certain actions and propose workable solutions. Informed citizens know when there are economic opportunities to grab, how to effectively grab such opportunities and how to keep improving their business undertakings. Therefore, growth in deployment and adoption of new media ICTs, especially growing use of cellular systems and rapidly expanding numbers of Internet users as well as ICTs increasingly becoming an integral part of national development agendas, will increase information accessibility in developing countries and as a result cause societal development.

5.11 The Gate keeping Challenge and Changing Reputation of Journalism

Increasingly, because of adoption and exploitation of new media ICTs, individuals and organizations are integrated into webs of horizontal non-hierarchical communication exchange points that have already proved themselves able to counter censorship and

disinformation. The role of editors is so challenged so that with online journalism concepts such as blogging and microblogging, where comments are instantaneously posted any end, it is impractical to preview before publishing. Citizen journalism as discussed earlier, has meant that anyone with a smartphone or digital camera and internet access (these are now quite affordable to many people) can take photos at an accident scene and post them instantly over social networking sites, blogs, emails or websites. An online editor does not necessarily do content analysis for necessary censorship but rather moderates online discussions to enhance divergence of views and greater participation. This is a challenge to institutionalized media houses which observe stringent ethical guidelines when publishing information. Due to canons of journalism and other media policies and regulations certain information has habitually been censored or framed in view of societal ethics. *New media ICTs have made observance of such guidelines almost an illusion and consequentially led to disrepute of the journalism profession. Consequentially, upholding a media house's credibility, in the event that a media house allows blog comments, Facebook and other new media updates on sensitive stories, is more challenging than ever before.* Uncontrolled comments from recipients and redistribution of the same is common. Certain comments can be alarming and risk individual harm or societal conflict. Therefore, it cannot be overemphasized that new media has affected ethical journalism negatively and subsequently has had undesirable social implications such as spread of pornography and the resulting moral decadence, and spread of hate speech and the resulting ethnic polarization.

5.12 Movement from 'Public Interest' stories to Sensational News

For a long time, professional journalists have always applied the public interest test before deciding whether to cover a story. The public interest is in having a safe, healthy and fully-functioning society. In a democracy, journalism plays a central role in that. It gives people the information they need to take part in the democratic process. And if journalists are good at their job, they hold governments and other institutions to account. For most issues it is fairly clear what is and what is not in the public interest; for some it is more complicated, particularly where privacy is concerned. According to Eggington (2012), the first task, therefore in testing public interest is to separate what is in the public interest from those things members of the public are interested in. The fact that the public may be interested in something has nothing to do with whether it is in the public interest. This according to Eggington means that there is a public service ethic at the heart all of serious journalism. To fulfill this public service role, journalists must behave ethically. They must build and retain the trust of their audiences by behaving in a professional, ethical way. Sensationalism, the contrast of public interest, has set into news more than ever before especially with advent and use of new media ICTs. *With new media that allows anyone from anywhere to comment on or publish stories at any time instantaneously, keen adherence to the principle of publishing public interest stories and not merely interesting stories has become almost a nightmare!* Typically the content and subject matter of sensational stories does not affect the lives of the masses and does not affect society, and instead is broadcast and printed to attract viewers and readers. Occasionally, news organizations mistakenly relay false information from unreliable anonymous sources who use mass media as a tool for retaliation, defamation, victim and witness tampering, and monetary or personal gain. Most of these sources are found over new media ICTs. Of course, any story based such sources is best interpreted with critical thinking but sensational reporting has overshadowed this. Nowadays, it is common for

mass media to report that which makes a "good story" from social media comments and updates, without much regard for the factual accuracy or social relevance of the information.

5.13 Redefinition of Employment and Mass Media Jobs

New media ICTs have led to profound changes in employment and job execution in the industry. These include *telecommuting*. This means working from home offices, airports, hotels or just about any area that is not the main office. New media including the Internet, wireless technologies, mobile phones, collaborative writing tools, email, voice mail, video conferencing, virtual private networks (VPN), blogs, bulletin boards, chat rooms, and other tools that allow remote connections and instantaneous communication throughout the day are some online tools that enable journalists to telecommute. The gains associated with telecommuting include higher productivity, job satisfaction, saving of costs, and reduction of traffic and pollution problems among others. *A less tired journalist is more productive. Teleworkers have more time for family bonding and this strengthens family units and as a result builds a better society while maintaining an economically productive workforce.* However, adversely, Although the increased mobility awarded by ICT may make it easier to combine work and personal life, the pressure of having to be available constantly because the communication technologies make it possible may have a detrimental effect on an employee's perceived work-life balance and ultimately his/her satisfaction (Reenen et al., 2010). Secondly, new ICTs have brought forth opportunities for self-employment and expanded job positions in mass media. Today media houses employ network administrators, bloggers, website designers, and digital programmers among others. People are also creating self-employment through use of new media ICTs. *Online media researchers, freelance journalists, online trainers, citizen journalists and system designers are some examples.* Thirdly, new ICTs enable constant skills upgrade. Due to the rapid and dynamic nature of ICTs, journalists working in a new media environment need to keep retraining to keep at par. *Such skills upgrade can earn someone a promotion with salary increase which subsequently means that their social status improves because they can afford better lifestyle and this in effect improves the society.*

6. Conclusions and Recommendations

This paper undoubtedly unearths that adoption of new ICTs by mass media practitioners has had several social implications and both media producers and media audiences cannot ignore the changes resulting thereof. In summary the thirteen major changes analyzed include: shift from traditional to new formats of access, shift from broadcasting to narrowcasting, multiplicity of media channels and increased global access, vivid digital divide and social stratification, increased but blurred interactivity between mass media and its audiences, creation of cyberspace and virtual communities, shift from traditional journalism to online journalism, growth of citizen journalism and shifting professionalism, shift from formal to informal news content, two-way instantaneous communication and audience empowerment, challenging gate keeping and changing reputation of journalism, movement from 'public interest' stories to sensational news, and redefinition of employment and mass media jobs. As Kaul (2012) puts it, digital technologies have fundamentally altered the nature and function of media in our society, reinventing age-old practices of public communication and at times circumventing traditional media and challenging its privileged role as gatekeepers of news and entertainment. According to Kaul, change in the media landscape is constant.

The paper therefore recommends that media owners and media producers should accept the fact that these changes have occurred and will continue to occur as diffusion of new ICTs continue to invade the industry and that the current mass media model is being impacted profoundly. This means that if they resist these changes they may not survive for long. This paper therefore further recommends that every media house should embrace the changes by establishing digital departments/positions so as to strategically devise coping mechanisms of these impacts that affect both their producers and audiences. Since new ICTs invention, diffusion and adoption is also very dynamic and sporadic, these paradigm shifts and effects will continue to occur every few months. The paper therefore also recommends that the mass media industry should equip its staff with change management skills so that they are ready to embrace the digital future that is hard to envision in totality.

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