The Influence of New Media Technology on Television Content Production in Selected Television Stations in Kenya

Wekesa Everlyne Nafula¹, Mberia Hellen Kinoti², Nyakundi Augustus O.³

St. Paul's University¹ Jomo Kenyatta University of Agriculture & Technology² Jomo Kenyatta University of Agriculture & Technology³

Abstract

Technology has permeated the media industry, leading to huge transitions in their operations. Technological advancements have led to a multiplicity of devices, ultimately affecting the content development process. This paper explores the influence of new media technology on television content production. It was born of a study that aimed at exploring ways in which the new media technology has influenced television content development in Kenya. The study was informed by The Technological Determinist Theory and the Media Determinism Theory. It was conducted in Nairobi County, being the centre of technological innovation in Kenya. The study adopted the descriptive survey design, its target population comprised of television content producers, program managers and television audiences. The producers were targeted since they interact with new media technologies daily, managers were targeted since they know the implications of the new media technology on television operations and television audiences were selected since they are more techno-savvy and more exposed to new media technologies compared to other population segments. The study employed the quantitative and qualitative methods of data collection. Tools for data collected included self-administered questionnaires, interview schedules and focus group discussion guides. The findings revealed that the most commonly used new media technologies for content production include digital video cameras, F, X, YouTube, Live-U, SI media, zoom app, OB tricasters, skype, and Smartphones among others. The study also revealed that new media technology has made the content-producing process cheaper and more efficient and allowed better output quality. On the flipside, it has led to citizen journalism which has opened doors to fake news and misinformation. Since technology has both negative and positive sides, the findings will help the television industry determine the place of new media technology in content development and work towards reinventing itself in order to remain relevant.

Key Words: Content Producing, Content Development, and Technological Innovation, New Media Technology

1.0 Introduction

Technology has become an integral part of the media industry, dramatically changing the media environment and revolutionizing the content development process (Chalkley et al., 2012). Technology has led to a proliferation of devices through which contents are produced and allowed for the multimedia production of information (MCK, 2016). Traditionally, media houses relied primarily on analogue technologies, which made content production cumbersome and incredibly expensive (Baran, 2008). However, over the years, technology has transformed the time-consuming and costly business through digitization of the process into a much easier and more efficient business (McQuail, 2000).

The new media trends including digitization, technological convergence and media fragmentation have affected content producing in numerous ways (Pavlik, 2011). Digitization has led to the digitization of the content producing tools and multimedia content production including images, video, text and audio possible (Pavlik, 2011; MCK, 2016). Additionally, it has made the content production process simpler and cheaper (Picard, 2011).

Technological convergence has also inspired media organizations to explore the multimedia production of information using a variety of media platforms including mobile phones and the internet-based platforms such as F, X, LinkedIn and blog sites (Lawson-Borders, 2005; Jenkins, 2006). Additionally, editors and reporters are able to collaborate more and integrate all their services in one newsroom, making it possible for them to produce contents for different media outlets more effectively (Mbatia, 2014; Herrick, 2003). Media fragmentation has given rise to more content options, compelling journalists to produce content in various forms for different media outlets (Ndonye & Khasandi-Telewa, 2013).

Such strengths of the new media technology have made it gain popularity and acceptance in the present generation (Ogwelle, 2011). This scenario prompted some scholars to predict a digital revolution that would see the old media replaced by new media, whereby for instance, broadcasting would be replaced by the Internet (Ibold, 2012). However, the view was challenged by a number of scholars including Mbatia (2014) according to whom the new media

is not replacing the old rather, the two are interacting in more complex ways with the new fusing with the old media to affect communication positively. This view is reiterated by Ndonye and Khasandi-Telewa (2013) who point out that the new media merely complement the traditional media and don't replace it.

Despite the advantages of the new media technology, it also has a dark side. Although content production in now easier, many media outlets have had to bear the financial burden that comes with 'going digital'. Media houses are also compelled to equip their staff with multimedia skills which further poses financial challenges on the media houses (Murunga and Diang'a, 2021). Moreover, the transformed media environment is pushing media organizations into finding new ways of content production (Githaiga, 2014).

The proliferation of media outlets has given rise to many content forms including tweets, stories, pictures, links, face-book pages as sources of information. Sifting through the volumes of information currently available is cumbersome (Githaiga, 2014). The new media environment and the demands of the audience force the media to provide 'bitty' raw information which adversely affects the credibility of news media organizations (Nyamboga, 2014).

Technology is fast growing and its implications on content development cannot be ignored. In order to remain relevant, the television industry must adopt new strategies in content production (Ndonye, Kemunto & Masese, 2014). This paper explores the influence of new media technology on television content production in Kenya and recommends strategies to be adopted.

2.0 Literature Review

This study was premised on the Technological Determinism Theory (McLuhan, 1962), which perceives technology as 'an external force introduced into a social situation, producing a series of rebound effects. This theory was relevant in describing the effects of the new media technology on television content production. It was complemented by The Medium Theory, which claims that technology has powerful effects on societies and inevitably causes specific changes in how people think, how society is structured and in the forms of culture that are created' (McLuhan, 1964). The medium theory was relevant in providing a deeper understanding

of the influence of new technology on television content producing and the changing media environment.

The Impact of New Technology on Television Content Producing

The new media technology has brought about a variance in the way information is produced (Croteau & Hoynes, 2003). Presently, social media platforms such as F, X and online forums have given consumers and ordinary people an opportunity to participate in content production (Castells, 2003; Lull, 2006).

Technology has brought about trends including convergence, digitization and media fragmentation that have made content production easier, cheaper and more efficient (Pavlik, 2011; ITU, 2011). Digitization has led to citizen journalism and made multimedia content producing through the internet and mobile phones possible (MCK, 2016). Digitization of devices increases the efficiency of the production process and also allows content producers to work closer to the deadline (Pavlik, 2011).

Convergence has led to converged tools for instance the multi-purpose computer and the production and editing software like Avid, Adobe Premiere and Final Cut Pro which allow digital production (Ibold, 2012). It has also led to converged newsrooms making it possible for producers to produce content for different media outlets more effectively (Mbatia, 2014). Fragmentation has led to a proliferation of devices through which media content can be produced (Douglas & John, 2005).

Challenges Posed by New Media Technology

The introduction of the new media technology has posed several challenges to the television industry (Ali, 2009). The process of digitization has had huge financial implication on the media organizations (Kirchhoff, 2009). Audience fragmentation has forced content producers to produce content for each of the media outlets, which is cumbersome and expensive (Debrett, 2009). In the new media environment, audience demands force the media to provide 'bitty' raw content (Chalkley et al., 2012). Although this benefits the consumer who receives information instantly, the tendency affects the credibility of content producers and media organizations (Nyamboga, 2014). Additionally, since information is first posted on social media platforms, it

reaches the producer as third or fifth-hand hand information meaning s/he has to come up with creative ways of retelling the story to make it sound current and captivating (Alejandro, 2010). The new media environment compels media organizations to train journalists to be multi-skilled and professionally inclined with today's technology, which places a financial burden on them (Gate, 2000).

Strategies Being Used to Adapt to the Changes and Challenges

Media organizations have had to come up with strategies to adapt to the challenges. The strategies include re-engineering businesses to serve multi-platforms and integrated online outlets, coming up with collaborations among television stations and integration with online platforms. Others include forming alliances and acquisitions between different media sectors, and between traditional media and new media corporations (Ajehandro, 2010). In Kenya, cross-ownerships and co-opetition where competitor companies establish cooperative activities through alliances, partnerships, sharing arrangements and networks are common (MCK, 2016).

Empirical studies in this area have focused broadly on the influence of new media technology on traditional media. For instance, 'The effect of New Media on traditional media' (Rajendran &Thesinghraja, 2014) aimed to establish the impact of new media on print media. Another study 'the digital video broadcasting mission study' conducted in 2009 aimed at investigating technology options to deliver digital video content over the Internet. Though related to the current study, it focused on only on content distribution.

In Kenya, related studies include 'the impact of digital technologies on the media and journalism in Kenya' (MCK, 2016) which broadly focused on the influence of digital technologies on both the print and electronic media. Another study 'Effects of social media on the content of local television program in Kenya' by Ouma, (2015) focused on program scheduling.

Despite the new media implications on the media, research efforts aimed particularly at establishing its influence on television content production have not captured the attention of researchers, which made the study necessary.

3.0 Methodology

The study employed the descriptive research design which was used to describe how the new media technology is influencing television content production. This design was preferred since it describes various aspects of a phenomenon, allows a large volume of data to be collected cheaply and makes the data analysis process easier and faster (Ethridge, 2004); Gilbert, N. 2008).

The study population comprised of the television workforce while the target population included television content creators, television managers and television audience members. A sample of 15 television content creators, 2 television program managers and 10 audience members participated in the study. These were purposively selected since they interact with media on a daily basis. The purposive sampling technique was also used to select one of the most popular television stations (KTN). The table below provides a summary of the sample population:

Table 1: Sample Population

Tool Used	Respondents	Number of Respondents
Questionnaire	TV content creators	15
FGDs	TV audiences	10
Interviews	TV program managers	2
Total		27

The main instrument for data collection was the questionnaire which was administered to content creators, face-to-face interviews were conducted with program managers while focus group discussion guides were used to obtain information from the television audiences. Two (2) focus groups, each comprising 5 media students from every level of study in the undergraduate degree program were represented (Bryman, 2012).

Data Analysis

The quantitative data generated by questionnaires was coded and entered in the Statistical Package for Social Scientists (SPSS) for analysis. After entry into SPSS, data was then cleaned

to identify errors made by ensuring that data is entered twice independently by two people according to Robinson (2002). SPSS aided in organizing, summarizing, tabulating and analyzing the data using descriptive statistics including means, standard deviations and frequency distributions, to enable the researcher draw conclusions.

The qualitative data generated from interviews and focus group discussions adopted the thematic analysis approach. This was done procedurally through identification of information relevant to the objectives, developing a coding system based on collected data, classification of major issues covered and major themes identified. Development of a summary report identifying major themes and the association between them was then done (Creswell, 2009).

4.0 Results and Discussion

This pilot study sought to find out the influence of new media technology on television content production. There was 100% agreement from respondents on the traditional media devices used for content production before the advent of new media technology. These included PD video cameras, VCR machines, video switchers, MPEG encoders. With advancements in technology, there a host of new media devices currently being used including DV cameras, audio mixers, video switchers, tricasters, OpenShot, studio Binders, Live - U and VMix among others. This is in line with what Ndonye and Khasandi-Telewa (2013) claimed that media fragmentation has given rise to a multiplicity of media platforms through which media content is produced.

According to 93.3% of the respondents, the most preferred devices for content production are digital video cameras, Live-U, SI media, Smartphones, OB tricasters, audio recorders, vision mixers, zoom app, Microsoft teams, F, X, YouTube and skype. Reasons for the preference included the fact that the new media technologies are cheaper, more user-friendly, easily customizable, more efficient and allow for creativity. They also allow for ease in information copying, storing and modification. This is in line with Pavlik (2011) who found out that new media devices make content sourcing easier, cheaper and more efficient.

Although media houses have switched to new media devices, the study (73.3%) revealed that they still use the traditional media technology for content producing. This is because they are

deemed more reliable, allow for a mastery of special skills, they have a highly centralized organization and provide more accurate information. This concurs with Mbatia's (2014) claim that the new media technology has not come to replace the old rather, the two complement each to affect communication positively" (Mbatia, 2014).

The study revealed that new media technology has affected the work of content producers in several ways. The proliferation of devices has led to diversity in content production methods, made the process easier, cheaper, faster and allowed for creativity. It has also allowed for real-time content production, more efficacy and improved output quality.

The study found that citizen journalism affects the work of content producers positively and negatively. It has allowed for instantaneous feedback and ensures customer-centrism where the content produced is relevant and responsive to their needs. Additionally, it has sharpened their content production skills and made the process of repackaging information for digital platforms easier. This is in agreement with a report by the Media Council of Kenya (2016) which states that digitization has led to citizen journalism and made multimedia content production through the internet and mobile phones possible.

Conversely, citizen journalism has opened doors to fake news and misinformation which has affected viewership rates negatively. Consequently, producers have to constantly review the feedback provided by viewers to help them make informed programming decisions. Mbatia, (2014) claims that the content creators' role is to find out which media platforms the audiences are interacting with, and to access which type of content so as to serve them appropriately.

Influence of the New Media Technology on Content Production

The study found out that the new media technology has influenced television content production in various ways. It has made the process faster, easier and cheaper. It has also made the process more efficient, allowing one to do more in less time and conveniently, where content producers can get information from the comfort of their offices. According to Pavlik (2011) and ITU (2011) the new media trends including convergence, digitization and media fragmentation have made content sourcing easier and cheaper.

New Media Trends Affecting TV Content Sourcing

The study (93.3%) revealed a number of new media trends affecting content production in a number of ways. Digitization has led to the production of higher quality contents, ability to compress the contents and greater efficiency. On the flip side, digitization comes with financial implications due to the need for digitized devices and digital skills for content producers.

Convergence has brought about multi-purpose computers that allow for digital production and editing as well as digital converged newsrooms which ensure more efficiency. This concurs with earlier claims by Mbatia (2014) and MCK (2016), that technological convergence has given rise to converged newsrooms where editors and reporters are able to collaborate more and integrate all their services in one newsroom, making it possible for them to produce contents for different media outlets more effectively.

Media fragmentation has made the content production processes cheaper and enabled for the production of more content. On the other hand, it has placed a demand on content creators to be multi-skilled and produce content for various media outlets and made it harder for them to meet the needs of the ever 'shifting' audiences. Ndonye and Khasandi-Telewa (2013) assert that media fragmentation has given rise to a multiplicity of media platforms, compelling producers to obtain content in various formats and for different media outlets.

Furthermore, owing to the stiff competition posed, there is a compromise on the journalism standards leading to poor work quality. Chalkley et al., (2012) point out that in the new media environment, market and audience demands force the media to provide 'bitty' raw information in form of breaking news. Earlier, Baecker (2011) had observed that in the new media environment, cases of stories that lack facts, a balance and necessary background have been on the rise, leading to credibility issues for the producer and the media organizations (Nyamboga, 2014).

The introduction of the Smartphone as a tool for content production has also impacted on content production. Audiences easily use it to get current information. This coupled with its interactive nature puts a lot of pressure on content producers who must always look for current information and come up with creative ways of retelling stories to retain the audiences. This concurs with Gate (2000) who states that the new media technology places a burden on media companies and content producers compelling them to look for new strategies in content sourcing, producing and dissemination in order to remain relevant.

Challenges and Demands of the New Media Technology on the Television Industry

According to the study (9.3%) the new media technology has placed a number of demands on the content development process. Currently, media houses have to adopt new strategies to satisfy the changing needs of their audience that is fragmented. Producers are compelled to produce ondemand programming for the various media platforms, hold constant conversations with audiences and review their feedback comments on social media platforms to determine their changing needs. This implies that television stations must spend more on audience research as echoed by Ndonye, Kemunto and Masese (2014). The scholars found out that the new media environment and audience demands have placed a burden on media companies and content producers who now have to rethink existing assumptions about media from the consumer's point of view and respond to the needs of the newly empowered audience.

Additionally, producers must now come up with fresh, relevant and unique content. This implies that stations must be ready to spend more to acquire good content and to train and equip producers with digital skills to enable them to operate in the digital and multi-media environment. Douglas and John (2005) contend that presently, there is more pressure for content creators to beat deadlines due to the nature of the present-day audience members who demand fresh and relevant content.

Moreover, in the converged media environment, a content producer must produce content for TV, radio and social media platforms, a role that was formerly played by 3 people which can be challenging and tiring. There is also the demand to produce different content modules; text, audio, and video for the various media outlets which puts a lot of pressure on content producers.

Audience fragmentation has led to the loss of revenue and consequently staff lay-offs. This means the few who remain have to do more and work for longer hours. This coupled with stiff competition from social media platforms leads to a compromise on ethical principles governing journalism and consequently a compromise on production quality. Moreover, there is pressure for journalists to find compelling stories, to be more creative and innovative and face more pressure to beat deadlines. This is in line with Githaiga (2014) said, that the new media landscape has transformed the media environment, forcing content producers to be more on their toes to find out emerging trends in the media space, determine their effects on audience needs and come up with new content strategies.

Strategies Being Used to Mitigate the Effects of New Media Technology

The study (9.3%) revealed a number of strategies being used to mitigate the challenges posed by the new media technology including going online, integration with online media outlets, monetizing online content through subscriptions and forming alliances between traditional and new media corporations. Other strategies being used include acquisitions, using free-to-air content, investing in organizational image and credibility, coming up with unique content that is responsive to the audience, and establishing partnerships with other television stations and individual content creators for cost-sharing purposes.

Opportunities Brought By the New Media Technology

Despite the challenges and demands posed by the new media technology to the television industry, 93.3% of the respondents said there are opportunities accrued. The new media technology has brought about a variety of devices through which content is produced, increased the communication pace, reduced the geographical distance between senders and receivers and enhanced co-opetition among media houses, where media houses work more as partners and not competitors. It has also made content production a participatory process.

Besides, the digitization of media tools has made content production easier and made producers to be more versatile due to the new set of digital skills acquired. It has also led to networked journalism, made tailor-made content production possible and brought about social networking. Consequently, content production and the process of meeting the changing needs of audiences have been made easier. Additionally, it has provided an opportunity for content developers to showcase their skills and talents to a wider audience.

5.0 Summary and Conclusion

Advancements in technology have led to a multiplicity of devices through which media contents are produced. New media technology has seen the television industry switch to new modes of content production and made the process easier, more efficient and convenient. The new media devices require a new skill-set among content producers. The new media devices are preferred over the traditional since they are faster, more convenient, more efficient, allow for interactions, are manipulatable, ensure higher quality and unfiltered information and are multi-purpose.

New media trends including digitization, convergence, media fragmentation and Smartphone digitization have affected content production both positively and negatively. New media technology has also placed a number of demands on content producers where they have to ensure fresh and relevant content and acquire multi-media skills. Among the strategies being used to cope with these effects include coming up with unique content, investing more in audience research and coming up with partnerships.

Conclusion

The study confirms earlier studies which claim that new media technology has affected television content development both positively and negatively. New media technology has not replaced traditional media, rather the two modes complement each other thence, the need for strategies to adapt. The study revealed that the present-day audience needs unique and fresh information, relevant to their needs. It also found out that new media trends including convergence, digitization, and media fragmentation have put pressure on television content producers to be multi-skilled and versatile to survive. Among the strategies to be used to survive in the media environment include investing more in audience research, staff trainings, digital tools and organizational credibility, hiring staff with digital skills and producing on-demand

content that is fresh, relevant and unique. Other strategies adopted to mitigate challenges posed include integration with online platforms, acquisitions, partnerships and co-opetition.

Based on the findings of the study, the researcher recommends that television industries conduct periodic audience research to gauge their ever-changing needs and determine new media trends affecting content production to help come up with appropriate content strategies. The researcher also recommends continuous equipping of content producers with appropriate digital skills with a global perspective, in order to adapt to the ever-evolving media environment. Given the times we are living in, there is need for a study on the influence of AI on program production. Since this was a pilot study, a larger study in the same area to generate more useful information for television programmers is recommended.

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