



Influence of Digital Communication Technology on the Operations of Star Television and the Tanzania Broadcasting Corporation (TBC1)

Janeth Mushi¹, Okechukwu Chukwuma (PhD)¹

¹Department of Journalism and Mass Communication, St. Augustine University of Tanzania.

Abstract

This study aimed at Investigating the influence of digital communication technology on the operations of Star Television and the Tanzania Broadcasting Corporation (TBC1). The focus of the study was the ascertain how the adoption of digital communication technology is improving the processing and distribution of content by the two television stations. The survey research method was used for the study. A total of 110 broadcasting staff of Star Television and the Tanzania Broadcasting Corporation (TBC1) participated in the study. Data were collected through self-administered questionnaire and analyzed using statistical tool such as the Statistical Package for Social Sciences (SPSS). Finding revealed that the adoption of digital communication technology has significantly improved content processing in Star TV and the Tanzania Broadcasting Corporation (TBC 1). It was also revealed that the adoption of the digital communication technology has improved content dissemination in both television stations. Based on the findings, the study recommended that Star TV and TBC1 must continue to keep themselves updated with the latest technological advancements and trends for effective compliance with the demands of modern television broadcasting. By staying informed, they can better understand the applications of digital media technology on their operations and make informed decisions. More so, owners of Star Television and TBC1 must ensure that their infrastructure is capable of handling the changes that come with digital media technology implementation. They should assess their existing technology stack and identify areas that require upgrades or improvements so as to be relevant in this communication technology driven era. Again, broadcast staff of Star TV and TBC1 must continue to approach digital media technology implementation with strategic and well-thought-out plans. By doing so, they can avoid being left behind by the rapidly evolving technology landscape as well as the massive technology inspired changing phase of television broadcasting. This will enable them to effectively continue to apply emerging technologies to enhance their operations.

Introduction

Scholars have argued that the origin and journey of digital media, its specifications, pros and cons, applications, and prospects are both interesting and important to discuss so as to explore the overall probabilities in conventional media operations, which is now at the junction of convergence between news production and news consumers (Kuyucu, 2020). Digital media content, just like traditional media content, has its audience; however, the main reason for using digital platforms is the ease with which people can access the content (Berger, 2017).

The penetration of digital platforms may have resulted in the development of ordinary people who use digital media to rely on an impressive transformative new environment to access news (Masele & Magova 2018). As a result, traditional media management must work on their digital platform production, content production, and audience feedback to adapt to the situation, as they cannot ignore media technological changes.

According to management studies conducted by Sotanasathien and Thammathirat (2021). (2021), traditional media management is still a requirement that exists today. Traditional media remains an important source of information. Traditional media entrepreneurs can change the way they manage their media businesses. Traditional media executives can manage their businesses in the face of changes in digital media adoption. And traditional media entrepreneurs may discover new management methods. To have all of these qualifications if and only if this is defined by income level and is an exposure of newspapers and television to the consumer audience, whether more or less (Sotanasathien and Thammathirat, 2021).

Traditional media is a survivor that must imitate the content of new media. In the case of full features, specifically: Today's traditional media content must begin to abandon its original identity. Traditional media outlets must adapt their content to something new. The presentation of traditional media content today necessitates variety. Today, traditional media content must be presented in the same way that new media content is. Original media content must be presented similarly to new media. Such comprehensive features are only available if the recipient has a habit of listening to radio or television broadcasting. It is also the frequency of exposure to traditional media and the number of hours per day, whether more or less, exposed to traditional media (Sotanasathien and Thammathirat, 2021).

In terms of digital transformation as Tanzania, traditional television was required to strategize on the rise of an option to extend as the first phase of a longer transition period. As the industry adjusted its strategies to include multiple channels and content, the next wave of changes emerged with the rise of digital media production. Television is now competing for every minute of people's free time with all other media outlets, YouTube, Facebook, Instagram, and other social media. In terms of viewing, direct free-to-air television remains popular (Makau, 2018). The majority of content is watched live when it is broadcast, but the market has completely fragmented, and young audiences, in particular, are watching less and less traditional television. Furthermore, time-shifted viewing has increased, and VOD services are rapidly expanding as the primary driver at the moment (Aziz, 2014).

Brief Overview of Star Television and the Tanzania Broadcasting Corporation (TBC1)

Star Television

Star TV is a private television channel headquartered in Mwanza and owned by Sahara Media Group, which also operates two radio stations. Star TV was founded in 2000 and has a large viewership, particularly in the southern highlands zone. It also has a strong market network and a contemporary OB facility, allowing it to broadcast live out-of-studio shows (Media Measurement Service 2021 cited in Lymo, 2023).

It is a commercial free-to-air channel, transmitting on all TCRA-licensed multiplexes. It is among the top nationally licensed stations in terms of reach, audience share, and advertising revenue. Its programming is accessible to the entire East, Central, and Southern Africa area platform. Star TV has also grown its digital media platform portfolio since 2015, launching services such as Instagram, Facebook, YouTube, and Twitter. It was unavoidable that the platform would require a disruptive makeover to accommodate the new acquisition, manufacturing, distribution, and consumption processes (Media Measurement Service 2021).

According to Geopoll's Media Measurement Service 2021, Star TV is the sixth most viewed TV station, with a large percentage of audience share. The station, which broadcasts news and current affairs, also shows entertainment, drama series, sports, and sitcoms. According to the Tanzanian Communication Regulatory Authority (TCRA), Sahara Media Group Ltd (SMG) owns 100% of the license for Star TV. SMG, previously known as Sahara Communication and Publishing Company Ltd., was founded in 1992. SMG operates three media outlets: Star TV, Radio Free Africa, and Kiss FM. Dr. Anthony M. Diallo, SMG's founder and current Chairman and CEO, is an ex-Minister in several positions. The government provides the corporation with information and news, but does not provide significant backing through state advertising (Media Measurement Service 2021).

Tanzania Broadcasting Corporation (TBC1)

TBC1 is a public broadcaster that primarily aims to educate, entertain, and inform the people. TBC1 is required to fulfill its mandate by providing quality programming that appeals to all citizens, regardless of ideology, race, religion, gender, class, or physical disability. Since its inception, TBC1 has fostered trust among Tanzanians. TBC1's audience values the voice it provides through news and programs. TBC1's convergence digital department has also launched digital platforms like as YouTube, Instagram, Facebook, and Twitter since 2015 as part of its objective to ensure that all audiences have access to information in order to keep up with technological advancements in the media communication channel (Media Barometer Report Tanzania, 2019).

TBC1 is a government-owned media outlet, with the Treasury Register, a department within the Ministry of Finance, holding 100% of the shares. The government's interest is to employ TBC1 to further its nation-building efforts. As a result, the government expects TBC1 to be its

mouthpiece rather than speaking independently and honestly overage (Media Barometer Report Tanzania, 2019).

According to GeoPoll's Tanzania Media Measurement report, which includes viewership data for the second quarter of 2021, TBC 1 has a 15.8% audience share. This signifies that it is ranked second among all television stations, and its programming covers the entire country of Tanzania. This gives the impression that, while TBC is technically a public broadcaster, financial and political restrictions force it to function as a state broadcaster in practice. This conveys the impression that, while TBC1 is legally a public broadcaster, it has an impact because of its extensive coverage. (Tanzania Media Measurement Report, 2021).

Statement of the Problem

The advancement of communication technology in Tanzania has compelled traditional media outlets to redefine their operational strategies by adopting new media technologies in their daily operations to effectively connect with a broader audience through social and digital media platforms. Consequently, TBC1 and Star TV have been steadily integrating these changes to align with current media practices that necessitate the integration of communication technology.

To stay current in the digital age, Star TV and TBC1 have been evolving their operations accordingly. As a result, they have continued to improve their performances and engage their audiences. With online multimedia content quickly becoming the most accessible and rapidly growing source of news, Tanzania's mainstream media has shifted its focus to digital platforms like social media sites such as YouTube, Twitter, and Instagram, as well as online versions of newspapers, radio stations, and TV channels.

As digital communication technology continues to disrupt the worldwide landscape of television broadcasting and compelling broadcast stations in Tanzania to adopt for their operation, there is lack of understanding about such adoption is impacting on the Star TV and TBC1. It on this basis that this study investigated the influence of digital communication technology on the operations of Star Television and the Tanzania Broadcasting Corporation (TBC1)

Objective of the Study

The main objective is to investigate the influence of communication technology on the operations of Star Television and the Tanzania Broadcasting Corporation 1 (TBC1). Specifically, the study sought to;

1. Determine the influence of the adoption of communication technology on content processing in Star Television and the Tanzania Broadcasting Corporation (TBC1)
2. To find out the effect of the adoption of communication technology on content dissemination by Star Television and TBC1

Research Questions

1. How has the adoption of communication technology affected content processing in Star Television and TBC1?

2. What is the influence of the adoption of communication technology on content dissemination by Star Television and TBC1?

Significance of the Study

The study contribute to the filling of the existing knowledge gap on the impact of communication technology on media operations specifically in Star Television and the Tanzania Broadcasting Corporation (TBC1). This implies that it will be a valuable literature for researchers engaging in related studies.

Star Television and the Tanzania Broadcasting Corporation shall find the study valuable because it will enable them to know how their adoption of digital media technologies is influencing their operations. In other words, the study shall be a feedback channel to both television stations.

Literature Review

With the arrival of digital media came an influx of user-generated content that appears to compete with mainstream media content in terms of speed of dissemination, ease of accessibility, and omnipresence of use. Furthermore, the bottom-up and interactive nature of online media appears to challenge the top-down and hegemonic structure of traditional media (Kramp, 2015; Jack 2010 cited in Nelson 2022).

Jack's point is strongly supported by Banda, (2010), who claims that changes in the landscape, structure, and practice of digital media in mainstream media have sparked a wide range of interest and concerns among various populations of society and that traditional media has found itself in a management transition as a result of the adoption of digital media platforms. Banda also claimed that the flood of information generated daily by both mainstream and digital media, particularly in the media spheres of developing countries, has called into question the reliability of this information and the media platforms that generate it. As a result, media management is a concern in the rise of digital media platforms to ensure the public receives accurate information (Banda, 2010 cited in Zeng 2019).

Digital media disrupt traditional communication channels and media, and some scholarly works have examined how these new channels differ from traditional media. Unlike traditional media, digital media requires a keen eye on audience feedback and a focus on ensuring that production and distribution are well managed. The definition of conveying information through the mainstream media has been reviewed and transformed in the media industry (Palekar and Sedera, 2015; Pegoraro, 2014; Laurell and Sandström, 2014; cited in Lang, 2021).

Content in digital media is more emotional than rational, this is influencing how traditional media should be managed. Furthermore, the impact of digital media on media innovation activities can generate interactions and bring information together to foster diversity in conveying information. Similarly, management of a literature media firm can control their innovation capabilities by utilizing digital media (Al-Saggaf and Simmons, 2015; Ooms et al., 2015; Turban et al., 2011; Huston and Sakkab, 2006; cited Issa, 2022).

The observation made by Spurk and Katunzi, (2019) on Tanzania's media sector's efforts to interrelate with technology leads News Media Organizations to rethink on exposes that technological resources to accommodate the situation by thinking on factors such as skills gaps, reaching the audience, coming up with digital plans, and the approaches resulting from technology. This was also backed up by (Robinson et al., 2019) As digital media shifts the forms and functions of content, the replicability and spread of information, and the roles of platforms, gatekeepers, and distributors, digital technology influences many management aspects in media institutions.

The comment was made that changes in the way things are done in traditional media have a significant impact on management's ability to refocus and learn how to stay in business while also experimenting with the use of digital media platforms to retain audiences (Robinson et al., 2019).

According to the Media Visibility in East Africa: Tanzania study (2021), inadequate knowledge is also cited as a reason why some media organizations are still lagging in reporting multi-media stories and utilizing technology to reach a large number of readers. However, the report indicates that media companies are still struggling to adapt to the many digital demands, such as: integrating their newsrooms to maximize the potential of convergence; creating good online content and launching apps that target niche markets with unique content; and developing new products for different consumers.

Kaewkhum (2020) conducted a research on the television industry and its role in the new media landscape within the context of the digital economy. The research objective was to study changes in the television industry in Thailand under the digital economy system, to explore the adaptation of the television industry in Thailand in the new media landscape, The study employed a mixed-method approach that included both qualitative and quantitative data. For the qualitative research, documentary research and content analysis on TV show schedules, as well as in-depth interviews with television industry professionals, were done.

For the quantitative research, survey questionnaires were distributed to viewers to investigate their viewing habits as well as their perspectives on television's functions and adaption in the changing media landscape. Findings from the study showed that technological considerations have had a significant impact on the current state of the television industry. As senders, all TV stations have deliberately modified their broadcasting and management strategies. In terms of message, the information is more personalized in order to appeal to and engage viewers. Communication routes, especially OTT channels, are increasingly being digitalized. The changes were significantly influenced by the television stations' adoption of digital media technology (Kaewkhum, 2020).

Nassanga et al. (2016) investigated the impact of new digital communication technology and computer-mediated communication on newsroom cultures among television journalists, focusing on the use of digital platforms and the internet. The study examines the impact of digital communication technology on television journalists through regional case studies from three African countries: Mozambique, Uganda, and Mali. The study found that the incorporation of

digital communication technology had favorable impact on television journalism practice because it increased information gathering, processing, distribution, storage, and community interaction, notably via digital platforms and the internet (Nassanga et al. 2016).

Also, Nassanga et al. (2016) employed a multiple case study approach to analyze television stations in Mali, Mozambique, and Uganda. It employs triangulation, which requires the use of more than one method. Because all research methodologies have limits, triangulation provides for the neutralization or cancellation of biases that result from using a single method. The study's techniques included surveys, key Informant Interviews (KII), and Focus Group Discussions. The study found that television stations in semi-urban areas or in areas with fairly good infrastructure have a better capacity for integrating digital communication technology and their sustainability, whereby they apply digital communication technology in the production and dissemination of information through the use of digital platforms as an additional way of capturing the emerging audience (Nassanga et al. 2016).

Setiadi et al., (2021) did a study on Adaptation of Multi-platform Broadcasting Management in the Disruption Era: A Case Study of Private Television in Indonesia. The study was necessitated by the massive use of digital technology with several main characteristics, such as the increasing importance of using online media platforms. The study explored how multiplatform broadcast media adjust to rapid changes occasioned by the digital media platforms. The objectives of the study were to investigate five essential aspects of broadcast production: content creation, packaging, scheduling, distribution platform, and user interface. The diffusion of innovation theory was used to discover new ways to investigate five essential aspects of broadcast production. The research method was descriptive qualitative with in-depth interviews, observations, and documentation studies as the primary data collection methods (Setiadi et al., 2021). The study found a significant impact of digital technology on content creation and distribution. This further attests to the impact of digital media technology on media operations in various parts of the world.

Theoretical Framework

The Technological Determinism Theory was used to explain this study. In 1964, Marshal McLuhan advanced the Technological Determinism Theory asserting that mass media technology not only changes people's attitudes and behaviors, but it also causes a revolution in the way a social structure runs. The idea also posits that as new technologies arise, the way a social fabric functions changes. The main tenet of media ecology theory is that changes in the human communication system impact human survival on the planet (Jan, 2020).

According to McLuhan (1964) cited in Bright (2011), the progress of mass communication technologies assures culture dissemination in a society, which in turn helps to influence human behaviours. To add to the discussion, here is McLuhan's famous quote: "We shape our tools, and they shape us." According to West and Turner (2007), McLuhan claimed that "we have a symbolic relationship with mediated technology; we create technology and technology, in turn, re-creates who we are." According to the theory's historical perspective, technological revolutions have induced comparable changes in society from time to time.

Technological Determinism theory posits that technological advancements drive social, cultural, and economic changes, shaping the way societies operate and interact. When applied to the influence of digital communication technology on the operations of television media, this theory offers valuable insights into how digital innovations have transformed content creation and distribution. The theory related to this study because the study focuses on communication technology adoption, which causes a revolution in the mode of operations of the conventional media specifically Star TV and TBC1. To adopt to technological changes, digital media is said to be altering traditional media operations.

Methodology

The study used survey research method and questionnaire was used as data collection instrument. A total of 110 broadcasting staff from Star Television and the Tanzania Broadcasting Corporation participated in the study. The data were analysed and presented in tables.

Data Presentation, Discussions and Findings

Research Question One: How has the adoption of communication technology affected content processing in Star Television and TBC1?

Table 1: Influence of the adoption of Digital Communication Technology on content processing

Stages	Strongly agree		Agree		Neutral		Disagree		Total	(%)
	No.	%	No.	%	No.	%	No.	%		
Content organization	63	59.4	36	34	6	5.7	1	0.9	106	100
Content packaging	42	43.3	44	45.4	9	9.3	2	2.1	97	100
Restricting content to a particular audience	26	27.1	47	52.1	19	19.8	1	1	96	100
Information collection	39	39.8	48	49	8	8.2	3	3.1	98	100
Content conceptualization	33	33.7	46	46.9	18	18.4	1	1	98	100

Table 1 above shows various ways the adoption of digital communication technology has impacted on the way television stations now process contents for the audience. The data presented in the table show that the adoption has significantly enhanced content conceptualization, information gathering, content organization, content organization, packaging and restriction to particular audience. This implies that the adoption of digital communication technology has significantly improved content processing in the two television stations. Giving credence to this findings, Kaewkhum, (2020) found that the utilization of digital media platforms has positively impacted on information processing among television journalists in Thailand. This is also supported by Nassanga et al. (2016) who found that digital media adoption is redefining content processing among television journalists in Mali, Mozambique, and Uganda.

Research Question Two: What is the influence of the adoption of communication technology on content dissemination by Star Television and TBC1?

Table 2: Influence of digital communication technology on content dissemination

Impacts	Strongly agree		Agree		Neutral		Disagree		Total	(%)
	No.	%	No.	%	No.	%	No.	%		
Facilitated quick content dissemination	72	67.3	31	29	4	3.7			107	100
Facilitated the use of more than one channel to disseminate information	51	49.5	47	45.6	5	4.9			103	100
Narrowed down the dissemination of information	24	24.2	46	46.5	25	25.3	4	4	99	100
Allowed checking and verifying from other digital media	41	40.6	52	51.5	8	7.9			101	100
Changes the way audience are selected	64	59.8	37	34.6	6	5.6			107	100
Changes the way of identifying the medium of reaching the audience	42	41.2	52	51	7	6.9	1	1	102	100
Changes the way of selecting the best medium to reach the audience	39	37.9	51	49.5	11	10.7	2	1.9	103	100
Changes the way content is conceptualized to reach the audience	38	37.3	52	51	9	8.8	3	2.9	102	100

Table 2 above indicates the how the adoption of digital communication technology has impacted on content dissemination in the two television stations. The data reveal that the the adoption of digital communication technology has facilitated quick content dissemination, facilitated the use of more than one distribution channel, changed the way audiences are selected, changed the way of identifying the medium of reaching the audience, changes the way of selecting the best medium to reach an audience, and makes it easy to narrow down the dissemination of information to particular audience. The implication is that the adoption of the digital communication technology has improved content dissemination in both television stations. Setiadi et al., (2021) gave credence to this finding when it was revealed in their finding that the use of digital communication platforms strengthens information dissemination among television stations in Indonesia.

Summary of Findings

Findings from the study show that;

1. The adoption of digital communication technology has significantly improved content processing in Star TV and the Tanzania Broadcasting Corporation (TBC 1).
2. The adoption of the digital communication technology has improved content dissemination in Star TV and the Tanzania Broadcasting Corporation (TBC 1).

Conclusion

The adoption of digital communication technology has transformed the operations at Star TV and TBC1, modernizing production processes, making content more personalized, and improving accessibility and interactivity. The adoption has also revolutionized content distribution, broadening the scope and availability of information, and equalizing the creation and distribution of content. The implication is that digital platforms are enabling media and content creators to instantly connect with larger audiences, fostering unprecedented levels of engagement and interactivity. The impact of the adoption on the daily content dissemination practices of TBC1 and Star TV has been profound, surpassing traditional media methods and enabling greater flexibility in adapting to evolving market demands.

Recommendations

Based on the findings of the study, the following recommendations were made;

1. Star TV and TBC1 must continue to keep themselves updated with the latest technological advancements and trends for effective compliance with the demands of modern television broadcasting. By staying informed, Star TV and TBC1 can better understand the applications of digital media technology on their operations and make informed decisions.
2. Owners of Star Television and TBC1 must ensure that their infrastructure is capable of handling the changes that come with digital media technology implementation. They should assess their existing technology stack and identify areas that require upgrades or improvements so as to be relevant in this communication technology driven era.
3. Again, broadcast staff of Star TV and TBC1 must continue to approach digital media technology implementation with strategic and well-thought-out plans. By doing so, they can avoid being left behind by the rapidly evolving technology landscape as well as the massive technology inspired changing phase of television broadcasting. This will enable them to effectively continue to apply emerging technologies to enhance their operations.

References

- African Media Barometer (2019). *A Home-grown Analysis of the Media Landscape in Africa Tanzania 2019*. Friedrich-Ebert-Stiftung (FES). Retrieved December 1, 2022, from: https://tanzania.fes.de/fileadmin/user_upload/Tanzania_AMB_2019.pdf
- Aziz, B. (2014). *The Impact of New Media on Journalism Practice in Tanzania*. Dar Es Salaam University Press.
- Berger, G. (2017). *Return of a Development Role for Africa's Media*. New Media Lab. Retrieved November 13, 2022, from: <http://nml.ru.ac.za/blog/guyberger/2010/11/18/return-development-role-africas-media.html>

- Bright, C. (2011). Exploring media theories. *Journal of Communication*, 3(2), 26-41
- Jan, A. (2020). Marshal McLuhan's technological determinism theory in the arena of social media. *Theoretical and Practical Research in Economic Field*, 2(22): 133-137.
- Kaewkhum N. (2020). Television Industry and its Role in the New Media Landscape under System of Digital Economy. A PhD Thesis submitted to the National Institute of Development Administration of Nigeria.
- Kuyucu, M. (2020). *Social Media and Journalism*, (1st ed), Academic Studies in Social Sciences, Cetinje-Montenegro.
- Lang, M.G. (2021). Media practice and digital platforms: An analysis. *Journal of Media Research*, 7(1), 1-19.
- Lymo, A. (2023). Digital media in nonprofessional terrain. *Journal of Information Technology*, 3(1), 11-27.
- Makau, J. (2018). Digital broadcasting readiness and challenges in Tanzania: A case study. Tanzanian. *Journal of Communication Studies*, 14(2), 78-94.
- Masele J. & Magova G. (2017). Towards social media usage for promotional activities in Tanzanian pension schemes: a factor scores regression analysis of perceived factors. *Business Management Review (BMR)*, 20(1), 37-52.
- Nassanga, L.E., Manyozo, L., & Lopes, C., (2016). DCT-Television in Africa: How the uptake of DCT has influenced the newsroom culture among television journalists. *Journal of Broadcasting* 5(2), 1-17.
- Nelson, W. (2022). A discourse on digital media and information dissemination. *Journal of Media Studies*, 6(1), 1-15.
- Robinson S., Seth C. Lewis & Matt Carlson (2019). Locating the "Digital" in digital journalism studies: Transformations in research. *Digital Journalism*, 7(3), 368-377.
- Setiadi A.A, Afifib S., Suparnoc A.B, (2021). Adaptation of multi-platform broadcasting management in the disruption era: A case study of private television in Indonesia. *Asian Journal of Media and Communication*, 5(2), 13-29.
- Sotanasathien, S. & Thammathirat, S. (2021). Cross- media management from mass media to online Media. *Academy of Accounting and Financial Studies*, 25(3), 1-13
- Spurk, C. & Katunzi, A. (2019). Yearbook on Media Quality in Tanzania 2018, Synthesised report on overall results. Media Council of Tanzania and Spurk Media Consulting Ltd.
- West, R., Turner, L.H. (eds). 2007. *Introducing Communication Theory: Analysis and Application*, (3rd ed.). McGraw Hill.
- Zeng, L. (2019). Digital communication: A round table discussion. *Journal of Policy Studies*, 11(1), 42-58.