

MAKERERE



UNIVERSITY

**FROM PRINT TO DIGITAL: EVOLUTION, ADOPTION AND CONTRIBUTION
OF ePAPERS IN THE UGANDAN PRESS**

By

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DECLARATION

I, Deogratias Arinaitwe Ruyendo, hereby declare that this thesis titled "*From Print to Digital: Evolution, Adoption and Contribution of ePapers in the Ugandan press*" is original and has not been presented to any University for the award of a degree; and, where it is beholden to other work, due acknowledgment has been made.

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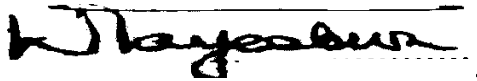
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APPROVAL

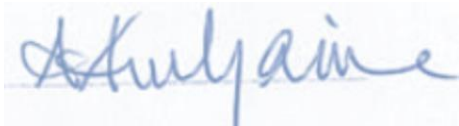
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DEDICATION

To my parents: Vincent Beyanga and Josephine Emily Garubanda for selflessly providing me with an education. May you continue to rest in God's glory and paradise.

To my family: Maureen KaramagiRugyendo, Lowena Mwiza Rugyendo, Laurean Rugambwa Rugyendo, Leanne GarubandaRugyendo and Lathan RutatiinaRukiraboonaRugyendo for the immense sacrifice, unwavering, patient and selfless support all through. Without you, this journey would not have been possible to complete in time.

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ABBREVIATIONS AND ACRONYMS

4IR	:	Fourth Industrial Revolution
CPE	:	Critical Political Economy
DP	:	Democratic Party
eBVM	:	ePaper Viability Model
ERP	:	Economic Recovery Program
GAI	:	Generative Artificial Intelligence
GDP	:	Gross Domestic Product
ICTs	:	Information and Communication Technologies
IMF	:	International Monetary Fund
ITU	:	International Telecommunications Union
KFC	:	Kentucky Fried Chicken
MUREC	:	Makerere University Research Ethics Committee
NMG	:	Nation Media Group
NRM	:	National Resistance Army
MoICT&NG	:	Ministry of ICT and National Guidance
MTN	:	Mobile Telecommunications Network
NUP	:	National Unity Platform
NVPPCL	:	New Vision Printing & Publishing Company Limited
SAPs	:	Structural Adjustment Programmes
SDGs	:	Sustainable Development Goals
SST	:	Social Shaping of Technology
SPEF	:	SocialTechnical Political Economy Framework
TD	:	Technological Determinism
UBOS	:	Uganda Bureau of Statistics
UCC	:	Uganda Communications Commission
UPC	:	Uganda People’s Congress
WB	:	World Bank
WEF	:	World Economic Forum

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ABSTRACT

The evolution, adoption, and contribution of electronic newspapers (ePapers) remain underexplored in Global South media scholarship, particularly Uganda. Existing literature often conflates ePapers with social media or frames them as threats to print journalism, overlooking their distinct potential. A key unanswered question is whether ePapers can viably deliver traditional newspaper services amid digital transition. This study addresses that gap by examining the case of *New Vision* and exploring factors responsible for the evolution of ePapers, the drivers behind their adoption and their contribution in the Ugandan press. Grounded in technological determinism, social shaping of technology, and critical political economy, the study highlights how technological innovation, socio-economic pressures, and institutional dynamics shape the evolution, adoption and contribution of ePapers in the press. Using key informant interviews and netnography, findings reveal that technology and socio-cultural factors such as the Structural Adjust Programmes of the 1990s, internet/ telecommunications penetration, social media, and COVID-19, are central to ePaper uptake in the Global South. ePapers have transformed news dissemination, redefined economic models, elevated digital archival journalism, and offer potential resistance to press censorship. The study introduces an ePaper Business Viability Model offering insights into sustainable revenue and digital resilience for newspapers in the Global South. Recommendations include further research on the digital divide, cultural-technological intersections, and more case studies. The study further recommends that newspapers should improve accessibility, innovate content formats, monetize archives, and integrate Artificial Intelligence into their ePapers for better results. Strategic partnerships with other industries are essential. Policy interventions must prioritize broadband infrastructure, digital literacy, media freedoms, and fair competition to foster public-private collaboration and digital transition. This study contributes to rethinking digital press viability in Uganda and offers a roadmap for sustainable media transformation across similar contexts.

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 Introduction

On 31st July 2024, the Chief Executive Officer of the *New Vision* newspaper in Uganda, Don Wanyama, announced a loss position for Financial Year 2023/2024. Shareholders of Uganda's leading daily newspaper went into a third consecutive year without earning dividends. He wrote:

The main contributor to this performance is the challenging business environment due to declining traditional media newspaper sales and advertising revenue spent across the different platforms, coupled with emerging technologies and the increase in prices of raw material inputs and other operational costs. (New Vision, July 31, 2024).

Wanyama's revelation shows a newspaper in a polycrisis: a combination of emerging disruptive technologies and a challenging environment, which have caused declines in newspaper profitability. How can we understand this phenomenon? Is Uganda alone in this? Not at all. Globally, traditional media, especially newspapers, are in decline. Emerging technologies and dynamics of ruthless market forces have constrained print media (Buller et al., 2024).

This announcement seemed to echo the justification for the adoption of ePapers 10 years earlier by the Vision Group. While debuting the ePaper, Robert Kabushenga, the then CEO reasoned that the justification for adopting ePapers was because electronic news platforms such as social media were growing faster than the print and it was high time the newspapers transitioned to ePapers to enable Ugandans, even those in the diaspora, to access good journalism in the comfort of their homes at an affordable price (Vision Group, 2015).

By 2023, the transition from legacy media to online platforms in Uganda was no longer a luxury but a strategic necessity. This transition, characterized by the rise of the ePapers, represented a response to the rising costs of traditional print and the changing habits of a digital-native audience (Salmon, 2023). Salmon further observed that this shift aligned with the broader historical-political economy shift where Ugandan media houses were evolving from purely informational entities into tech-driven platforms seeking to balance traditional journalistic roles with new-age financial sustainability.

Newspapers face layoffs, closures, and other cuts due to rising costs, falling advertising revenues, and sharp declines in traffic from social media. The failure by news media to resist pressures from powerful businesspeople or governments looking to influence coverage and control narratives, has left traditional media troubled on a global scale (Newman, 2024). To remain afloat and independent, many media outlets have turned to digital subscriptions models, erecting paywalls and ePapers as an alternative revenue stream to print (Eshitemi, 2025).

This study, therefore, explores the evolution, adoption and contribution of electronic newspapers (ePapers) in the Ugandan press, using the case of New Vision newspaper. New Vision was selected as the primary case because its status as Uganda's leading state-owned media conglomerate provides a unique, high-stakes vantage point for analyzing how a dominant legacy institution navigates the dialectical tensions between traditional print dominance and the necessity of digital transformation in a constrained market (IPSOS, 2019). It argues that the transitions and adaptations to digital formats by newspapers in the Global South are consequence of sociotechnical and political economy forces that have combined to occasion a tectonic shift in the Ugandan press landscape. The study utilizes an African context, Uganda, where the dearth of communication research on digital media renders the Global North to dominate literature on ePapers. The central motivation behind this study is to contribute to the ongoing debates and discussions surrounding the adoption of new media technologies in Uganda's media industry, particularly focusing on the evolution, adoption, and contribution of ePapers. To test this argument, this study adopts a qualitative approach privileging in-depth interviews with key informants and netnographical research. The key findings, as we shall see in Chapters 4, 5 and 6, reveal the centrality of technology and social-cultural drivers, unique to the Global South, particularly Uganda, in the transition to ePapers. This effort constitutes part of the de-westernization of communication studies, forming a diffused, multi-pronged intellectual movement that has produced vibrant literature in recent years from around the world (Waisbord, 2022).

This effort further benefits extant scholarship from Global South whose viewpoints indicate a nature of communication research dominated by Global-North perspectives (Mare, 2019). Adaptation of ePaper technology in Uganda is, therefore, not just a response to a media polycrisis but to technological and political economy imperatives unique to Global South contexts. Newspapers are reimagining themselves like the Pacific Island nation of Tuvalu which is

threatened by rising sea levels due to climate change. Tuvalu intends to create a digital replica of itself in the metaverse (like the ePaper adoption by newspapers), becoming the first nation to digitally preserve its culture and identity as its physical land may disappear under water soon (Yeo, 2024). Like Tuvalu's national-digital self-replication, newspapers are replicating themselves digitally. This is a development that demands academic inquiry on how technology is reshaping traditional communication systems in complex and rapidly-changing contexts (Habil et al., 2023; Kosa et al., 2023).

Akin to Tuvalu's plan to digitalise itself into an immersive online virtual and real technology realm, combining Augmented Reality (AR) and Virtual Reality (VR) technologies (Dwivedi et al., 2022; Zhang, 2024), technology is fast reshaping traditional enclaves, including media systems. Global North literature continues to present emerging technologies reformatting business transactional models and systems straddling complex political, environmental, and economic contexts (Latino et al., 2024). Additionally, technology is disrupting analog systems – making prediction of phenomena close to reality with the metaverse as the ultimate form of internet (Zhang, 2024). Placed in the newspaper context, technology has bred a virtual environment that blends the physical and the digital, facilitated by the convergence between the internet, web technologies, and Extra Reality (XR) technologies (Sylaiou et al., 2024).

More so, technology has bred cannibalistic effects on existing media platforms: *Google, YouTube, Facebook, Instagram, X (formerly Twitter)* influence news consumption patterns (Checa & Bustillo, 2023). For instance, per early 2025, there were 5.9 million Google searches every minute, 8.5 billion searches per day and 3.1 trillion searches per year (Kaul, 2025). Compare this to only millions of physical library visits globally in the same year, as reported by the International Federation of Library Associations and Institutions (FLA): the threat of emerging technology to analog systems remains.

When it comes to technology giants such as Facebook, TikTok, YouTube and Google, the use of metrics and Artificial Intelligence algorithms to tailor content to audiences, thus attracting advertising revenue away from traditional media, has been the hallmark of the crisis of the traditional newspapers globally. Technology giants like Alphabet (Google/YouTube) and Meta (Facebook/Instagram) now command revenues that eclipse the entire global newspaper industry,

with Alphabet alone earning nearly double the revenue of all global newspapers combined in 2025 (Newman, 2024).

The foregoing interplay of technology and operating environs of print newspapers suggests the *polycrisis* confronting newspapers globally. It presents a convergence of multiple, interconnected crises threatening their survival and sustainability. This *polycrisis* is conflating issues such as financial instability, declining copy sales, dwindling advertising revenues, shrinking readerships, and increased competition from digital platforms and social media (Bleyer-Simon *et al.*, 2024; Djourelova *et al.*, 2024).

The shift in audience consumption preferences toward digital and mobile formats has placed pressures on print media to either adapt or die, forcing adaption to new technological demands while struggling with issues of misinformation, increased operational costs, and journalistic integrity in a rapidly evolving digital landscape. These interconnected crises have threatened the viability of print newspapers in a multimedia-dominated information ecosystem, including the Global South. This explains why newspapers (press) have been compelled to explore new avenues for reaching wider audiences and generating revenue (Bhuller *et al.*, 2024). One prominent adoption emerges from ePapers seeking to counter alternative media platforms such as *Google* and *Facebook*. This adoption further enhances the production of the traditional paper, its consumption patterns, the cultural value therefrom with positive implications for the environment and media viability, aspects that require thorough scholarship.

It is further important to note that this study is strongly reinforced by the June 2025 market performance report from the Uganda Communications Commission (UCC), which indicates a rapidly digitizing Ugandan communication landscape. For example, the report reveals 55.8 million registered mobile subscribers, 17.6 million smartphone users, and 16.5 million mobile internet subscriptions (UCC, 2025). The same report highlights how the Ugandan population is increasingly positioned to consume digital content. The nation now exhibits massive digital engagement on social media with 9.2 million on WhatsApp, 8.8 million on TikTok, 1.1 million on X, and 6.1 million on YouTube. This is coupled with 245 million gigabytes of data downloaded in a space of three months and 21 billion mobile money transactions.

These numbers reveal the urgency of understanding how digital platforms such as ePapers have the opportunity to leverage this digital momentum to sustain not just journalism but also to pave the way for viable business models in the media ecosystem. And as traditional print media struggles to maintain relevance, ePapers emerge beyond the technological alternative label to a strategic response tool to Uganda's evolving digital realities and audience behaviour. Furthermore, these figures highlight a digital migration that renders traditional print distribution increasingly obsolete and positions the ePaper as a vital, high-reach alternative for media sustainability in the Global South.

Therefore, the desire for newspapers to extend their reach beyond traditional print readership and tap into the vast and growing online audience, raises questions of whether ePapers are an efficacious response, in places like Uganda. While providing a digital format of the print edition (Putri, & Purwanda, 2023), ePapers may offer the convenience of online access. Available literature from the Global South shows that this transition to digital, or digitalization, has not only catered for the evolving preferences of readers but offered the press an opportunity to embrace digital content delivery and monetization (Taremwa, 2021). The efficacy of the digital transition, however, seems to elude scholarly effort in Uganda. The dearth of literature in Uganda, and much of the Global South on how these transitions cater for evolving readership preferences, content delivery via ePapers and their contribution, calls for academic enquiry in a region where communication research is dominated by theories and epistemologies of the Global North-oriented epistemologies (Chibuwe&Muromo, 2024; Mare, 2019).

2.2.5 Ugandan Press as Precursor to ePapers: A Historicisation

The brief historical outline made here is intended to show that ePapers in Uganda today are rooted in the country's century-old evolution of newspapers as part of the country's broad mediascape. This implies that there may be continuities and discontinuities in the trajectory of her media development, especially the press, which have bearing on the present-day ePaper phenomenon. The earliest traces of print media in Uganda date back to 1900 when the first newspaper, *Mengo Notes*, owned by the Church Missionary Society (CMS), came alive in Mengo, Buganda, then a colonial administrative region of the British Protectorate of Uganda (Nsoba, 1980). By virtue of its ownership, the paper concentrated on religious activities. A little bit of its coverage addressed

colonial administration. It was renamed *Uganda Notes* after three months. Seven years later, the CMS started a Luganda version, *Ebifa Mu Buganda* (Issues in Buganda), to reach a much wider audience, especially the royal family and the local community.

In 1912, the White Fathers Congregation of the Catholic Church in Uganda launched their own newspaper called *Munno* (loosely trans. "Your Brethren"). It targeted the catholic faithful and provided a watchdog role over the colonial administration (Lubega, 2019; Nsoba, 1980). A few months later, the *Uganda Herald*, founded in 1912, dominated until the mid-1950s (Gariyo, 1992; Mbaine, 2003). During this period, colonial laws restricted African media, but private newspapers which emerged later, like *Ssekanyolya* and *Munyonyozi*, would play roles in pre-independence struggles, highlighting issues like economic exploitation and land distribution (Gariyo, 1992). For example, *Ssekanyolya* and *Munyonyozi* played a crucial role in holding the colonial regime accountable; they criticized colonial policies and injustices (Mbaine, 2019; Mugumya, 2020), highlighting issues like the Asian agents' monopoly over trade and control over agricultural export crops, which marginalized Africans from participating in trade (Mbaine, 2019). The newspapers condemned forced labor and the unfair distribution of land that left many Africans landless or as squatters (Mugumya, 2019). These newspapers gave a voice to young anti-colonial agitators, such as the Young Baganda Association and Uganda National Farmers' Union, in the central region.

In 1910, colonial administrators enacted the Newspaper and Surety Ordinance to protect colonial political turf and economic interests from African media entrepreneurs (Gariyo, 1992). This law banned the publication or printing of newspapers within the protectorate unless a person or company executed a bond of Shs. 6,000, equivalent to Uganda Shillings 1,090,668 million (Approximately \$295) in today's currency when adjusted to inflation, and registered with the Registrar of documents (Gariyo, 1992). Non-compliance with this law resulted in a penalty of six months in jail or a fine not exceeding Shillings 1,500/= (Gariyo, 1992; Mbaine, 2003). The conditions were further tightened with the enactment of the Press and Censorship Ordinance 1915, giving the colonial governor the power to establish a press censorship board and revoke the order at any time (Mbaine, 2003).

Despite these limitations, the first private African newspaper, *Sekanyolya* (The Dawn), began publication in 1920 (Gariyo, 1998; Mbaine, 2003). Its editor, Daudi Basudde, was active in the Baganda Bataka Party and the Buganda Welfare Association (BWA), both advocating for land and

political reforms in Buganda kingdom (Gariyo, 1998; Mbaine, 2003). Following *Sekanyolya*, *Munyonyozi* (Star) was launched in 1928, and *Dbozilya Buganda* in 1932 (Mbaine, 2003). *Dbozilya Buganda* (Voice of Buganda), edited by Bamutta, was known for its anti-colonial and anti-Buganda establishment stance (Gariyo, 1992). Bamutta faced consequences for the paper's position and was dismissed from his position and later jailed on false charges of rape in 1932 (Gariyo, 1992). Similar political organizations emerged across Africa, starting as native associations and evolving into serious political activities (Boahen, 1985). In central Uganda, where these organizations were prominent, a vibrant press emerged, particularly in the indigenous Luganda dialect (Mugumya, 2019). This influence spread to other regions. Newspapers emerged in dialects like Runyakore-Rukiga in Western Uganda such as *Agari Ankole* (Ankore News), *Ageteraine* (Unity) and *Buseesire* (The Dawn) around 1955 (Mugumya, 2019).

Newspapers like *Sekanyolya* played a significant role in amplifying the pre-independence struggle in Uganda, often facing bans by the colonial government (Mbaine, 2003). In the 1940s, heightened agitation against colonial rule led to the emergence of newspapers reflecting this sentiment (Mbaine, 2003). *Buganda Nyaffe*, started by Daudi Mukubira in 1944, criticized colonial exploitation during the Second World War (Mbaine, 2003). These agitations resulted in riots in 1945 and 1949, targeting the colonial administration and Buganda kingdom leadership (Mbaine, 2003). In response, the colonial administration banned newspapers such as *Mugobansonga* (The Enlightner), *Munyonyozi*, and Uganda Star, and imprisoned editors like Luyima of Gambuze and publisher J. N. Tabula (Gariyo, 1992). Mukubira was also jailed, while other anti-colonial editors like J. W. Kiwanuka of Matalisi were sent to study journalism in Britain (Gariyo, 1992).

In the 1950s, with the formation of political parties newspapers became prominent partners in the struggle for independence (Mbaine, 2003). Newspapers such as *Uganda Empya* (New Uganda), *Uganda Eyogera* (Uganda Speaks), *Uganda Times*, *EmambyaEsaze* (The New Era), *Uganda Express*, and *The African Pilot* identified themselves with the anti-colonial movement (Mbaine, 2003). There was a revolt by Ssemakula Mulumba, an ex-Seminarian, Augustine Kamyia and Ignatius Musaaazi, who protested the unfair treatment of the natives involved in agro-commerce and began advocating for them to be allowed to take charge of their produce and the entire supply chain up to the market. In the 1949 *Bataka* (natives) uprising, a number of Asia properties were

destroyed in Kampala and the countryside. At the dawn of independence, there was capital flight as Indian middle class began transferring their wealth to the western world.

By 1960, internal factional interests within the nationalist movement and Ugandan society shaped the character of the press. Political parties aligned with religious factions and the Buganda monarchy emerged, and their influence extended to the press (Gariyo, 1993). The Catholic Church-owned press, for example, showed a preference for the Democratic Party, while papers like *Uganda Eyogera* supported the position of the Kabaka (king) and Lukiiko (parliament) advocating for Buganda's autonomy (Gariyo, 1993). These affiliations and political alignments highlight the influence of political-economic factors on the press. The colonial government used anti-colonial tensions as an excuse to increase newspaper fees, causing small newspapers to fold (Gariyo, 1993). By independence in 1962, several newspapers had ceased publication, leaving only *Munno* (owned by the Catholic Church), *Argus* (foreign-owned), *Taifa Empya*, and *The People* (associated with the Uganda People's Congress/UPC party) in production (Mbaine, 2003; Mwesige, 1998).

The colonial state's divide and rule tactics caused a lack of cohesion in the country during the granting of independence in 1962 (Mamdani, 2015; Mbaine, 2019). The British economic structure, characterized by the Three Cs (Cotton, Coffee, and Copper) and the Three Ts (Tea, Tobacco, and Tourism), created problems, including unfair trade policies favoring Asians and conflicts with the press (Mbaine, 2019). Furthermore, the colonial system led to restrictions on information flow through repressive colonial legal and political mechanisms (Mbaine, 2019). The press, however, soldiered on and struggled to provide a voice for pro-independence activists. Technologically deterministic factors explain this: The choice of media platforms and tools utilized by these press outlets for instance, was influenced by the prevailing technological landscape of the time. The specific mention of newspapers like *Uganda Eyogera* suggests the use of print media as a primary medium for disseminating information and shaping public opinion.

This colonial legacy left unanswered questions that continue to affect Uganda's political, cultural, and economic structure, including its relationship with the press and media (Mbaine, 2019). Three significant questions remain: the Buganda question, the northern question, and the Asian question (Mamdani, 2015; Thomson, 2003). The "Buganda question" involved Buganda's enjoyment of semi-federal status while the rest of the country had a unitary system, eventually leading to the

abrogation of the constitution in 1966 (Mutibwa, 1992). The imposition of a republican system caused further problems, including drawing the army into partisan politics and suppression of political dissent. The media became a target in this authoritarian political situation, with the arrest and detention of journalists. These unresolved tensions led to a military coup by Idi Amin in 1971. The unresolved “Buganda Question” is integral to what Moses Khisa calls “political uncertainty” in the unending search for “political settlement” in Uganda (Khisa, 2015).

During the 2004/05 constitutional review process, advocates for a federal system of government, especially Buganda kingdom, campaigned for a federal system of government to settle the “Buganda question.” Their demand for a federalism, instead of the proposed regional-tier system, remains unresolved and contentious. Supporters of Buganda kingdom insist that without a federal system, they view the central government as an occupying force (Mutibwa, 2008).

The "northern question" emerged from the north-south division perpetuated by the colonial state. The colonial administration, faced with peasant uprisings and worker strikes in 1945 and 1949, used armed forces recruited from the North to suppress resistance movements in the South (Mamdani, 2015). During the first two and a half decades of independent Uganda, this division continued until an armed rebellion led by the current President, Yoweri Museveni, brought defeat to the second administration of President Milton Obote, and the subsequent General Tito Okello regime, to create its own army, in 1986.

In using the northern ethno-linguistic community to quell resistance in the south, the colonial state set in motion a structural challenge that would continue to bedevil the country’s social, political and economic fabric. Since 1986, the North, until recently, has been the site of military campaigns led by a southern-leaning government (Rwengabo&Niringiyimana 2022). While the real cost of the armed confrontation paid by the civilian population (Mamdani, 2015), the press has been at the centre of its reporting amidst repressive laws and shutdowns. In May 1999, *Daily Monitor* was shut down and its editors arrested and charged with sedition for reporting excesses of the army’s quelling of that rebellion (Mbaine, 2003).

The “Asian question,” stems from preferential treatment of Asians by the colonial state. It resulted in tensions that have plagued post-colonial administrations (Mbaine, 2019). These tensions are rooted in the colonial period (1894-1962) and post-colonial governance 1962- 1972. Samwiri

Lwanga-Lunyigo observes in his book, *Uganda an Indian Colony 1994-1972*, that Uganda was structured into a racial hierarchy, with the British at the top, Indians in the middle, and Africans at the bottom. Indians, positioned as a buffer between the British and African resistance, exploited African labor and dominated internal commerce, earning them the reputation of being the "masters of economic imperialism." This led native Ugandans to believe that prosperity and money were associated with Indians, while they themselves were seen as poor and subordinate. Indians subjected the natives to hard labor, reinforcing their own perceived superiority and the racial hierarchy established by the British. Eventually, the native trade unionists emerged to challenge these dynamics, demanding better working conditions and pay. Their efforts primarily focused on ending British political domination rather than addressing the economic exploitation by the Indians. Native agency was suppressed, and the return of Indians in later years reinforced their perceived efficiency, while native labor was unfairly stigmatized as lazy (Lwanga-Lunyigo, 2022).

President Amin's expulsion of Asians in 1972, though, had a devastating impact on the economy. Their businesses were handed over to indigenous African traders (Mbaine, 2019). Some struggling native businesses led by Gordon Wavamunno and James Mulwana thrived without Indian competition, grew and employed native labor. The media coverage of these contestations also framed the Indian question, especially during the period of their expulsion, as a manifestation of ethno-racial and xenophobic violence in Uganda (Tayeebwa et al., 2024). Tayeebwa, Ntulume and Mbaine (2024) observe that the expulsion was framed predominantly as an "economic war" for the "economic independence" of Uganda. The Asians were framed as "foreigners" who were "exploiters," "tricksters"; and, during the expulsion, as "arsonists" and "saboteurs," pointing to how the press were driven by and made alive to the political economy imperatives at the time.

Amin's rule had far-reaching adverse effects on the media, which suffered greatly with limited freedom for journalists outside of state-owned media under military control (Mbaine, 2019). The press faced dangerous conditions; the number of newspapers decreased significantly during this period (Isoba, 1980). In April 1979, when Amin was ousted, there remained little press freedom. The fall of Amin's regime brought hope for a freer press. Newspapers enjoyed newfound freedom however short-lived. Newspapers such as *Mulengerap* published freely but their honeymoon would be short-lived as the transitional government banned several newspapers as the country prepared for general elections (Gariyo 1993; Mbaine, 2019). In early 1980, the Minister of Internal Affairs,

Paulo Muwanga, banned three newspapers; *The Citizen*, *The Economy*, *Mulengera* and *Ngabo* (Mbaine, 2019). During 1980-1985, more newspapers, such as *Aga Africa*, *Weekly Topic*, *Saba Saba*, and *The Champion*, were also shut down and their editors, such as Drake Sekeba, Sam Katwere, and Anthony Sekweyama, detained.

From 1986 to-date, the Museveni era saw the press undergo significant changes (Willis et al., 2017). Particularly, after the fall of the second President Apollo Milton Obote regime in July 1985, a military coup led by Gen Tito Okello took over, but had minimal impact on the press. Six months later, when Museveni's National Resistance Army (NRA) rebels overthrew Okello's government and assumed power on 26 January 1986, the new leader promised a "fundamental change" in the political and economic environment, including the media landscape (Willis et al., 2017).

During the initial years of Museveni's administration, the press experienced a period of growth. Journalists believed they had a role in national building. They set up over 70 publications within 10 years (Mwesige, 1998; Twinomugisha-Shokoro, 1998). These newspapers included the government-owned *New Vision* and the privately owned intendent daily *The Monitor* (now *Daily Monitor*). However, due to political and economic challenges of a small and emerging economy, the number of newspapers has since been whittled down to a few dailies and weeklies (Mbaine, 2019).

The Museveni era is significant to this study for several reasons: (i) it is the longest administration by one president since independence. (ii) it was expected to bring about fundamental changes in the country, including the press. (iii) it is during this period that key politico-technical developments, such as liberalization of the airwaves and the proliferation of digital platforms have occurred (Mbaine, 2019; Chibita, 2009). The liberalization of the media in 1993 expanded the media landscape in Uganda, allowing for the entry of new players in the market (Tusiime, 2012). Private radio stations, privately-owned newspapers (e.g. *Daily Monitor* as an independent newspaper) further diversified the media landscape (Chibita, 2009). (iv) Museveni initially showed tolerance toward the media, but later imposed an advertising ban and threatened to shut down independent press outlets like *Daily Monitor* (Chibita & Fourie, 2007). (v) during the Museveni era, particularly over the past 20 years, government has also unleashed tighter controls over critical

media, especially the legacy print press, often characterized by shutdowns of critical radio stations, newspapers, social media platforms and detention of journalists on trumped up charges.

This reversal on the promise of tolerance and media freedoms means that the rapid expansion of digital media platforms and internet penetration has led to the emergence of privately-owned online news publications and internet paywalls further affecting the survival of traditional print (Tayeebwa&Kayiira, 2024) in an uncertain political economy landscape. (vi) under the Museveni era, Uganda increasingly became a neopatrimonialism state with authoritarian and arbitrary tendencies. The media have limited lifeline outside of Museveni's firm control over their operations. Journalists who often demand government accountability are either arbitrarily pushed out of their jobs or are forced to censor themselves or run stories favourable to NRM authorities. This has constantly left a chilling effect on media freedoms and state-constructed walls against a shield-less media.

Today, the dominant newspapers in Uganda are the state-owned *New Vision* and the privately-owned *Daily Monitor*, with circulation numbers of around 25,000 and 20,000 copies respectively (ABC, 2019). The two have led the pack in adoption of digital technologies such as replica ePapers with *New Vision* moving a notch higher by adopting AI tools for content sharing and reader experience. Other newspapers, *The Observer*, *Bukedde* and *Red Pepper*, all privately-owned, have also adopted digital versions including ePapers. This shift towards postmodern digital information technologies signifies the evolving nature of these publications (Taremwa, 2021).

The foregoing historical synthesis reveals three lessons relevant for this study. First, technologies of the time, specifically printing press, allowed print-only newspapers to emerge and circulate. Levels of social development, specifically education, influenced the language and reach of newspapers. This implies that the level of social and technological education influences the nature and reach of newspapers at a given historical juncture. Second, newspapers of the time contended with important political economy issues – colonial policies, racialized inequalities in terms of access to economic opportunities (owing to colonial preference for Asians as opposed to indigenous agricultural and business class), and a privileged indigenous class of Bugandan royals. These political economy imperatives forced newspapers to play their crucial historical role: holding leaders accountable. This demand-for-accountability role-play explains the contentions

between newspaper owners and editors and the colonial state. Finally, the instrumentality of newspapers for political struggles, economic emancipation, social engineering, and policy articulation means that media is a contentious and contested domain in which technology, politics, economic and vested interests, and ideational interactions take place on a continuous basis. These observations are critical for understanding the evolution of ePapers in Uganda because the technological, political-economy, and socio-structural imperatives remain important.

1.1.1. Electornic Newspapers (ePapers): What they are and What they are not

Communication theory is bereft of a conclusive definition and articulation of ePapers. This study aims to focus on ePapers in the Global South that have evolved in countries like Uganda via the press with significant impact between 2015 and 2025. While the ePaper phenomenon, lacks a clear and specific definition (Ihlström et al., 2005), from the different scholarly definitions, ePapers are sometimes referred to as newspapers published on an ePaper device, such as an electronic reader or e-reader, offering high-quality news reading experience at any time of the day (Ihlström&Kalling, 2007).

Crina Ihlström Eriksson and her colleagues pioneered a definition of e-newspapers in the context of ePaper technology. They basically attempted a definition from the context of ‘form,’ ‘technology,’ and ‘utility’ as a convergence of traditional print qualities and digital capabilities.

In their 2005 research, Ihlström and colleagues define the ePaper as an innovation that merges the strengths of two distinct media worlds. They offer that an ePaper is a portable medium which provides the same readability, and familiar design of printed newspaper while incorporating the interactivity, video capabilities, and continuous updates of the web (Ihlström, 2005). That is the form. From a technological and utility basis, they describe an ePaper as the underlying depicting display technology that is thin, flexible, and non-sensitive, offering high contrast and the ability to be read in direct sunlight, much like physical paper (Ihlström, 2005).

In another improved definition two years later, the conceptual articulation of ePapers evolved to focus more on the ePaper as a distinct service and potential replacement for the traditional business model of the print media (Ihlström&Kalling, 2007). The scholars conceptualized the ePaper as a newspaper service on an ePaper device, emphasizing that it is not merely a ‘digital replica’ such as 72 dpi, or Dots Per Inch, online PDF, but a high quality (170 dpi) reading experience meant to

be portable and accessible ‘antime and anywhere.’ From a utility perspective, they identify it as a new mobile innovation that requires its own business model framework rather than a simple transfer of the print model to a digital screen. I speak to in a Chapter 8 where an ePaper Business Viability Model has been preferred using empirical findings at New Vision newspaper.

From another definition, ePapers are viewed as digital newspapers that can be quickly, comprehensively, reliably, and remotely accessed by subscribers (Deacon, 2007). Others see them as webpages or applications that resemble newspapers and can be accessed using various technologies, facilitating fast and reliable searches (Suijkerbuijk, 2014). ePapers technology replicates the appearance of text on paper providing comfortable reading experiences with wider viewing angles and optimal readability in ambient light conditions (Suciu et al., 2016).

From the German Audit Bureau of Circulation (IVW), ePapers are defined as the digital edition of a press publication which is identical to its print counterpart in terms of content and layout. These ePapers are optimised PDF versions of a newspaper or magazine which are made available digitally to readers as well as or in place of the print edition (Lamour, 2023). The *FOCUS* Magazine in Germany spells out the utility of its ePaper version:

The FOCUS ePaper is the PDF version of the print magazine and is perfect for downloading, reading, saving and printing on PCs and Macs. We recommend the FOCUS magazine app [interactive ePaper] for reading on tablets and smartphones. This digital version is equipped with reading mode and includes additional content such as video, audio and links. Subscribers can sign in on up to three mobile devices at the same time. Once downloaded, the issues are also available offline (Focus Digital, 2024).



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Fig 1: A screenshot of New Vision showing its ePaper copy of September 4, 2025

In Uganda’s context, this study considers the scholarly definition of ePapers as replica digital versions of their print editions which are digital document-like available in PDF, with standard features for sharing, archiving, retrieving and printing electronic documents (Ihlström et al, 2005; Hanumanthappa&Nagalavi, 2015). In the publishing industry, ePapers have become a new digital business model to locate information. They are searched comprehensively, quickly and remotely by subscribers. Readers can access ePaper news in high quality forms anytime of the day (Bucher et al., 2005; Deacon, 2007; Ihlström&Kalling, 2007; Tamara et al., 2020).

From these two definitions, the study synthesizes ePapers as electronic newspapers which resemble the print versions, often optimized in PDF format as distinct media platforms, to drive additional readership to their print replicas, while preserving familiar appearances and experience of reading printed newspapers (Ruyendo et al., 2025. This agrees with Suciú et al (2016), who emphasize utility benefits of ePaper technologies powering the content or the user. The ePaper technology provides newspaper companies with the possibility of publishing a portable digital ePaper with the same readability as in print media. That way, the ePaper converges print and online with the best from two worlds by offering the overview and familiar design of the printed edition and interactivity. Thanks to the Internet of Things (IoT), chances are increasing for convergence

of wireless connected devices such as WiFi, iBeacon and ePaper, to continuously evolve towards larger, highly scalable and more flexible networks to address different information needs (Alaba, 2024).

In Uganda, there are other forms of ePapers which do not necessarily mirror the print press as periodical stand-alones. These include form the categories of corporate newsletter publications such as ICPAU E-News (Institute of Certified Public Accountants of Uganda), UGEITI Newsletter (Uganda Extractive Industries Transparency Initiative), FUE "The Voice of Employers" (Federation of Uganda Employers), SBIL Investment Newsletter (Stanbic Business Incubator) and URBRA News (Uganda Retirement Benefits Regulatory Authority), among others. Overall, ePapers mirror an adaptive traditional print media to a digital revolution, offering cost effective delivery, measurable audience engagement and enhanced interactivity (Bucher et al., 2005; Buschow & Wellbrock, 2023). What is preserved is the visual identify of print formats remains their subscription-based model and PDF-like formats that enable portability, offline access, and multimedia –integration. These features, which aim to reduce paper usage through orienting of newspapers, align well with sustainability goals such as UN SDG #13 which calls for urgent action to combat climate crisis.

Conceptually, ePapers dwell in a unique place within digital journalism, which is different from online-only news websites and hybrid platforms. This is due to their replication of their print edition and fixed publication cycles (Nossek et al., 2015). Whereas some digital products may mimic ePaper formats, such as newsletters, they are deficient on the journalistic lineage, heritage and editorial structure of newspapers, which calls for definitional precision. (Shapira et al., 2009; Soni, 2020).



Fig 2: A screenshot of Research Finds News website showing its online-only interface of June 6, 2025

Examples in Uganda such as New Vision, demonstrate how legacy media can leverage digital formats to enhance readership, foster interactivity and generate new revenues. The new format obviously reinforces their relevance in a rapidly transforming media ecosystem. In this conceptual framing, a methodological inquiry is invited into format differentiation, user engagement metrics, and the socio-economic implication of digital press innovation. We can therefore, draw inferences to view ePapers in the following lenses:

- (i) The intricate interplay between social and technological forces during the initial stages of digitalization seems to cut across time and space.
- (ii) The agency of social actors in shaping technology, and the ability of successive technologies in driving sociocultural and political-economic change, should be observable in and beyond Uganda.
- (iii) Context – political economy and societal structures – matters in the adoption and impact of technologies; and
- (iv) The potential for techno-products, such as ePapers, to acquire independent influence upon subsequent media processes and trajectories, cannot be overemphasized.

This inferential summation raises empirically observable processes that I speak to in theoretical promise of the Socialtechnical Political Economy Framework (SPEF) that I elaborate in Chapter

Two. The framework enables investigating the trajectory of media evolution, ownership, regulation, and control, and political economy factors that shape the press landscape in a changing society like Uganda without degenerating to deterministic or overly relativist biases.

Empirically, one can focus on the role of specific societal forces and media technologies—not an unspecified array of all societal and technological influences—in transforming media practices and processes. The reciprocal relationship between media technologies and social actors, and how they influence each other and impact social, political, and economic processes, can be interrogated. This highlights opportunities and challenges presented by technological advancements to the given political economy landscape. Hardly any single theory would capture these interrelated but complex issues that simultaneously undergird contemporary digitalization in the media industry. Yet, these aspects of the ePaper raise fundamental questions about media viability, the accessibility of ePapers, business modelling, and the broader relevance of ePaper as media in itself and as archival material.

1.1.2 Redefining the ePaper: From Print Replica to Optimized Digital Edition

the ePaper and its production process within the Ugandan news ecology, it must be understood not merely as a "digital replica," but as a strategically compressed and curated multimedia product that sits at the intersection of print tradition and digital immediacy. The production process begins with the "flat-planning" of the traditional newspaper layout, which is then exported and transformed through specialized digital publishing software into a high-resolution PDF format; crucially, this file undergoes a specific optimization phase to reduce file size for data-sensitive Ugandan consumers, followed by the integration of metadata, hyperlinked archives, and a manual delivery sequence via encrypted WhatsApp bot links and web portals. This process distinguishes the ePaper from standard web articles because it preserves the "integrity of the edition"—offering the curated authority and finite structure of print—while overcoming the physical bottlenecks of Ugandan road infrastructure and high distribution costs. By situating this product within a media system defined by high mobile-first engagement and low fixed-line internet penetration, the ePaper emerges as a unique "bridge medium" that utilizes digital affordances to deliver a traditional journalistic product, thereby problematizing its status as a mere copy and establishing it as an evolved, platform-specific news form.

1.2. Background to the Problem

The main problem with communication research consists in the inadequate scholarly efforts geared toward understanding the evolution, adoption, and efficacy of newspapers. This problem is rooted in our limited appreciation of the unique distinctions among the various communication products enabled by the internet, AI, virtual reality technologies, and specifically the crises now afflicting the press. Globally, newspapers are operating in a polycrisis. In 2020, the Economist editorial reported: “The newspaper industry is taking a battering; advertising sales and circulation are collapsing even as online traffic surges.” The most-hit victims of this “battering” were prominent newspapers such as the Yorkshire Post, the Scotsman, and other titles that experienced reduced circulation due to the COVID-19 pandemic.

A similar trend in Europe at Daily Mail, Guardian, and Metro, the Jewish Chronicle and the Jewish News, reveals declining revenues from print and advertising among global newspapers despite a silver lining presented by new digital subscriptions. Obstacles like declining readership and advertising sales are amplified by digital media that seem to threaten the significance of newspapers. Social media platforms and COVID-19 aftereffects have also militated against the global newspaper landscape, especially in Uganda (Tayeebwa, 2016; Walulya& Moges, 2022). Additionally, market dynamics, including electronic distribution, mergers, globalization, precision productivity, and digitalization, have also reshaped the newspapers' conventional roles (Sorescu& Schreier, 2021).

With Generative Artificial Intelligence (GAI) today, newspapers compete with robot-generated content written at supersonic speeds. There are no significant differences between news articles generated by AI and those written by professional journalists (Barrolleta& Sandoval-Martín, 2024). It has become difficult for newspapers to keep audiences alone. Even more difficult is keeping display advertising where Google is a direct competitor and, on whose platform, previous print advertisers like Samsung, Apple, Mobile Telecommunications Network Uganda (MTN Uganda) are advertising online and cheaply. In other word, big companies like Kentucky Fried Chicken (KFC) have become a real advertising threat to newspapers globally because in using AI algorithms, they have become more audience-knowledgeable than the newspapers.

Additionally, the COVID-19 pandemic, which engulfed the globe in 2020, lethally accelerated newspapers' problems. It propelled a shift towards more digital, mobile, and platform-centric media landscapes. The pandemic forced newspapers to suspend operations, leading to declines in retail copy sales, advertising cuts, and distribution challenges (World Bank, 2020). This prompted scholars to question the importance of newspapers in the face of shrinking circulation and advertising revenues during the digital transition (Bakke & Barland, 2022).

In the USA, between two and three local newspaper titles close each week leaving huge swathes of the country as so-called 'news deserts' (Newman, 2024). The situation is blamed on COVID-19. But the pandemic only exacerbated a collapse that was already in motion due to the growth and spread of the internet-based online media, e-books, streaming radio, social media, and other media (Samawi & Haryono, 2024). A report by the Reuters Institute Digital News Report of 2024 reveals that after a period of growth in 2014–2019, followed by a boost during the COVID-19 pandemic, many news publishers are experiencing struggles as they readjust their business models in an attempt to build a strong foundation of digital reader revenues (Newman et al., 2024).

The Reuters Institute for the Study of Journalism and Oxford University found that between 2015-2022, twelve news markets globally presented a shift in news consumption to mainly news websites and social media platforms among the 18-24 age category. The institute also revealed that younger audiences are favoring alternative access through social media, search engines, or mobile aggregators such as Google, with Facebook, YouTube and the youth-centric platforms such as TikTok reaching 44% of 18–24 -year-olds globally (Newman, 2023). This shift presents a 20% inclination toward digital news that is rapidly expanding (Newman, 2023).

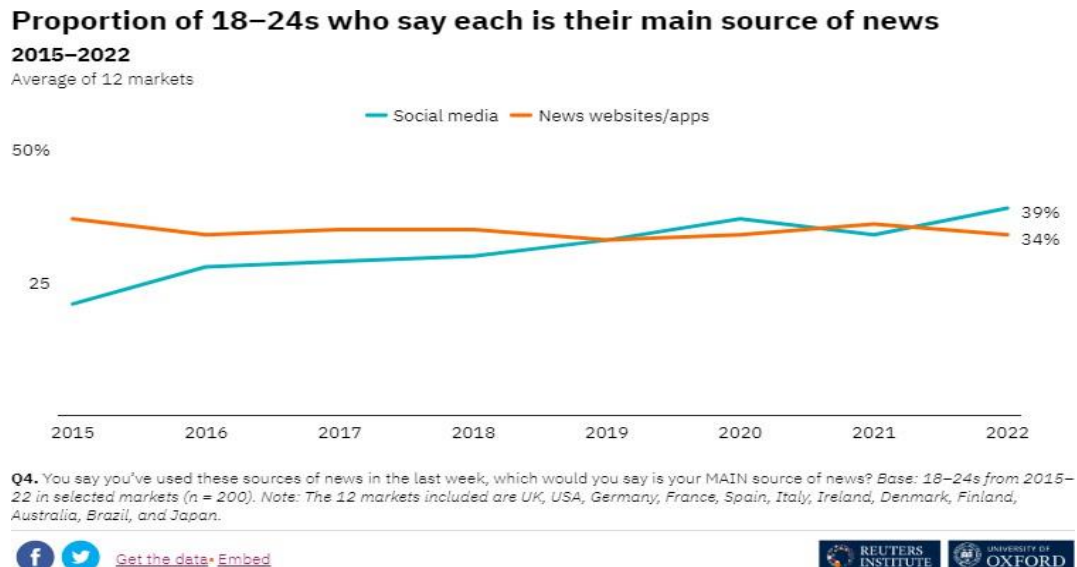


Fig 3: Proportion of the global young age category who look to digital media as their source of news (Source: Reuters Institute for the Study of Journalism/University of Oxford).

The Digital News Report of 2024, shows an increasing trend for younger populations to privilege the video sharing app, TikTok. Majority young people continue to identify with digital platforms as their main gateway to online news.

In Africa, the newspaper industry has not been spared the global decline. It has also faced challenges due to the emergence of new technologies. In Kenya for example, traditional media houses face competition from digital-born websites such as Tuko.co.ke, which reaches around 70% of the population. In Kenya, social media experienced significant increase by 5 points to 77%, with YouTube and TikTok showing an increase in their use for news. YouTube grew by 8% to 59%, while TikTok grew by 7% to 36%. Even though Facebook remained stable, it remained the most popular platform for news along with WhatsApp at 60% (Gicheru & Nyabuga, 2025). This reveals a concerning rate at which print media is being relegated in Africa’s most lucrative locations for media products.

However, where there is change, where there is upheaval, there is opportunity. Media scholars on the continent have acknowledged the potential of digital media technologies (such as ePapers) in transforming media systems, especially newspapers (Mare, 2019). A study on two Namibian papers, The Era and The Namibian, acknowledges the potential of new media technologies to reach newer audiences than the hard-copy newspaper. It recommends a futuristic solution: using

complimentary platforms for print editions, increasing awareness about their ePapers to interest new audiences (Nghitongo, 2019). This is similar in The Gambia, where it is argued that newspapers have an opportunity to adopt digital technologies that enable convergence and multi-media journalism since the internet, social media, and smart phones have transformed the landscape of journalism in the country (Nnaane, 2022) and so are ePapers.

In Kenya, a study on The Star newspaper's survival in the era of digital media reveals the paper's benefits from digitisation arising from a shifting to reporting exclusive in-depth digital stories that could be paid. The study recommended investment in improving technology that can be used to deliver its information effectively (Chepchumba, 2021). This indicates the future of newspapers is going digital. Hardly different, Uganda's digital media platforms and aggregators have become increasingly popular (Kakooza, 2017; Namasinga, 2018). This has contributed to declining readership for newspapers while presenting opportunities for potential digital media growth (Kipkoge, 2019, Tayeebwa, 2016).

In Uganda, since the introduction of print-news media in Uganda in the 1910s, newspapers and magazines have followed the established business model (Sserunjogi, 2019). Copy is reported, edited, and published for readers and advertising is the source of three-quarters of the paper's revenue. This advertising-led model has also applied to radio and television. But, since the mid-2000s, the disruption caused by the internet with the migration of brand advertising to the web and social media, newspapers in Uganda have been changing to different business models never tried before: direct, paid e-subscriptions.

This disruption is compounded by a revenue-challenged media environment, not only in Uganda but the region; in countries like Kenya and Tanzania which are currently grappling with revenue generation on the digital platforms (Walulya & Moges, 2022). During COVID-19 shutdown in Uganda, newspapers such as New Vision offered a free ePaper subscription in order to keep their audiences but this did not translate into permanent paid subscription after the lockdowns (Matsiko, 2024). The post-COVID-19 political economy imperatives have had their impact: the pandemic precipitated the closure and/or suspension of several media publications across the globe, Uganda inclusive, that could not meet profit portfolios (Tayeebwa & Kayiira, 2024). The closures of seven newspapers in Uganda was part of a global phenomenon occasioned by market imperatives during the COVID-19 pandemic. These closures arose from failure of media institutions to meet profit

portfolios and return dividends to shareholders (Tayeebwa and Kayiira 2024). Worsening these struggles is revenue competition by tech giants like Facebook and Google that have deeper global capabilities.

It follows that the spread of the internet, social media, and proliferation of news aggregating digital media companies, significantly threaten traditional newspapers everywhere. As viewership on global conglomerates like BBC, CNN, France24 and MSNBC is declining, the same can be said of mainstream media in Africa especially Uganda. This is the same way hotel chains are facing competition from Airbnb and U.S, African shopping malls and libraries are being undercut by Amazon Prime's one-day delivery. Thus, the adoption of internet technologies in Uganda ignited declining print circulations, and triggered a growing digital universe for viable exploitation. This shift forced forward-looking attempts to transition to e-publishing (Imokola, 2022; Walulya& Moges, 2022).

The silver lining, in form of digitisation, however, presents opportunities for newspapers. After all, the relevance of ePapers and paid-content offers is increasing steadily. These transformations have significant implications for journalism's business models and formats (Mannewitz& Rudzio, 2023): the ePaper market is projected to grow at annual rate of 11.12 % between the years 2024-2027; revenues reached \$6.45m in 2024; while advertising market grew by \$5.90m in the same period. Uganda's digital media market is thus experiencing rapid growth, fueled by increasing internet penetration and a growing population of tech-savvy youth (Statista, 2024).

Uganda's ePaper context is equally important for scholarly analysis. With a relatively high literacy rate at 74%, majority of Ugandans can read and comprehend newspapers, including ePapers (UBOS, 2024). Uganda's population size, GDP, ethnic composition, English-language usage, and literacy rate, provide a context for exploring the evolution, adoption and contribution of ePapers. More so, the strategic importance of information and communications technology (ICT) is emphasized in Uganda's National Policy and Planning Frameworks, such as Vision 2040, National Development Plans IV, the Manifesto of the ruling National Resistance Movement (NRM) 2021-2026, the Digital Uganda Vision, and the National Strategy on Fourth Industrial Revolution (4IR). Uganda seeks to transform from a predominantly peasant and low-income country to a competitive upper-middle income economy by 2040, with ICT playing a critical role: out of a population of 45

million, 24 million are active digital media consumers, with 8 million on social media and 16 million as internet subscribers (Ministry of ICT & NG, 2024).

Uganda's effort to leap toward a technology-driven development trajectory leaves little doubt that Uganda's ICT sector has been one of the fastest growing and has significant potential to contribute to the economy as nearly all industries embrace ICT's transformational influence. With 55% internet penetration and 4G geographical coverage of less than 24%, there is plenty of space for investment and growth in various ICT-driven sectors and products like ePapers (Ministry of ICT & NG, 2024).

Furthermore, the potential viability and evolution of ePapers in Uganda must be contextualized within the country's rapidly digitizing communication ecosystem. According to the Uganda Communications Commission's Q2 2025 Market Performance Report, Uganda recorded 55.8 million mobile registered subscribers and 44.3 million active mobile subscriptions, with 17.6 million smartphones and 16.5 million mobile internet users. Social media penetration is equally robust, with 9.2 million users on WhatsApp, 8.8 million on TikTok, and 61 million YouTube engagements, alongside significant traction on Snapchat (2.2 million), Instagram (1.5 million), and X (1.1 million). Mobile money transactions reached 2.18 billion, supported by 51 million registered mobile money accounts. These figures underscore a fertile digital landscape for ePaper adoption, where mobile optimization, social media integration, and emerging technologies such as AI, blockchain, and machine learning can be strategically harnessed to enhance content delivery, civic engagement, and monetization. The convergence of high data consumption (245.1 million GBs downloaded) and domestic voice traffic (20.1 billion on-net minutes) further reflects a digitally active population, positioning ePapers as viable platforms for both public discourse and sustainable press innovation.

1.3. A Brief Techno-Communication Media History of Uganda

Technology has been at the heart of media transformation since pre-colonial Uganda. Precolonial Ugandans employed various communication instruments and sociocultural measures, such as folklore, serving roles in political mobilization, accountability, and community service (Bukenya, 2025; Sunkuli & Miruka, 1990). Flutes, drums, horns, and gongs reflected technological sophistication, while oral tradition, visual arts conveyed messages through folklore – with Music

and dance were integral, and leaders proclaimed decisions orally (Akinyemi & Falola, 2021; Mabingo, 2015).

The first newspapers in Uganda, Mengo Notes and Uganda Notes, emerged around 1900, publishing in English (Nsoba, 1980). Later, the Uganda Herald, founded in 1912, dominated until the mid-1950s (Gariyo, 1992; Mbaine, 2003). While colonial laws restricted African media, the newspapers which emerged later like Ssekanyolya and Munyonyozi, would play roles in pre-independence struggles, highlighting issues like economic exploitation and land distribution, leading to Uganda's independence. This underscored the significance of the printing press and post office in printing and distribution of anti-colonial ideas through the press.

The post-independence period, particularly between 1962 and 1986, was marked by factional interests which shaped the press in aligning with political and/or religious factions, a trend that continued to influence state-media relationship (Mbaine, 2019). In a country facing daunting questions of state building, nation building, and difficult domestic-governance questions (Mamdani, 2015), the newspaper survived due to the sheer ingenuity of the editors and the printing technology

During the period 1986-2000s, the press experienced growth. Liberalization during the 1990s ushered in a string of private media, including the print, but state-media relationship remained contentious, as seen in periodic shutdowns and detentions of media personnel in the recent past (Namasinga, 2018). Nonetheless, the media landscape has evolved with digital platforms. Major newspapers adopted online versions and ePapers. These digital technologies reflect changes in media ownership influenced by domestic political economy imperatives, technological advancements, globalization, and control (Taremwa, 2021; Kazibwe, 2018). For example, over 70 percent of radio stations are owned by businessmen and politicians, many of them linked to the ruling NRM, who often dictate the news agenda and key decisions on digitisation and/or adoption ePapers in the press. The dominant players, Nation Media Group (NMG) which run Daily Monitor Newspaper; and Vision Group, the government-leaning media group that runs New Vision newspaper, operate in a media landscape where corporate and political interests often override the essential functions of journalism in a democracy (Wasserman, 2018).

Uganda's press landscape was dominated by New Vision, Daily Monitor, Red Pepper, Observer and Bukedde newspapers at the time of writing this dissertation. These newspapers represented a fairly broad content spectrum covered by Uganda's print media. For example, New Vision is predominantly state-owned and considered a government mouth piece (Tayeebwa&Kayiira, 2024). Daily Monitor is purely independent and considered a critical platform (Namasinga, 2018). Red Pepper is Uganda's leading tabloid newspaper, commonly known for stylish pictures, raunchy content and largely a social newspaper (Bocast, 2022). Bukedde is a successful local language daily, published by Vision Group in Luganda, a popularly spoken local language across the country. It has an ePaper platform and remains a fair representation of the complex and diverse language situation in a heterogeneous Ugandan society (Namyalo & Nakayiza, 2015). There were also other titles with ePaper versions such as The Kampala Sun, owned by Vision Group, but these were not the focus of the study due to time and resource constraints. Jackson (1995) and Namasinga (2018) argue that researchers never have enough time and money to conduct large-scale studies especially for time-bound research like a PhD project, especially on Uganda.

This promise of a technology-driven future of the press merits a study on the evolution, adoption and contribution of technologies such as ePapers, in Uganda. Interestingly, scholars highlight the potential contribution of social media in health communication (Kakooza, 2017); the opportunity presented by social media to print platforms (Tayeebwa, 2016); television engagements on Facebook (Alina, 2021); media sustainability amidst the COVID 19 pandemic (Walulya& Moges, 2022); and the utility of social-media news in convergent spaces (Namasinga, 2018).

Problematically, scholarship is bereft of vital knowledge about ePapers as a distinct phenomenon currently defining print media transition in Uganda and beyond even when ePapers offer a plethora of distinctive qualities and advantages that would render them a subject of interest to media scholars. They, the ePapers, symbolize a critical aspect in the ongoing digital transition within the mediascape. They are easily archived, searchable, and readily available anywhere, anytime. They are global in reach, and an environmental protection choice compared to print media, providing subscription options, thus extending the reach of journalism beyond national borders.

While communication research and theory are dominated by epistemological, ontological, and methodological perspectives from the Global North, the field can benefit immensely from embracing nuanced discourses and knowledge from the Global South (Mare, 2019). Scholarly

perspectives on media transformation, especially from the Global North, have emphasized dominant theories in technology such as platformization and technology determinism, often assuming high digital literacy, stable technological infrastructures, and institutional capabilities (Verhoef et al., 2021; Newman, 2023). But these frameworks assume universalization of digital transformations in media, ignoring the imbalance in use and distribution of technological resources between the developed North and Global South. As Berger (2005) notes, this has led to conjectural discourses that invoke the “digital divide” as a default explanatory lens—casting African journalism as “in deficit as regards the emerging global information order” and unable to “drink at the fount” of the digital revolution.

This study moves beyond this dearth of scholarship by developing an ePaper Business Viability Model that addresses the specific economic precarity of the Global South, a challenge often overlooked by Western-centric models of digital surplus. Furthermore, by cross-pollinating Technology Determinism, Social Shaping of Technology, and Critical Political Economy, the thesis generates a Sociotechnical Political Economy Framework in Chapter Two designed to interrogate the unique intersection of infrastructure, social cultural agency, state power, and digital adaptation in the Ugandan context.

Additionally, dominant narratives around “fake news” and cyber-propaganda, for example, have focused on their entanglement with populist politics and digital capitalism, often analyzed through a Western gaze that misses local specificities and socio-political nuances (Mare, Mabweazara & Moyo, 2019). These shortcomings—particularly the neglect of cultural context, infrastructural fragility, and the agency of African media actors—strengthen the rationale for this study, which seeks to explore the evolution, adoption, potential and contribution of ePapers in Uganda through socially embedded frameworks that reflect local realities and structural constraints. The extant media theories fail to consider the realities of African governance structures and philosophies that should lead to a media framework that may be more reflective of the realities of the African continent. This mirrors what Obonyo (2024) reveals in his study toward an African typology to elevate Global South voices in communication research. He proposes a conversation of four media typologies that closely match Africa’s continental conditions: pragmatic authoritarianism, pragmatic progressive, pragmatic libertarianism, and civil society.

In essence, pragmatic authoritarianism looks at how states control media and digital platforms for purposes of stability and development- often suppressing dissent, press freedoms and limiting the transformative potential of digitization. Programmatic progressivism sees innovation and inclusion is vital, but oftentimes risk cooptation by elite interests without proper grounding in equitable access and grassroots participation. Coming to pragmatic libertarianism, in championing for minimal regulation and market freedoms, it minimizes structural inequalities and the call for accountability.

Civil society on the other hand, is seen as important for elevating digital rights and media pluralism but lacks the institutional power and resources to counterforce state and corporate dominance in shaping media futures. The state dominance is not limited to the press. The broadcasting governance in Uganda under current President Yoweri Museveni has been shaped by a fragmented and law-driven approach, which has hindered the development of a diverse and independent broadcast media sector (Maractho, 2015).

Despite visible global media shifts, there is need for scholarly focus on the distinct category of ePapers, to adequately examine the African context, in order to address the serious empirical, theoretical, and methodological shortcomings on ePapers in the continent while informing general media and journalism studies. The concerns about the future and sustainability of traditional media in Africa, including Uganda, which is troubled by social media, resource gaps, and other challenges (Ireru, 2024), need to be fully understood and contextualized. In a world where print media have encountered challenges, ePapers may become the major source of information, transform into the newspapers' survival mechanisms: their novelty and dynamism may become a transformative feature for journalism and media. After all, despite the limited resources, newspapers in Africa are catching up in terms of deploying new media technologies creatively, shaping new ways of journalistic practice and collaborative storytelling (Mare, 2016). But only in-depth research can lead us to a better understanding of whether or not this potential trajectory is in offing.

This study therefore, argues that technology adoption and usage in the press requires both technological advancements, social and cultural factors, and balancing of political and economic interests of powerful actors in a given polity. This cogently accounts for interactions between social

and technical considerations during the initial stages of decision-making processes leading to digital transition in the press as we shall see in theoretical frame section of the next chapter.

1.4 Statement of the Problem

The print press in Uganda is facing a critical juncture, a survival crisis manifested by falling print circulation and prohibitive production costs. While the digital formats transition from print is widely acknowledged in scholarship, the process remains haphazard and evidently fragmented. This uncertainty is firmly rooted in a fundamental knowledge gap about transformations in the Ugandan press and the lack of an empirically grounded ePaper business viability model tailored to the Ugandan context. Without a sustainable framework for monetization and operation, the transition to digital risks being a hollow move that fails to replace lost print revenue, ultimately threatening the economic independence and democratic function of the Ugandan press.

Despite the ongoing transition, existing scholarship, particularly in the Global South, has not adequately interrogated the ePaper as distinct phenomenon (Walulya & Moges, 2020). For instance, extant literature has often failed to extrapolate the specific evolution, adoption and contribution of ePapers with a neopatriotical context such as Uganda (Taremwa, 2021; Kagolo, 2024). There appear to be a significant conceptual hurdle in existing research, especially the unending conflation of social media with ePapers (Nyanjeje, 2023; Violet, 2025). By blending all virtual news presence into a singular conceptual and analytical category, extant scholarship and print media practitioners overlook the unique structural and economic realities of the ePaper, which unlike social media, maintains the editorial integrity and layout of traditional journalism while leveraging digital distribution.

Empirically, the Ugandan media industry lacks comprehensive data regarding how specific newspaper companies adopt these digital transformations and how they alter the traditional media environment. Existing scholarship has generally focused on digitalization, leaving the industry bereft of a clear understanding of the nexus between technology, political economy, and socio-technological imperatives driving the ePaper phenomenon in the Global South (Gondwe, 2024; Ajaegbu & Ajaegbu, 2024). This absence of localized, product-specific evidence means that the print press in the Global South is making high-stakes digital shifts based on global trends that may not align with Ugandan consumption patterns or cultural values.

Ultimately, the failure to distinguish the ePaper from broader digital noise prevents the development of a sustainable business model. Therefore, studying the evolution, adoption and contribution of ePapers in the Ugandan press, is not to fill a scholarly lacuna but to proffer a necessary interventionist empirical evidence required to build a viable ePaper business viability model and a fundamental knowledge value in digital media scholarship. Such a model is essential to ensure that the Ugandan press survives its current fiscal crisis and continues to serve as a platform for accountability and public discourse in an increasingly digitalized sphere.

1.5 Objectives of the Study

1.5.1 Main Objective

The main objective of this study is to explore the evolution, adoption, and contribution of ePapers in the Ugandan press.

1.5.2 Specific Objectives:

1. To explore the factors that have influenced the evolution of ePapers in Uganda.
2. To assess the drivers of the adoption of ePapers in the Uganda press, specifically at the New Vision newspaper.
3. To evaluate the contribution of ePapers in the Ugandan press.
4. To propose a business model for the ePaper industry in Uganda.

1.5.3 Research Questions

1. What factors have influenced evolution of ePapers in Uganda?

This question seeks to:

- a) *Find out the socio-economic factors that have influenced the evolution of ePapers in the Ugandan press.*
- b) *Establish how technological advancements have influenced the evolution of ePapers in the Ugandan press.*
- c) *Find out any other contextual factors, such as media industry trends, and the regulatory environments, that have influenced the evolution of ePapers in the Ugandan press.*

2. What are the drivers of adoption of ePapers in the Ugandan press?

This question seeks to:

- a) *How do users at New Vision engage with ePaper platforms beyond daily news consumption?*
- b) *What socio-technical factors influence user adoption and sustained engagement with the New Vision ePaper platform?*
- c) *In what ways do ePapers contribute to media sustainability and digital inclusion in Uganda?*
- d) *What political economy factors, if any, drive the adoption of ePapers in Uganda?*

3. What is the contribution of ePapers to the Ugandan press?

This question seeks to:

- a) *Assess the contribution of ePapers in broadening readerships in the Ugandan press.*
 - b) *Analyse the contribution of ePapers in revenue generation for the Ugandan press.*
 - c) *Establish how ePapers have enhanced the traditional roles of newspapers and press freedoms*
4. What business model can enhance the evolution, adoption and meaningful contribution of ePapers in the Ugandan press?

Sub-questions here include:

- a) *What would a business model that can enhance the evolution, adoption and meaningful contribution of ePapers look like?*
- b) *What tactics can be employed to enhance user adoption and engagement with ePapers, ensuring consistent growth in readership and market share?*
- c) *What ways can ePapers adopt to attract revenues such as adverts and mass subscriptions?*
- d) *What viability model can be proposed for ePapers to stay relevant and competitive in the digital media market?*

1.6 Justification

While newspapers have adopted ePaper replicas that now dominate the Ugandan print media landscape, little is known about the extent to which the new technologies have evolved, gotten adopted and reshaped the print mediascape in the country. Contemporary studies about

digitisation in the media do not sufficiently address the issue of ePaper technologies in the Ugandan press. Instead, related studies frame digital media in form of social and online media. They focus on the utility of social media for news production (Namasinga, 2018), health communication (Nakiwala & Kakooza, 2020), and its impact on political and civic engagement (Boulianne, 2016). While the challenges and opportunities of social media for media houses have been highlighted (Tayeebwa, 2016), ePapers and paid-content offers are increasing steadily (Mannewitz & Rudzio, 2023). This calls for inquiries into the ePaper phenomenon which has been adopted by traditional media.

Studies about the viability of digital subscription for online media in Uganda and how the ePaper innovation in converging print and online (Ihlström, 2004; Taremwa, 2021), present contextual gaps. Regional studies on the impact of online media on print media in developing countries (Kalombe & Phiri, 2019), and on the challenges and opportunities for newspapers in the digital age (Hassan et al., 2021), leave serious gaps in the study of digital media in respect to the evolution and adoption of ePapers in the Ugandan press. Within the Ugandan news media space, television struggles with online publics for hegemony (Alina, 2020), for television local content, and for regulation (Imokola, 2022). Sustainability questions related to the impact of COVID-19 on media houses have been raised (Walulya & Moges, 2022); and media as mediators in contemporary science terrains examined (Lukanda et al., 2023). But this contextual focus leaves important gaps about emerging technologies such as ePapers.

The theoretical anchorage of existing studies also leaves a lot to be desired. Major media scholarship theories, such as critical political economy (CPE), technology determinism (TD) and social shaping of technology (SST) theories, are treated separately. This perpetuates inadequacies in each of these theories, leading to methodological inefficiencies and empirical constraints. We need studies that combine these theories to enrich one another but also provide richer insights into how ePapers, through an evolutionary and adoption process, can sustain the newspaper as is traditionally known. This study combines CPE, TD and SST to examine ePapers and their enhancement of traditional media roles. The thinking is that beyond digital technological threats to the traditional press, newspapers have a crucial role at a time when media are increasingly being sidelined by commercialisation in Africa due to political economy imperatives and power relations (Jjuuko, 2023).

Existing digital media studies in Ugandan scholarship, while similarly qualitative, such as Kakooza (2017), Tayeebwa&Kayiira (2024), Ntulume (2019), they fall short of interrogating new media adaptations like ePapers. This has had the effect of failure to capture lived experiences, cultural nuances, and techno- political economy dynamics shaping digital transitions in the Ugandan mediascape. In order to address this gap, this study proffers an in-depth interview with key informants and netnography to allow for a granular exploration of the evolution, adoption and contribution of ePaper in the Ugandan press. The methodological justification is to allow the researcher access insider perspectives from media practitioners, managers, users thus revealing strategic decision making, constraints, and expectations behind ePaper transformations. In complementing interviews with netnography, the researcher gains an immersive experience into an emerging digital community in Uganda in order to assess user engagement, adoption patterns and new circulatory practices in the realm of digitisation, a nuanced methodological experience within the Ugandan media scholarship. Where netnography has been utilized in Ugandan media scholarship such as Alina (2020) to interrogate television engagement with followers on Facebook at Nation media, there's limited conflation with ePapers, a methodological justification for this study.

This study, therefore, elevates the significance of ePapers as a relatively unexamined phenomenon in the Ugandan and African mediascape. In interrogating ePapers' contribution to the press, this study enriches scholarly understanding of the digital transition facing the print media. Studying ePapers is vital for promoting access to information, education, and communication, as envisaged in both the NDP IV and the United Nations' Sustainable Development Goals (SDGs). Specifically, SGD 16 focuses on ensuring public access to information and protecting fundamental freedoms. It lays emphasis on ePapers' ability to contribute to environmental sustainability by reducing paper usage and offering valuable insights for the future in the context of the SDGs and the NDP IV. The protection of the environment is enshrined in SDG 13, 14 and 15 which call for climate action, life below water and life on land, respectively to ensure sustainability.

1.7 Significance of the Study

This study hopefully contributes to ongoing policy debates and operational discussions about the adoption of new media technologies in Uganda's media industry, particularly the evolution,

adoption, and contribution of ePapers. This is timely because the Ugandan government has commissioned a report on the adoption of Fourth Industrial Revolution (4IR) technologies, including in the communication sector (MoICT, 2023). Uganda's ICT policy primarily focuses on the application of ICTs in governance, business processes, and the services sector. This study aligns with these objectives. It provides evidence-based recommendations for developing a feasible and robust digital media landscape that can contribute to holistic transformation. The government, through the MoICT, should therefore find this effort useful not only for policy making but also development of programmatic interventions for developing a technology-savvy nation.

The proposed theoretical framework – the Sociotechnical Political Economy Framework (SPEF) - for examining the evolution, adoption and viability of ePapers on the press should be useful for newspaper industrial investors and managers. When integrated into business developments by firms, government agencies, and academia, this framework can potentially attract investor interest and policy attention. This can help address communication challenges and the shifting narratives in the digital landscape. Uganda currently lacks such a framework. This study provides valuable insights into such a framework. By addressing methodological and conceptual inadequacies, this study contributes to press studies scholarship by highlighting how ePapers, driven by digitalisation, have the potential to reshape the media landscape. This supplements the efforts of previous studies that primarily focus on social media, e.g., Kakooza (2017), Namasinga (2018) Taremwa (2021) and Tayeebwa (2016).

Finally, this study carries great value for both users and investors by foregrounding the evolving utility and commercial potential of ePapers with the Ugandan mediascape. Users will find the findings full of insights into ePaper accessibility, convenience, and empowerment, particularly for readers in rural areas and underserved communities traditionally unreachable by print media distribution. For investors and media managers, the study introduces an ePaper Business Viability Model that offers strategies for a communication marketing mix, sustainable revenue generation, opportunities for increased advertising, and data analytics for audience-driven news consumption, segmentation, and sentiment analysis. In providing an analytic for trend analysis and user behaviour, the model provides a strategic framework that bridges the gap between technological innovation and market sustainability, and how to scale up ePapers in ways that are both socially responsive and financially sound.

1.8 Scope of the Study

1.8.1. Content scope

This study explores the evolution, adoption, and contribution of ePapers in the Ugandan press. Interest is placed in the country's major ePaper, the *New Vision*, which replicates its mother print edition. This exemplifies a successful ePaper operation within the wider Ugandan digital media landscape for several content-scoping reasons:

First, *New Vision* is widely read across Uganda and abroad. Its ePapers are readily accessible online and in English. It has Uganda's highest circulation at about 30,000 pre-Covid-19 (Sobel & McIntyre, 2020). This makes for convenient and accessible content scope to tease out the factors influencing its evolution, the drivers behind its adoption, and its contribution to the printed version.

Second, my content focuses on interrogating ePapers along the circulatory, readership and political economy imperatives. This clarifies study boundaries and ensures that the research focuses on the specific area of qualitative interest from which inferences could be made about Uganda's print media.

Third, *New Vision* is key for understanding user experiences, meanings, and understandings about the adoption of ePapers in the Ugandan press. The *New Vision* allows for a comparative analysis of the similarities and differences in the evolution, adoption, and impact of ePapers in Uganda, and the factors that influenced the transition to ePapers. This provides relevance to the research questions, as the *New Vision* is pertinent in a context where explorations of the ePaper phenomenon are still limited in scope, academic knowledge, methodology, and geographical context. For instance, whereas this study delves into an exploration of user experiences, institutional strategies, and socio-technical and political economy dynamics defining the evolution, adoption, and contribution of ePapers in the Ugandan press through the *New Vision* lens, it doesn't extend to editorial content analysis. There's no focus on framing, journalistic styles, or ideological positioning of *New Vision* articles. These exclusions define the conceptual boundaries of the study, rather than the micro-level content and editorial discourse embedded therein, such as the experimental, structural, and technological dimensions of ePaper adoption and contribution.

1.8.2. Time Scope

The empirical assessment covers a period of 10 years, starting from May 2015 when the first ePaper, the *New Vision ePaper*, was launched on the Ugandan market (Kamanzi, 2015) to June 2024 when fieldwork was completed. During this period, Uganda has experienced rapid growth of digital technologies. She witnessed significant growth in internet penetration. The use of mobile devices grew. A surge in the popularity of digital media platforms, including ePapers, followed. This period provides insights into a decade of digital media transformation in Uganda.

During the same period, Uganda's media industry faced a range of challenges: issues related to press freedom, revenue generation, digitisation, COVID-19 and distribution. Researching ePapers during this period reveals the challenging time-frame during which media organizations faced significant endogenous and exogenous constraints and how they responded thereto. The period has also provides immense opportunities for innovation and growth in the media industry: calls for e-governance, e-commerce and adoption of 4IR technologies in the economy opened windows for media organizations to leverage digital technologies to their advantage.

1.8.3. Geographical Scope

The focuses on Uganda, located in Sub-Saharan Africa, where communication discourses struggle against epistemologies from the Global North (Mare, 2019). Uganda provides a unique developing world and/or African context characterized by underdeveloped infrastructure juxtaposed with rapid penetration of digital technologies characterized (Abagen& Ochi, 2024) and a neopatrimonialism political economy landscape. This digital proliferation in the region, particularly in Uganda, can be attributed to favourable policy frameworks, substantial private investment incentives, and a growing young and digitally-literate population. Thus, Uganda is a compelling case for the exploration of the evolution, adoption, and contribution of ePapers, in a region marked by challenges and opportunities related to media transformation. Uganda's distinct digital trajectory, supported by specific policy incentives and investment inflows, offers a unique environment for analyzing the impact of ePapers. Her press landscape, marked by a mix of traditional and digital media, provides rich insights into the conventional dynamics of print media in the Global South. This enriches understandings of digital media evolution in the Global South.

1.9 Definition of Key Terms

This study has adopted the following key terms:

Press: Press in this study refers to printed newspapers and magazines that are based in Uganda and abroad.

EPapers: ePapers refer to digital versions of print newspapers that are accessible online or through dedicated applications. These digital newspapers aim to replicate the appearance and experience of traditional newspapers, while offering the convenience of digital access. Readers can navigate through the pages, read articles, and view advertisements in a format similar to physical newspapers.

Evolution of ePapers: Evolution in this study refers to the process of the press transitioning into digital publishing formats, driven by technological, economic, and social changes resulting from the increasing popularity of digital platforms.

Adoption of ePapers: Adoption in this study refers to the growing availability and use of ePapers, including their diffusion and the changing media consumption habits of Ugandans. This term encompasses the factors that drive the adoption of ePapers within the Ugandan press.

Contribution of ePapers: Contribution in this study refers to how ePapers have proffered visible economic, structural, habitual changes, broadened or shrunk press readerships and enhanced the traditional roles of the newspaper.

Digital Media: Digital Media in this study takes the definition by O'Lynn (2023) who says it is the move of traditional forms of media into digital forms, such as reading a print book on a digital reader, such as a Kindle. For this study, I take digital media to mean all new media platforms such as ePapers, news websites, social media platforms (such as X, Facebook, You Tube), online television and radios, Virtual and Augmented Reality, Interactive media, video, Graphic and audio texts, and web content.

Netnographic research: In this study, netnographic research refers to the qualitative process of obtaining data from the WhatsApp channel by adopting traditional ethnographic techniques to the study of the channel as an example of an online community at the newspaper company.

Digitisation, Digitalisation and Digital Transformation: Technological shifts in the print media such as newspapers have occasioned processes of digitization, digitalization and digital transformation (Bloomberg, 2018). Maltaverne (2017) as well as Unruh and Kiron (2017) have defined these processes broadly: ‘Digitisation,’ is the conversion from analogue to digital; ‘Digitalisation’ means the process of using digital technology and the impact it has on, the innovation of business models and processes that exploit digital technologies; ‘Digital Transformation’ means designing new technology ways of doing things that generate new sources of value. In the context of media industries, these processes have not only opened borderless opportunities for media to curate stories and distribute them across the multiple platforms (Khan & Shnaider, 2021), they have ignited unending debates about the digitalisation of newspapers.

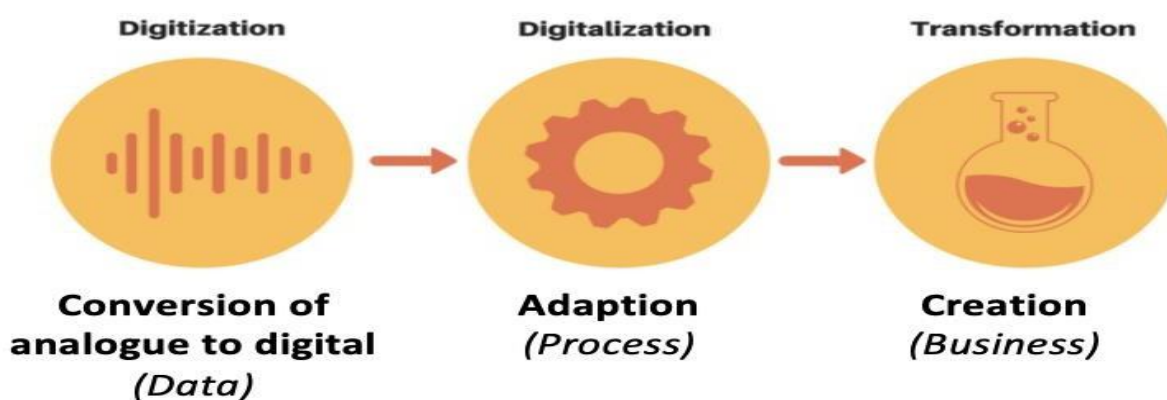


Fig.4: Definition of Digitisation, Digitalisation and Digital Transformation (Maltaverne, 2017)

1.10 Dissertation outline

Chapter One introduces the study and provides the necessary context. It offers the background to the digital media landscape in Uganda, problematizes the phenomenon, and lists objectives of and justifications for this study. Chapter Two presents the theoretical framework underpinning the study. The theoretical framing is grounded in a constellation of TD, SST and CPE theories. This synthetic theoretical framework not only informs the study's methodology but also aids in understanding the conceptual aspects related to the digitization of newspapers of newspapers especially in Africa.

Chapter Three presents the literature review examines the historical, political, economic, and technological factors that have shaped the evolution of print media in Uganda. It delves into

philosophical, epistemological, and ontological debates surrounding the digitalization of newspapers; the role and expectations of media in society; the political economy of revenue generation within ePapers; and the drivers toward ePapers.

Chapter Four presents the methodology used to obtain the study findings and for their analysis. Privileging the Research Onion Framework, I adopt the qualitative research approach and use in-depth interviews and netnography to collect and analyse data.

Chapter Five presents the findings which have answered the first objective seeking factors that have influenced the evolution of ePapers in the Ugandan press.

Chapter Six focuses on the second objective, presenting findings on the drivers behind the adoption of ePapers in the Ugandan press.

Chapter Seven presents the findings on the contribution of ePapers, assessing the role of ePapers regarding broadening readerships, revenue generation and enhancement of press freedoms as envisaged in the third objective.

Chapter Eight presents a broad analysis and in-depth discussion of key findings about the evolution, adoption and contribution of ePapers. The key factors and factors behind this evolution and adoption, and the implications of these findings for the broader mediascape and sustainability of journalism, are explored.

Chapter Nine addresses the fourth objective – a business viability model for ePapers in Uganda. Designed to offer practical solutions, the model guides digital and traditional press in their navigation of an increasingly digitalized media landscape.

Chapter Ten presents the concludes the study. It summarizes key findings, draws conclusions that highlight the role and contribution of ePapers, and provides recommendations for academia, industry and society.

CHAPTER TWO

THEORETICAL FRAMEWORK

2.1 Introduction

This study argues that a combination of technological factors, political economy imperatives, and socio-cultural dynamics have informed the evolution, adoption and contribution as well as efficacy of ePapers. I integrate conceptual and theoretical resources in an attempt to provide a theoretical synthesis that offers more enriching understanding of ePapers in the Ugandan press. The theoretical framework outlined in this section guided research and analysis, and was helpful in developing a comprehensive understanding of the topic (Creswell & Poth, 2018). This framework explains the path this study undertook and grounds it firmly in theoretical constructs, making the findings more meaningful and acceptable to theoretical constructs in media studies (Adom et al., 2018). The framework is rooted in the three theories combined in this study to understand the evolution, adoption, and contribution of ePapers in the Ugandan press, giving rise to a synthetic constellation of resources from Technology Determinism, Social Shaping of Technology, and Critical Political Economy.

The intention of combining three perspectives was because, first; relying on one theory increases the chances of a theoretical bias. Second; by employing three theories, the study has achieved theoretical crystallization, utilize the complementary strengths of each framework to eliminate analytical blind spots there by enhancing interpretive rigor through dialectical tension, and constructing a robust, multi-dimensional lens capable of explaining complex, real-world phenomena such as ePapers. Thus, in order to construct a comprehensive a theoretical lens, this study utilised a three-pronged framework to situate ePapers in the Ugandan press as follows:

From TD, the study situated ePapers in the lenses of technological advancements that drive societal changes, helping to understand how digitalization influences the Ugandan press. From SST, the framework incorporates the idea that technological change is shaped by social, economic, and cultural factors, highlighting the interplay between technology and the Ugandan social structural context. From CPE, the study avers that media communication technologies are influenced by political and economic structures and power dynamics that thrive and influence the Ugandan press. This conceptual and theoretical synthesis informs my integrative framework which provides holistic examination of the evolution, adoption and contribution of ePapers in Uganda.

2.1.1 Technology Determinism

TD is associated with early theorists like Thorstein Veblen and Marshall McLuhan, who famously said, "the medium is the message." TD emphasizes technology's influences on society. Thorstein Veblen developed the concept of "machine process" in his book *The Theory of the Leisure Class* (Veblen 1899) but modern TD was developed by, *inter alia*, Marshall McLuhan, Jacques Ellul, and Raymond Williams in the 19th Century. McLuhan's book *Understanding Media: The Extensions of Man* (1964) is often considered a seminal work on TD. Ellul's book *The Technological Society* (1964) and Williams' book *The Long Revolution* (1961), are equally important.

Veblen focuses on social and cultural factors. His analysis suggests that technology plays a role in shaping patterns of conspicuous consumption and social hierarchies. In other words, technological advancements can create new goods and services that become markers of social status. Individuals adopt and display the latest technologies to demonstrate their economic and social superiority, hence technology has a deterministic influence on society and culture.

Essentially, TD asserts that that technology is the primer in driving societal change, that new technologies transform society at every level (of institutions, social interaction and individuals) (Chandler, 1995). In essence, TD frames technology as an autonomous force that progresses independently, inevitably impacting social structure. Its key assumptions are:

- i. Dominant media technologies tend to take a central position in a given historical era. These techno-dominants may last for some time, such as did print media since the invention of the printing press; the drum and flute in simple rural societies; and typewriter in a modern pre-computer world.
- ii. Technology shapes society and culture: technological developments have autonomous effects on individuals and communities; technology plays an important role in shaping social structures, practices, and norms; and technological changes can disrupt existing social systems.
- iii. Dominant media technologies tend to take a central position in a given historical era: modern information societies arise from the development of innovations and new technologies as the key movers of social, political, ideational, and economic interests. Hence, changes in technologies tend to have a generational imperative, becoming more

dominant as new generations are used more to new technologies than previous technologies (Harold, 1951); McLuhan, 1962; 2003).

- iv. But soon, media techno-dominants are replaced by new media when three conditions obtain: (a) when new technologies are developed and used to articulate different media (say using a telephone to communicate over long distances and rendering a drum, flute, long-distance walks); (b) if the dominant media and their technologies stop fulfilling (or fail to fulfil) their societal functions due to deviation from original purpose or societal metamorphosis; and (c) where leading ideas and interests in society change and demand different media infrastructure (such as shifts from analog to digital television; from nationalist propaganda to globalist viewpoints).

The foregoing summation shows that technological shifts follow the development of innovations and new technologies as the key movers of social, political, ideational, and economic interests and change (Kunz & William, 2006). Slow, stagnant societies are compelled by technologies to adapt or be laid aside. New technologies transform society at every level, including institutions, social interaction and individuals (Chandler, 1995). In the contemporary media, TD views innovations and new technologies as affecting our lives in a manner that initiates transformation (Hauer, 2017). Technologies tend to have a generational imperative; the rise of digital media keeps increasing as technology and young generations interact through social media, e-magazines, and ePapers, becoming a new digital business model for information and n. With increase in newer adaptations, digital reach, and influence, older technologies lose import, gradually becoming un-useful. Others may be quickly, rapidly, pushed aside due to rapid changes and the interests these technological changes generate vis-a-vis old ones.

McLuhan and Fiore (1967) observe that TD places the medium as the real message: the new medium and message takes on the form of communication technologies (such as ePapers). McLuhan (1988) sees technology as playing the role of enhancement, obsolescence, retrieval and reversal in media contexts. This augmentation places ePapers at the centre of media as technology plays out as both the driver and modifier of media adaptations. Under these circumstances, technology may not be the antecedent factor informing the founding and operations of a medium, such as a newspaper. But once the medium is in place, technology seriously intervenes and the impact of an ePaper becomes beholden to it.

TD allows for a deeper understanding of how ePapers, as mediums, become communication products and services channelled through communication technologies. The technologies reflect both the content and features of traditional print newspapers, shaping a new information society. This digital society is characterized by greater connectivity and networking. It involves effective communication, broader readership audiences, and communication industries seeking revenues. Technology becomes the driving force behind social and cultural change, a force that shapes society with its transformative power that is independent of social or cultural factors. The implication here is that technological progress is inevitable and autonomous, and that technology shapes the way we think and act, and that the evolution, adoption and contribution of ePapers in the Ugandan press is driven by technological progress and the inherent qualities of ePapers.

Without ICT and digitalisation technologies, ePapers would have been impossible to conceive let alone create. TD is used to make sense of a technological enabler of ePapers as new technological products. ePapers occasion a new normative and value-laden journalism permeating through the traditional print media architecture. This reconfigures relationships between journalists, audiences, news sources and new forms of content distribution and revenue generation.

However, a TD approach to studying the adoption and contribution of ePapers has some limitations. It overlooks social and cultural factors that influence the adoption and use of new media technologies; the power dynamics, social structures, and individual agency involved in the adoption and diffusion of technologies, such as the interests of media owners, advertisers, readers, journalists, marketers and many the state; and the interests that are driven by technology and by the desire to work with or instrumentalise technology. Some societal aspects tend to defy the deterministic nature of technology because they are either resilient against or are integral to it. This is why TD is criticized for its reductionist and simplistic approach (Lin et al., 2015): technology does not happen in a vacuum; human agency shapes technology and its solutions.

It was important, therefore, to combine TD with other theories, such as the CPE and SST, in order to provide a more nuanced and comprehensive analysis of the evolution, adoption and contribution of ePapers on the Ugandan press. I thus turn to the SST supports this viewpoint.

2.1.2 Social Shaping of Technology Theory

The SST theory critiques TD for oversimplifying the complex interplay between technology and society, and for overlooking how social, political, and economic (social structure) factors influence technological innovation and adoption. SST was originated by University of Sussex's Science and Technology Studies (USSTS) Unit in the 1980s. Key scholarly figures associated with SST include Brian Martin, Rob Kling, Trevor Pinch, Wiebe Bijker, and Thomas Hughes. These scholars were buttressed by Donald MacKenzie and Judy Wajcman in *The Social Shaping of Technology: How the Refrigerator Got Its Hum* (1985). SST theory's critique of TD emphasizes the intricate interplay between technology and social structural factors. Where TD views technology as an autonomous primer of driving societal change, SST privileges the human agency and the social structural contexts in shaping technological development and use. The relationship between technology and society is underscored: technology is not bereft of other forces such as power, politics, culture, and economics (Winner, 1986). SST proponents hold that:

- i. *technology is shaped and mediated by social and cultural factors.* Its development and use are shaped by human values, beliefs, and practices. This gives technology wider view, broader focus (Howcroft et al., 2004). Technology cannot be viewed as a neutral tool. It is, instead, designed and influenced by other factors beyond technology, which grants it the means to empower and constrain phenomena.
- ii. *technology use is a co-production process in which both designers and users have agency in shaping technology as they adapt, appropriate, and modify it to fit their needs.* This continuous interaction between users and technology influences its evolution, adoption and contribution. Technology is thus shaped by human imperatives.
- iii. *development and adoption of technology presuppose mutual shaping of technological and social phenomena.* In essence, technology and society have co-evolving, co-influencing relationships. Technology may be designed to meet a specific need or solve a particular problem, but its ultimate form and impact may be shaped by broader social, economic, and political factors: technologies are socially-shaped in a manner that reflects the structural and political circumstances of their development and application (Bijker et al., 2012)

SST proponents, such as Bijker et al (2012), suggest that technologies are socially shaped in a manner that reflects the structural and political circumstances of their development. To make sense of the evolution, adoption and contribution of ePapers we need careful appreciation of the social structural dynamics in the Ugandan mediascape. This appreciation can point us into the contestations that have shaped the adoption and usage of ePapers from 2015 onwards. Williams and Edge (1996) aver that technology is not a neutral, but is shaped by social, economic, political, and cultural factors. Technologies are not predetermined by technical characteristics, but rather they are shaped by the values, interests, and power relations of those who create and use them (Bijker, 1987). As the empirical chapters reveal later on, similar social structures explain the circumstances that shaped the evolution, adoption and contribution of ePapers in Uganda. The design, adoption and production of ePapers is not reducible to innovation but also circumstantial reflection and reinforcement of existing social structures that played a mediating role upon technical considerations (Howcroft et al., 2004) related to design and application of ePapers.

SST concludes that technology transcends technological 'impacts' in examining what shapes technology in which technological impacts are achieved (Williams, 1997). Development of technological devices, such as ePapers, is an expression of interlocking elements of physical artifacts, institutions, and individuals (Collins & Pinch, 1993; Latour & Woolgar, 1979). Particular paths of technological change may have been inevitable (perhaps reflecting an inner technical logic or economic rationality) but required particular kinds of 'social' change (William, 1997). Thus, ePapers as technological artefacts are patterned by the conditions of their creation and use. At every stage in the generation and implementation of new technologies, a variety of technical options are available. Which option is selected cannot be reduced to simple 'technical' considerations, but is shaped by broader social, economic, cultural and political factors.

How, then, do we apply SST in this study? The adoption of ePapers in the Ugandan press can be explained by the prevailing social context: rising literacy rates, readers shifting their reading habits from print to digital devices, limited access to traditional print media particularly in hard-to-reach areas (e.g. Ugandan diaspora and remote places but with significant internet access), and newspaper owners and managers recognizing that many Ugandans, particularly those in rural areas and abroad, did not have access to their print publications. Chapter 5 shows that ePapers were developed through interactions between different social groups, including newspaper operators,

technology providers, and potential users. Engagements with newspaper audiences through *WhatsApp* Messenger and other platforms help to determine the most user-friendly content and structural format for ePapers, reflecting interactions between different social groups (Wajcman, 2002). Newspapers invested in the necessary infrastructure and promoted the use of ePapers through advertising and other marketing efforts, reflecting SST's argument that technology can be influenced by human agency (Baym, 2015).

However, there are some weaknesses to this theory when applied to the evolution, adoption, and contribution of ePapers on the Ugandan press. Its focus on the role of social groups while paying limited attention to power relations among those groups is surprising. Hence, macro-theorists (e.g. neo-Marxist and feminist thinkers) seek to transcend simple relationships between technologies and large scale economic and political interests in order to account for the fine-scale and local processes in influence (Williams & David, 1996). Power dynamics in Uganda, among media owners, government officials, and consumers, impact or impinge the adoption and impact of ePapers. Thus, SST enthusiasts run the risk of ceding too much power and autonomy to individual actors, rather than to existing structures of power and interests (MacKenzie, 1981; Russell & Williams, 1988; Radder, 1992; Cockburn, 1993). SST theory does not adequately consider cultural factors. For example, preference for physical newspapers and the value placed on print media impact the adoption of ePapers. The social and economic factors shaping adoption of technologies require grasp of the behaviour and properties of technologies that are mediated through particular social settings (Williams & David, 1996).

SST does not seem to situate what is purely social and what is not, ultimately suffering from conceptual conflation and stretching into the realm of political economy. For example, the cost of accessing ePapers and the economic viability of digital transition had a profound influence in the evolution and adoption of ePapers in the country. Given such causal logics, SST suffers difficulty in predicting technological trajectories, specifically predicting the trajectory of ePapers in the Ugandan press given its emphasis on co-evolution of technology and society, which can be difficult to predict and control. Given the ever-changing socio-political environment, it is difficult to predict the trajectory of ePapers in Uganda and other similar contexts. This is the point where CPE of media becomes important.

2.1. 3 Critical Political Economy

CPE foregrounds the economic, political and ideological structures and contestations that underpin technology. It argues that technology is deeply embedded in systems of power, ownership, and control. By incorporating metrics such as class, labour, political, governance, regulatory structures and capital, CPE provides a broader lens to interrogate how power asymmetries and market dynamics influence technological trajectories. Media ownership and economic influence and remains dominant in explaining trends in media studies (Fuchs, 2013).

The theory is rooted in Marxism but benefited from conceptual resources of eminent scholars like Herbert Schiller (1976), Dallas Smythe (1977), Nicholas Garnham (1990), Vincent Mosco (2009), Graham Murdock (1997), Peter Golding (1997), and Janet Wasko (2014). Their ideas and conceptualisation of power relations in explaining phenomena continues to evolve up to today. Their ideas inform CPE of media, which explores the interplay between media, economic power, and political structures, emphasizing how control over media production, ownership, and distribution influences public discourse and societal norms (Hardy, 2024).

The CPE of media considers how media systems serve the interests of the powerful political and economic actors, often prioritizing profit over public interest, which can shape the accessibility, diversity, and ideological slant of media content. In principle, the theory focuses on the political and economic factors that shape media systems and the production, distribution, and consumption of news. It examines the ways in which power relations, class interests, and ideological forces influence the development and operation of media industries, including the adoption of new technologies such as ePapers. I privilege its assumptions in further detail below:

- i. *Media ownership and control are concentrated in the hands of a few corporations or powerful entities, which influence the production and distribution of communication goods and services.* The media reflects the interests of those who own and control them, often prioritizing profit and elite agendas over the public interest. This helps to understand the complex relationship between media, power, and society, and examine the ways in which media are shaped by broader economic and political structures (Schiller, 1984). Contemporary media, such as newspapers, face complex processes and pressures, in form of operational dynamics that a newspaper needs to prepare for,

or existing ones that needs to be navigated to serve the roles for which newspapers are founded. Pressures are constraining experiences founders and managers of newspapers face in their everyday business of news production and dissemination. These pressures include ownership dynamics; financing constraints; convergence-divergence issues between owners, managers, and consumers; the elusive internet space; globalization pressures; multiple spaces for digital advertising; and more. These pressures call for the kinds of analyses that underpin not just the technological and commercial but the sociopolitical and cultural dynamics driving contemporary media. As cultural industries, contemporary media operate as commercially-oriented business entities (Golding & Murdock, 2000; Mbaine, 2019).

- ii. *Media institutions and practices are shaped by and reproduce the dominant economic and political interests in society.* Scholars like Mosco (2009) emphasize the centrality of CPE in examining the role of media in relation to power, politics, and economics. This provides a window of opportunity in exploring the evolution, adoption and contribution in the Ugandan press beyond technological factors.
- iii. *In capitalist environs, contemporary media operate as commercially-oriented business entities* (Golding & Murdock, 2000; Mbaine, 2019). They are profit-minded corporations interested in generating revenues for their shareholders and owners. Tayeebwa and Kayiira (2024) have observed that media institutions are driven and motivated by market forces to survive. Scholars like Golding and Murdock (1991), Herman and Chomsky (1998), underscore the role of neoliberal processes of privatization and liberalization, such as those adopted in Uganda in the late 1980s and early 1990s. While widening the public sphere, liberalization has made media and communication institutions too dependent on market forces. For media houses to survive as businesses, they could hardly operate independently from the advertisers and big business who sustain their operations. Market operations under liberation reflect te political economy imperatives of private-sector operations. Therefore, market forces and the need to turn media platforms into profit-making operations are key drivers of ePaper adoption. Here, CPE helps us to focus on the relationship between media and power, and the ways in which media ownership, production, and

distribution are shaped by broader economic and political structures, beyond technology. The media is seen as a part of the broader political economy in which technology thrives, and media organizations and practices are influenced by social relations, class structures, and power dynamics (Kellner, 1997).

- iv. *The media serve the interests of those who control them, such as media owners, advertisers, and government regulators, who shape the media content and the way it is delivered* (Bagdikian, 2004) particularly via technological platforms and regulatory inlets. Communication industries produce, distribute, and exchange goods and services and the social order in which communications and cultural phenomena are to be understood (Golding & Murdock, 2000; Hardy, 2014). How these goods are consumed, the power relations in the production and consumption process that need to be negotiated, is important. The imperatives of decisions related to production, distribution and consumption of media products, and how these processes are founded, funded, and controlled, are critical to our understanding of media roles in society (Graham, 2007; Jansen, 2013; Swartz & Wasko, 2021). Media industries may be organised and funded in order to execute roles and functions of their controllers.

CPE is suited for this study because it offers a set of parameters that can reflect a mixture of economic, political, and cultural dynamics. It is useful in the analysis of the political and economic dynamics that drove and continue to shape the evolution of the Ugandan press, the motives and interests behind the adoption or resistance to ePapers, and the implications of digital news dissemination for media ownership, control, and diversity in Uganda. The CPE perspective reinforces the ideological functions of the media, arguing that they play a role in shaping public discourse and reinforcing dominant social norms and values. The theory thus highlights the ways in which media ownership, production, and distribution serves to reinforce or challenge dominant power structures, and emphasizes the importance of analysing the political economy of media in understanding media content, its circulation, and its impact on society.

Duncan (2012) and Mbaine (2019) observe that decisions in media operations tend to take the CPE route. This reflects the role of agency in decision enhancement within a corporatized media environment where power over decision-making and what the media and journalists can do is more likely to be held by owners, advertisers and the governments. Such actors have the wherewithal to

direct newspaper organizations to adapt to certain political, economic, cultural, and ideational changes. The complex dynamics behind the evolution, adoption and contribution of ePapers on the Ugandan press, entail a distributive, ownership, commercial decision-making, consumptive and regulatory imperative inherent in CPE assumptions.

2.1. 4 Toward a Sociotechnical Political Economy framework

The sociotechnical political economy (SPEF) framework used in this dissertation brings the fusion between social and technical factors that interact with political economy imperatives in a given polity. Social and technical factors matter. They are intertwined: a given social category, such as the younger generation colloquially referred to as Gen-Zs, is more able to use digital technologies than another, such as the elderly. The development and application of technology, therefore, is a technical matter that is a function of social position.

Consider this example: while advanced levels of education may not be necessary for one to design applicable digital technologies, a minimum level of education is a prerequisite for the newspaper company's ability to design, apply, and spread digital technologies. The operating environment for the design, development, and application of digital technologies is a function of the policy choices and decisions related to techno-infrastructure development and change.

Ugandan newspapers that have adopted ePaper models – for example, *New Vision*, *Daily Monitor*, *Red Pepper* and *Bukedde* – are a good representation of this theoretical constellation. They exemplify how technology adoption and usage require both technological advancements (TD), social and cultural factors (SST), and political and economic interests (CPE) as earlier on argued in the previous chapter. This renders SPEF a theoretical cross-pollination. Only from this fusion are we able to account for the possible interaction between social and technical considerations during the initial stages of decision-making processes leading to digital transition in the press. Political acceptability and economic viability were equally important at this stage, and continue to define the trajectory of ePapers, especially in the Global South.

The label “Sociotechnical Political Economy” (SPE)–is my classification. It encapsulates the interplay of technology, societal influences, and political-economic considerations, in shaping and explaining media trajectories, systems, and technological adaptations in the Global South. SPE framework (otherwise also, “SPEF”) arises from the intersection or a theoretical cross-fertilization

of TD, SST, and CPE theories. This is done to achieve a theoretically-enriched understanding of the evolution, adoption, and contribution of ePapers in the Ugandan press. The synthesis addresses inadequacies in the individual perspectives in enriching our grasp of the changing media landscape generally, and the phenomenon of ePapers in an African political economy context specifically. As an effort in theoretical intersectionality (theory synthesis), SPEF achieves broader theoretical reach and novelty.

Pound and Campbell (2015) observe that the idea of synthesizing theory serves as a means to design interventions that are informed by multiple theoretical perspectives. This involves extracting and summarizing relevant parts of different theories, comparing them for points of convergence and divergence, and refining the synthesis to gain further theoretical insights. Theory synthesis offers potential to collate, evaluate, and combine theories for practical application, providing a systematic approach that allows for a deeper understanding, critical analysis, and improvement of theories.

Cockerham (2005), Dixon and Banwell (2009), and Zimmerman (2013), also support theory synthesis: the process brings together different theories to generate greater theoretical insights. Ritzer (1990) argues that a systematic approach to theory allows for a more comprehensive understanding and evaluation of theories, leading to generation of new theories and overarching perspectives. Thus, the SPE framework is meant to emphasize that the evolution, adoption, and contribution of ePapers is a dynamic process in which we can empirically observe phenomena reflecting TD, SST, and CPE assumptions. Thus, from TD, technological innovation, technological autonomy, and technological impact on society are observable. From SST, the social context and influences, and user practices and behaviors, are discernible. From CPE, ownership and control, power and ideology, economic interests, and institutional factors, are observable.

My SPEF presents technology as both a driver and an outcome of social, economic, and political forces. Once in place (due to invention, innovation or adaptation), technology acquires independent influence and agency on the trajectory of social, economic, and political processes. For instance, e-commerce follows electronic communications. *E-politica* (e.g. online campaigns) follow online technologies. Netizens and Gen-Zs are products of internet and other ICTs. At the same time, the desire to acquire a competitive edge in industry or commerce, or in identity conflicts, to outcompete rivals in political-security processes (like surveillance and spying), may generate

incentives to develop appropriate technologies. Technologies developed for some purposes can then be extended to other related purposes, leading to technology-driven social, economic and political change.

SPEF privileges a deeper appreciation of the phenomenon of ePapers in an African setting, and provides a comprehensive framework for understanding ePaper evolution and adoption in the Ugandan press by shading light on the complex dynamics involved in the development and influence of media technologies. Specifically, the evolution, adoption, impact and efficacy of ePapers can best be understood from a SPEF perspective. The theories that inform this framework offer supplementary perspectives for understanding the interplay between technology, society, and power; fused together they shed light on how the press has evolved, especially in the Global South.

The import of SPEF is such that economic, technological and sociopolitical forces, which are germane to CPE and TD for example, are also important in SST. This theoretical complementarity and operational interoperability, provides a useful framework for understanding ePapers and their contribution to the press. Circumstances, like media-industry practices, economics, politics, beliefs, language and other factors involved in design and application of ePapers, are built into technology which influences subsequent deployment of media technology(ies).

In summary, SPEF enables identification of what functions currently and what needs to be improved so we can more fully understand and keep developing these technologies in the future. It sheds light on the ways in which technological change shapes, and is in turn shaped by, broader social, technological, political, and economic factors. Showing how the emergence of ePapers affects power dynamics within the Uganda media industry, SPEF offers both conceptual relevance and methodological promise. Conceptually, it gives nuance to the political and economic forces that shaped and continue to shape media systems in Uganda; helps in exploring power structures and economic interests that influence the ownership, control, and content of ePapers. Specifically, SPEF highlights the role of media conglomerates, government regulations, and capitalist ideologies in shaping the digital media landscape. Particularly, in laying bare the concentration of media ownership, corporate influence on news production, and the potential for digital media viability in the Ugandan press; SPEF foregrounds ePapers' autonomous effects on the local press and society in general.

SPEF shows that ePapers have inherent qualities and affordances that shape how information is produced, distributed, and consumed on digital platforms and channels like tablets, smartphones, and broadband internet connectivity. It recognizes that while technological production is affected by socio-cultural factors, technologies in turn shape social practices, new meanings and values. Digitisation involves a series of changes – technological, organisational, economic and journalistic – that pave way for innovations that affect the ways in which these media function (Puijk et al., 2021).

This theoretical synthesis, therefore, provides a starting point for undertaking assessments about the evolution, adoption, contributions of ePapers in a Global South perspective. It does by proposing a framework that conceptually articulates and succinctly specifies ePapers as a distinct medium of communication. Its theoretical and methodological lens offers a comprehensive exploration of when and how ePapers can thrive since newspapers need to digitise in order for the communicant (the ePaper) to capture the attention of the audience (the netizen) (Prihantoro et al, 2019). Further research on digital media can contribute new directions for media scholarship in emerging economies in the developing world, where digital media technologies are becoming a commonplace.

This is why SPEF classification reflects Obonyo (2024)'s call for Africans' voices and contributions to communication scholarship. He argues that while the challenges contributing to the limited influence of the African voice in global communication scholarship are extant, African scholars should look beyond these challenges and focus on the realities of African governance structures and philosophies that should then lead to a media framework more reflective of the realities of Africa.

CHAPTER THREE

LITERATURE REVIEW

3.1. Introduction

The previous chapter problematises the phenomenon of ePapers. The background, to the problem of limited understanding about the trajectory of newspaper digitisation, puts into perspective the justification for interrogating ePapers. It lays a foundation for reviewing available literature. Drawing upon this Problematisation, this chapter reviews the literature and provides the theoretical framework that guided the study. It delves into the political, economic, social, cultural, and technological factors that have influenced the evolution, adoption and contribution of ePapers in the Ugandan press, and their implications for journalism practice and media ownership. The gaps in the literature are highlighted. The theoretical framework is presented in a synthesized manner in order to engage the study with a structured scholarly lens.

3.2 Literature review

3.2.1 Evolution of media technologies globally and regionally: A Brief Historicisation

The evolution of communication technologies has long been a disruptive force central to human civilization. Yet, communication scholarship remains dominated by epistemologies from the Global North, often tracing technological development back to ancient Rome while overlooking the ontological heritage of the Global South. This Western-centric framing foregrounds formal media—television, newspapers, and radio—as the foundation of digital media, sidelining Afrocentric informal communication traditions (Hyden, Leslie, & Ogundimu, 2002; Mare, 2019).

Informal media encompasses popular and folk communication, oramedia, and indigenous technologies such as drums, traditional attire, artefacts, paintings, stories, myths, folktales, songs, drama, festivals, town criers, proverbs, and cultural architecture (Mare, 2019; Salawu, 2017). These socio-technologies reflect Africa's rich communicative heritage, often excluded from dominant narratives.

Western scholarship tends to valorize technological milestones—such as the printing press and industrial revolutions—as pivotal to communication evolution (Fang, 1997). For instance, the *Acta Diurna*, launched by Julius Caesar in 59 BC, is considered the world’s first newspaper (Wright, 2016). Displayed in public spaces, it informed Roman citizens about governance, military victories, and civic events, laying the groundwork for modern news dissemination.

The evolution of mass media has been deeply shaped by successive industrial revolutions, beginning with the First Industrial Revolution and Gutenberg’s invention of the movable type printing press in the mid-15th century, which mechanized text reproduction and revolutionized literacy and learning (Barker, 1978). Unlike earlier woodblock printing in Asia (Chau, 1978), Gutenberg’s press thrived in Western Europe due to favorable political and economic conditions, enabling mass production of books and newspapers and laying the foundation for modern journalism (Acemoglu & Robinson, 2012). However, Africa saw minimal impact during this period, as colonial infrastructure limited technological advancement and newspapers served imperial interests.

The Second Industrial Revolution (1870–1914) introduced electricity, photography, and film, transforming print media with visual storytelling. In Africa, this era saw the rise of African-led newspapers, such as Nigeria’s *Lagos Weekly Record* (Enemugwem, 2009) and Uganda’s *Mengo Notes* (Isoba, 1980), later *Uganda Notes* (Mbaine, 2003), followed by *Ebifa mu Buganda* (Gariyo, 1992) and the Catholic *Munno* (Mbaine, 2003). The first commercial paper, *The Uganda Herald* (1912), became influential due to missionary-established literacy (Gariyo, 1992; Mutibwa, 1992; Mwesige, 1998). These publications fostered awareness and political consciousness, laying groundwork for anti-colonial struggles.

The Third Industrial Revolution (1960s–1990s) introduced digital technologies, including computers and the internet, which transformed media production, storage, and distribution (Ahmad et al., 2024). ICT enabled online newspapers, eBooks, and social media, reducing reliance on print and allowing instant global communication (Gupta et al., 2024). In Uganda, post-independence media flourished, with printing technologies empowering newspapers to express political ideologies and challenge colonial legacies (Scotton, 1973). The press became a contested space

reflecting Uganda's political, technological, and socio-cultural dynamic (Karugire, 1988; Mbaine, 2019).

In contrast, Afrocentric scholarship highlights indigenous technologies like talking drums and town criers in pre-colonial and colonial Bamenda Grassfields, Cameroon. These tools debunk colonial-era myths of African communicative primitiveness. Walter Nkwi (2018) emphasizes that talking drums, though limited in range, functioned as precursors to modern telephony—messages were relayed through rhythmic codes and passed along community chains.

Similarly, precolonial Uganda featured diverse instruments and sociocultural mechanisms for communication. Kingdoms and chiefdoms used flutes, drums, horns, and gongs to mobilize political participation, hold leaders accountable, and promote communal services like Buganda's *Bulungi-bwa-Nsi*. These tools reflected technological sophistication and sociopolitical nuance. Oramedia - oral traditions including storytelling, folklore, proverbs, and histories - played a vital role in transmitting knowledge across generations (Akinyemi & Falola, 2021). Drum communication conveyed messages over long distances (Blades, 1992), while town criers and elders disseminated news (Sunkuli & Miruka, 1990). Music and dance served as expressive tools for storytelling and social commentary (Mabingo, 2015), and visual art - paintings, sculptures, carvings - depicted cultural values and historical events (Stokes, 2021). Leaders orally proclaimed laws and decisions (Scheub, 1985), reinforcing oral governance systems.

By contrasting Western technological linearity with the indigenous resilience of oramedia, the study identifies a hybridity of adoption where the digital ePaper functions not as a foreign imposition, but as a modern extension of traditional information-sharing networks. This connection is vital to the research problem as it explains why ePaper adoption in Uganda is driven by socio-cultural trust and community-based meaning-making rather than purely technical or Western-centric metrics of innovation.

These pre-newspaper forms of communication were shaped by political economy, technological ingenuity, and sociocultural imperatives. They fulfilled roles such as rallying for war, signaling danger, promoting public accountability, and mobilizing community projects. Instruments like drums and horns were used to issue alerts, share rulership messages, and foster civic engagement—functions mirrored in today's digital tools.

Ultimately, both Roman and African systems reveal that while modern technologies have increased the speed and scale of communication, earlier forms were deeply embedded in their societies' political, cultural, and technological fabric. Africa's communicative legacy deserves equal scholarly attention in understanding the global evolution of media.

3.2.2 The Fourth Industrial Revolution and the rise of Artificial Intelligence

The period of the 2000s to the present is known as the Fourth Industrial Revolution (4IR) era. It relates to the combination of virtual, physical and biological interactions facilitated by technology, the convergence of which breaks down the siloes between these words (Ministry of ICT & NG, 2024). These technologies include cloud computing, Blockchain, autonomous vehicles, 3D printing, social media and ePapers.

The 4IR in its form, is also characterized by AI, big data and the Metaverse, as I explained in the introductory section. These technologies are transforming how media is produced and consumed. In fact, AI algorithms can now curate personalized news for users based on their browsing history, interests, and social media activity (Scheffauer et al., 2024). Thus, the shift towards algorithmic journalism represents a fundamental change in the relationship between news producers and the consumers, much like it happened ages ago with invention of the printing press. Unlike in the ancient times and the Middle Ages, media organisations can now privilege data analytics to optimize their user engagement (Rezk et al., 2024).

The rise of ePapers in Africa, particularly Uganda, is a natural evolution. It represents a continuation of the trend towards digitalization, providing a cost effective and environmentally sustainable alternative to print newspapers (Maritim, 2022; Oladapo, 2018). Thus, the 4IR era has enabled ePapers reflect the broader shift in consumption especially demographically as younger generations access news on smartphones and tablets more than in print form.

This era has further brought about technologies such as Machine Learning and social media dominance that personalize news consumption. These technologies have transformed content curation, and distribution and rendered social media platforms the primary source of news and information for many people. With the widespread usage of mobile technology and internet connectivity, the rise of ePapers is now visible in countries such as Kenya, South Africa, Uganda and Nigeria. The transformations have seen ePapers such as *Daily Nation* in Kenya, *Mail*

&Guardian in South Africa, *New Vision* and *Daily Monitor* in Uganda adopt digital first strategies to cater for global audiences and a surge of digital audiences on social media. The impact of this 4IR shift has been more interactive and multimedia in content, enhancing reader engagement and adapting to changing consumption habits.

From the foregoing, technology has been a constant feature in the disruption and impact of media systems over time and space. Its extensity has not only received inadequate scholarly attention, especially in Africa, it has left a dearth of epistemological, ontological and empirical gaps in a dynamic media continuum. The extant evolution, adoption and contribution of ePapers in the Ugandan press, must out of conceptual and empirical necessity be explored within the broader historical context of technological shifts in mass communication.

Similar to the revolutionary impacts of the printing press and telegraph on media in earlier centuries, digital technologies have transformed the Ugandan press. Mobile technology, in particular, has been key in enabling Ugandans to consume news digitally. For example, the rise of mobile money and digital payment systems has further facilitated the monetization of digital papers such as ePapers, allowing readers to purchase them easily (Taremwa, 2021). In sum, ePapers are a representation of an ongoing revolution in the media space. This digital transformation of the press continues to deepen, and ePapers are proving essential in this ongoing evolution, transforming how information is produced, distributed, and consumed. It is therefore, crucial to explore their adoption and contribution in Africa, where global communication knowledge imbalances marginalize Southern perspectives, making theoretical and empirical contributions from the Global South peripheral (Mare, 2019).

3.2.3 Contemporary Debates in the Digitalisation of Newspapers

The digitalisation of newspapers into formats such as ePapers is not bereft of epistemological and ontological debates. These debates provide the foundations upon which a meaningful review of the literature on ePaper influence in the print media industry can foster a good academic debate.

The first element of the debate is the universal-internet-access aspiration encapsulated in the UN goal of achieving universal internet connectivity by 2030. This highlights the importance of the internet as a vital driver of digitalisation. It is acknowledged that globally, 3.7 billion people lack internet access, nearly half the global population (International Telecommunications Union- ITU,

2023). The internet is presented with a deterministic nature, which has sparked debates about whether digitalisation of communication media is possible. TD scholars, such as McLuhan (1964), borrowing from early sociologists such as Thorstein Veblen, suggest that technological advancements drive social and cultural changes and view internet proliferation as having an undebatable potential to spark technologies that would lead to digitalization and predict the emergence of new forms of newspaper communication, transforming how news is produced, distributed and consumed.

Least developed countries (LDCs), for instance, have only 19% online connectivity. Globally, 2.85 billion people worldwide remain offline (ITU, 2021). Governments, particularly those in Sub-Saharan Africa, are being encouraged to invest more in ICT along with other infrastructures, so as to reap benefits of digitalization for economic growth (Godwin et al., 2020). Therefore, achieving universal internet access by 2030, aligned with the SDGs, faces challenges with slower user growth rates for digital platforms such as ePapers.

A second element revolves around the issue of “equity- access” or the “digital-divide”. Diffusion of Innovations theorists, for example, argue that technology and the spread of new ideas follow a pattern of early adopters, early majority, late majority, and laggards. This is influenced by factors such as perceived benefits, ease of use, and social norms (Rogers, 1962). The global media ecosystem is experiencing a "window of opportunity," from the late majority, for a new business strategy and innovation due to shifts in customer behavior, high-growth markets, globalization, and technological innovations (de-Lima-Santos & Mesquita, 2021). ePapers are a manifestation of this shift by way of providing greater accessibility to news content.

Yet, concerns are raised regarding the digital divide characterized by disparities in access to and use of technology, presenting a significant challenge (Bircan & Özbilgin, 2025; Lythreatis et al., 2022). More precarious is the fact that digital divide and inclusivity is a challenge exacerbated by digital transformation (Omol, 2024). However, the World Bank’s Digital Economy for Africa initiative, for instance, includes digital skills as one of the five foundational pillars to address the digital divide so as to realize Africa’s Agenda 2063 and the SDGs in Africa and globally (World Bank, 2021). Access to technology and internet connectivity are presented as solutions to a digital

divide that may limit opportunities for underserved communities or rural areas in sub-Saharan Africa (Mercy & Fatuma, 2023).

Third, the digitalisation of newspapers raises questions about the authenticity and trustworthiness of digital news sources. With the ease of sharing and manipulating digital content, concerns about fake news, misinformation, and disinformation have become prominent. Jack Gibb's (1965) Trust Theory of Communication argues that effective communication depends on a foundation of trust. Open and honest information exchange is enabled by the belief in the other party's integrity and reliability. Therefore, trust is essential for meaningful communication, connections, and collaboration. Contestations about trust in digital communication have left society highly vulnerable to manipulation, misinformation and social (digital) media fatigue (Das & Ahmed, 2022). The reliability and trustworthiness of digital news sources, raise questions about the implications of digitalisation on credibility and accuracy of news.

Fourth, discussions about the reliability and objectivity of digital newspapers continue to emerge. The dynamic nature of digital platforms allows for real-time updates, staying up-to-date with news and current affairs, corrections, and revisions of news articles (Gilsenan, 2019). However, this raises questions about the permanence and stability of information (Caled & Silva, 2022).

Epistemologically, debates arise concerning the construction of knowledge in a world of constant newspaper updates. As news organizations cannot meet this demand, the public itself takes their role, through independent online updating that may not be subjected to journalistic rigor and professional scrutiny. This begets an e-knowledge landscape that may compromise the quality and usability of online knowledge in much the same way as newspaper archives might be used in future. The intrinsic dynamism of social networks and digital platforms can fill the update gap, giving voice to the production of amateur content (Andrews et al., 2016) but this has serious implications for news sources as knowledge channels. SST theorists contend with this problem: they postulate an alternative perspective to technology determinists by presenting communication processes as co-produced.

For SST theorists, technology is not a neutral force. Instead, it is actively shaped by social, political, and economic interactions. The development and use of technology are influenced by the social groups involved and actively constructing programmes (communication) through various social interactions and power dynamics (Williams & Edge, 1996). The social, the political, the

technical, and the interactive, merge and fuse. This begets digital communication tools, such as ePapers, as outcomes of the co-production between technology, knowhow, and social structure.

Fifth, digitalisation of newspapers raises debates about ownership and control of news content as espoused in the political economy of communication theory. As traditional newspapers adapt to the digital landscape, questions arise about intellectual property rights, copyright, and digital distribution models and power dynamics. These debates raise ontological aspects of digital news, examining the nature of digital artifacts, their ownership, and the implications for the traditional concept of a physical newspaper. Political economists argue that production of communication goods and services is a bi-product of the influence of political and economic factors on media production and distribution. Scholars such as Vincent Mosco, Janet Wasko, Herbert Schiller, Dallas Smythe, and Robert McChesney maintain that transformation of industries, such as newspapers, is shaped by policies, market forces, and the interests of stakeholders, including governments, media companies, and advertisers.

What do we learn from these and similar debates? I contend that that the debates provide important conceptual tools for understanding media digitalisation. The debates leave out theoretical cross-communication about digital transformation. Their parallel, non-integrated, arguments leave conceptual and knowledge gaps, by disaggregating assumptions about digital transformations.

3.2.4 The Press in the Digital Technology Era

Digital technology has become an integral part of our society and economy, including communications media. And the data economy in particular, emerging from the current hyper-technological landscape, is a global digital ecosystem where data is gathered, organized and exchanged to create economic value (Sestino et al., 2025).

This transformation has made industries, including newspapers, to experience a process of digitization, digitalization, and digital transformation (Bloomberg, 2018).“Digital Transformation” implies the deliberate designing of new technologies and new ways of doing things that generate new sources of value based on online platforms. In media industries, digital transformations open borderless opportunities for media to curate stories, distribute them across multiple platforms (Khan&Shnaider, 2021), and even assess their efficacy. As a result, ePapers

have become a new digital business model where the old newspaper archives are now being replaced by new mediums (Mpoza & Maqsood, 2021; Puijk, 2021; Tamara et al., 2021).

Globally, newspapers are engaging in digitisation processes as a strategic priority to embrace the opportunities presented by emerging digital technologies (Horlacher & Hess, 2016; Smolinski et al., 2017; Zavolokina et al., 2016). The pressure to transform digitally has not only altered media consumption patterns, but it has also occasioned a paradigm shift in media habits, audience and market response (Kulkarni & Srivastava, 2020). While opportunities presented by digitalization are also numerous, challenges of digital transformation, shrinking margins and falling circulations, continue to bog media industries. Newspapers are forced to publish online versions in order to bring the whole world on a reader's desktop/mobile phone (Appu & Burkathullah, 2019; Kalombe & Phiri, 2019; Koundal, 2019; Kulkarni & Srivastava, 2020; Smolinski et al., 2017).

In India, Covid-19 made digitisation a new normal. It unleashed new forms of media consumption patterns (Kulkarni & Srivastava, 2020; Maniou et al., 2018). The AI driving factors occasioned the swift evolution of new technologies, significantly reshaping the communication landscape. With emerging tools like VR and AR, these factors are exerting notable influence even within traditional newsrooms (Chen et al., 2023). This transformative impact raises pertinent concerns regarding the media sustainability in the face of global economic challenges (Newman 2023). As these advanced technologies continue to permeate the media industry, the dynamics of news production, dissemination, and consumption are undergoing profound changes, prompting a reevaluation of traditional models and practices to adapt to the evolving digital communication landscape.

Africa's digital media sector is on an upward trajectory. Doubtless, new media technologies, such as ePapers, have become necessary, radically reshaping media industries (Kemp, 2021; Lievens et al., 2019; Nyanduko, 2016). A good case is Namibia where the importance of adopting new media technologies in the newspapers is important in the *New Era* and *The Namibian* newspapers. Key stakeholders, such as managing editors, marketing managers, IT managers, and journalists, are accepting digitalisation: the importance and utility of adopting new media technologies within their operations is well understood (Ndeumono, 2019). The proactive adoption of online newspapers (e.g ePapers) can be a complementary opportunity for the print editions, websites, and mobile applications at both *New Era* and *The Namibian*. Therefore, Namibian newspapers progressively integrated new media technologies, aligning with the country's telecommunications

infrastructure and the need to implement digital platforms to attract audience interest and engagement.

Relatedly, BarikuiNnaane (2022) explores the influence of digital technologies on journalism practice in Gambia. The research reveals critical dynamics within the press industry: digital technologies and the transformative impact of the internet, social media, and smartphones, lead to the convergence and multi-media journalism in The Gambian journalism landscape. Nnaane recommends journalistic adeptness and multitasking due to the challenges posed by convergence. In other word, digital technologies are reshaping journalism practices in The Gambia, emphasizing the need for journalists to adapt to the evolving media landscape (Nnaane, 2022).

In Uganda, internet traffic is reshaping consumption patterns and bolstering innovations in form of communication technologies (Kulkarni & Srivastava, 2020; UCC, 2021; World Bank, 2020). Uganda's e-commerce industry is fast growing with revenue from the sector expected to double to \$421 million by 2025 (MoICT, 2021). The current transition to ePapers is rooted in technological changes that have determined the pace and trajectory of adjustments in the communications (press) industry. New media technologies bring fortunes to existing newspapers which adopt them (Ihlström&Kalling, 2007). Technological changes determine not just the genesis but also the trajectory of new transformations in the newspaper industry. The more rapid and far-reaching these changes, the more widespread and substantial the transformations. Hence, transition to ePapers is both a consequence of and response to technological changes.

The foregoing analyses, however, are bereft of dedicated effort to conceptualize ePapers. They hardly view ePapers as separate digital news channels from social media, online-only news sources, and online blogs. This renders ePapers footnotes in media scholarship. In Africa, possible explanations for limited inquests in ePapers might be that these digital newspapers are still a new phenomenon. Digitisation is still too limited to attract scholarly attention. The transition to ePapers in Africa has happened recently (Kamanzi, 2015). The dearth of research attention about ePapers translates in a less-researched subject matter despite notable scholarship on the changing media landscape. Available studies about news media in Africa are insufficient about this otherwise important phenomenon, even as newspapers like *New Vision* and *Daily Monitor* in Uganda; *Daily Nation* in Kenya; *New Times* in Rwanda; *TheEast African* across the East African Community; *Vanguard News* in Nigeria; *The Ghanaian Times* in Ghana; *The Herald* or *Sunday Times* in South

Africa; *Al Akhbar* and *Daily News Egypt* in Egypt; and *Ethiopian Herald* in Ethiopia, are adapting to digitisation pressures. In Uganda, media scholarship concentrates mainly on the growing influence of social media (see, e.g. Kakooza 2017; Namasinga 2018; Tayeebwa 2016). Could a historical reflection address this gap?

3.2.5 Evolution of ePapers and the Utility of Digital News Consumption

The introduction of ePapers in the media landscape has attracted scholarly attention of the Global North thanks to the global digital trend of the 1970s, 1980s and 1990s, driven by the rise of personal computers, the internet, and mobile communications (Bokesoy, 2008; Delaere & Audenhove, 2006). Initially, online versions of newspapers served as advertisements for the print medium, complementing traditional newspapers (Boczkowski, 2005). With increasing accessibility of mobile devices and changing media consumption habits, newspapers recognized the potential of digital publishing in the early 2000s (Storsul & Stuedahl, 2007). Technological advancements and the demand for instant news access further fueled the shift to digital formats (Storsul & Stuedahl, 2007). A transition towards a paperless society became eminent. Early versions of ePapers, which evolved into today's ePapers, were text-based and delivered through online services like America Online (Li, 2006). As early as 1993, newspaper executives around the globe started to assess the consequences of the Internet. Many viewed its diffusion as a threat to their industry. Others saw the opportunities associated with this new technology. Both opportunities and challenges informed the evolution of digital newspapers in the Global North.

The Newspaper Society, one of the world's largest publishing associations, formed a steering group funded by a levy on its members to explore the industry's future. Their findings highlighted potential threats but also underscored opportunities, notably the expertise and trusted brands of newspapers developed over decades (Beamish, 1998). Thus, online newspapers emerged from the convergence of traditional newspapers and the internet (Chyi and Sylvie 2001), allowing these platforms to target a global audience while primarily relying on their print counterparts for content. The main challenges included design, organizational adaptation, and changing audience preferences. The first fully web-based newspaper, *The Palo Alto Weekly*, launched in 1994. Within 18 months, many American newspapers had their own websites (Carlson, 2003; Hall, 2001). Journalists faced new tasks like redesigning content for digital platforms. Transitioning from printed text to digital required major overhauls in how news was presented. Design studies by

Ihlström and Lundberg (2004) recommended new layouts, such as using the broadsheet metaphor for online newspapers, while Gubman & Greer (1997), Schultz (1998), and others conducted extensive content analyses on online publications.

Despite the growing popularity of online newspapers, profitability remained elusive for many publishers. By the mid-90s, online newspaper staff had grown, especially at larger publications like *The Washington Post*, which employed 100 online staff members by 1997 (Kirsner, 1997). But smaller newspapers faced difficulties adapting. The shift attracted new readers, including younger audiences and those who did not engage with print newspapers (Chyi & Lasorsa, 1999; Coats, 2002). These new audiences had diverse expectations, complicating the task of satisfying all user preferences (McAdams 1995). Despite audience growth, generating profits remained a challenge, exemplified by *The New York Times'* announcement in 1999 of growing losses in their online operations (Moses, 1999). A 1995 study identified a significant technological innovation on the horizon: the e-newspaper, published on e-Paper technology. The e-Paper closely mirrored the reading experience of traditional paper, offering advantages such as high contrast, the ability to read in sunlight, and a thin, flexible, no sensitive design (Ihlström et al., 2005). This technology combined the readability and layout of printed newspapers with the interactivity and constant updates of online media. It was predicted to eventually replace printed editions.

However, the transition to ePapers presented substantial challenges for successful implementation. For example, as early as 1995, anticipating both the promise and potential pitfalls of ePapers, scholars predicated the form and substance of ePapers. Negroponte (1995) envisioned an electronic newspaper delivered to homes as bits or sent as a magical, paper-thin, flexible, waterproof, wireless, lightweight, bright display. He predicted that the interface solution would likely call upon mankind's years of experience with headlining and layout, typographic landmarks, images, and a host of techniques to assist browsing. Done well, he stressed, such an electronic newspaper would likely turn out to be a magnificent news medium. Done badly, it would be hell.

Negroponte's vision stressed the necessity of maintaining the familiarity and ease of traditional newspapers in the new digital format, emphasizing the practical requirements for digital print media to succeed as an alternative to traditional newspapers. He argued that to function as a practical alternative to mechanical printing and pulp paper, digital print media needed to be highly

portable and simple enough for anyone to use without having to read a manual. For him, these digital forms must be comfortable and convenient to read while lying in bed, riding on a subway, dining in a restaurant, or sitting on a park bench. He insisted that ePapers should integrate interactive and multimedia elements without compromising the readability and ease.

Globally, newspapers are prioritizing digitization to embrace emerging digital technology (Horlacher & Hess, 2016; Smolinski et al., 2017; Zavolokina et al., 2016). This transition has brought about a paradigm shift in audience and market response, leading to alterations in the business and revenue models of traditional mass media like newspapers (Kulkarni & Srivastava, 2020). Associated challenges like shrinking margins and declining circulations have compelled newspapers to publish online versions to reach a global audience (Kalombe & Phiri, 2019; Kulkarni & Srivastava, 2020). The COVID-19 pandemic accelerated digitalization and occasioned new forms of media consumption patterns in countries such as India (Kulkarni & Srivastava, 2020; Maniou et al., 2018).

In Africa, the digital media sector is experiencing remarkable growth, driven by increasing internet users and the recognition of digital media technologies as essential (Kemp, 2021; Nyanduko, 2016). In South Africa alone, a significant increase of 1.7 million internet users were registered between 2016 and January 2021, totaling 38.19 million users (Kemp, 2021; Nyanduko, 2016). This highlights the importance of digital media technologies in the region opening up immense opportunities and greatly influencing consumption patterns especially in the news segments (Kulkarni & Srivastava, 2020; MoICT, 2021; World Bank, 2020).

The proliferation of internet platforms has also transformed contemporary media, resulting in centralized, commercialized, state-controlled, professionalized, and concentrated media ownership (Baran & Davis, 2012; McQuail, 2000; Rasul & Proffitt, 2013). The internet has also opened up opportunities for innovation in ePapers, enabling them to enhance traditional roles and meet the expectations of media stakeholders (Abbey, 2019; Angelucci & Cagé, 2019; Islam & Ahsan, 2020; Mbozi, 2021). This is why ePapers played a vital role in helping citizens make sense of the COVID-19 pandemic, prioritizing socio-economic imperatives while enhancing traditional media roles (Deuz, 2021; Parvin et al., 2020).

At the heart of ePaper transformation has been the internet as a crucial factor that has driven their adoption in Africa (Kalombe & Phiri, 2019; Shapira et al., 2009). As part of the digital media ecosystem, ePapers become a new digital business model, replacing traditional newspaper archives and enabling search and location-based information with immediacy, multimedia publication, and interactivity (Mpoza & Maqsood, 2021; Puijk, 2021; Tamara et al., 2021). This may explain why ePapers in Africa, including Uganda, struggle to provide a platform for independent and alternative voices, challenge the monopoly of traditional media houses (Choi et al., 2019), and thrive on the proliferation of the internet that has changed the nature of media work in Sub-Saharan Africa (*ibid*).

Given Africa's young and digitally-connected population, internet penetration has accelerated the adoption of digital platforms such as ePapers. However, the continent still lags significantly behind the global average, creating a digital divide that limits widespread adoption of digital platforms like ePapers. In Africa, for instance, while 85% of the population in Africa has access to at least 3G mobile broadband services, only 60% is covered by 4G services and only 11% is covered by 5G, compared to the global average of 51% (Zavazava, 2024). Thus, the role of the internet in shaping the adoption of ePapers in the world's second most populous and youngest continent has been significant.

With an average age of less than 20 years old, Africa's youth have embraced digital platforms like ePapers due to the accelerated internet penetration in the region (Kabanda, 2025; Nyanduko, 2016). The internet has enabled news consumption by just a click because advanced new media technologies, such as ePapers, are improving newspaper market share through improved subscriptions and advertising (Mudgal et al., 2019). In Europe where audiences have adapted to digital trends, ePapers have potential to attract new circulations and advertisers (Harris, 2020; Hassan et al., 2021; Jenkins & Nielson, 2020).

In Zambia, low subscription pricing made ease of access to ePapers possible. With declining cost of internet, newspaper revenues improved (Kalombe & Phiri, 2019). That is why Tamara (2020) recommends printed media to diversify their media channels and start to use digital systems to reach more customers and promote more benefits to their advertisers. These recommendations are relevant for Uganda's digital media market. The *New Vision* reports that the adoption of digitization, especially ePapers and ART, resulted in a 2% revenue growth in 2021 (Twaha, 2021).

The prospects for ePapers remain high in Africa, driven by internet infrastructures and regulatory frameworks. This is supported by the World Bank's Digital Economy for Africa initiative that recognizes digital skills as one of the foundational pillars, aligning with the African Union's strategy (World Bank, 2023). Consequently, digital-era newspapers exemplify the industry's adaptation to technological advancements and changing media consumption habits (Kemp, 2021). The transition has led to significant changes in content, distribution, accessibility, and business models of traditional media (Kulkarni & Srivastava, 2020).

Despite challenges related to mobile connectivity and the digital divide, collaborative efforts between media organisations, technology companies, and government initiatives have supported the development and evolution of ePapers (UCC, 2023). While at it, the digital media sector in Africa is experiencing growth, emphasizing the increasing necessity of digital media technologies (Kemp, 2021) such as ePapers, and their potential to influence print media. The unprecedented convergence of cyber, physical and biological technologies – popularized in the 2016 World Economic Forum (WEF) as the 4IR – is altering long established methods of producing goods and providing services (Mamphiswana, 2020).

3.2.6 ePapers' Contribution to the Transformation of the Press

Technology has transformative power. It ensures that systems, such as new media platforms, contribute significantly as sources of news and information that affect society by their characteristics or content (Eucherner, 2016; Hauer, 2017; Soni, 2020). Thus, the contribution of ePapers, as observed and conceptualized in Chapter One, includes broadening readerships, role expectations, and revenue generation.

3.2.6.1 Broadening Readerships

With the proliferation of internet platforms, contemporary media have morphed into centralized, commercialized, state-controlled, professionalized and concentrated media ownership (Baran & Davis, 2012; McQuail, 2000). This has influenced the way in which they enhance traditional roles of media, fostering varied theoretical approaches. Opportunities for ePaper innovations have emerged and easier are their contribution in enhancing traditional roles and expectations of media (Abbey, 2019; Angelucci & Cagé, 2019; Ekeanyanwu et al., 2017). The potential replacement of the

printed newspaper with ePapers will cause direct interactivity with the customer due to ease of use (Islam & Ahsan, 2020; Mbozi, 2021)). Therefore, interactivity, ease of access and changes in reading patterns as occasioned by ePapers, reflect the disruptive power of digital media and the emergence of ePaper technology as a major shift in the printing industry (Battle et al., 2010).

Ihlström et al (2005) stresses this contribution: ePapers would change the editorial and advertising workflows, affecting media houses and their relations with different players on the market. These roles have a bearing on how power relations are exercised, the production of communication and services is intertwined with the rest of the societal expectations as enshrined in CPE. For instance, Cherian and Farouk (2015) conclude that the ePaper technology helps young readers to get the news rapidly. In a 2021 study about the factors that influence the choice of newspapers by Indian readers, it was established that although the COVID-19 pandemic altered many businesses around the world, the ePaper technology choice helped the print industry to survive (Veluchamy et al., 2021). This was because ePapers enabled news to easily spread sometimes via social media platforms, reaching new and wider audiences.

Recently, Parvin et al (2020) report how five ePapers helped citizens of Iran, South Korea, Singapore, Bangladesh and India to make meaning of the deadly pandemic and underscore the capacity of these ePapers to mediate socio-economic imperatives critical to the fight against the pandemic. Indeed, these contemporary roles suggest the place of ePapers in enhancing traditional roles of media (Deuz, 2021).

ePapers are also known to be self-contained, reusable and refreshable versions of a traditional newspaper with potential to attract young readers and offer space for brands (Swan, 2011). It can therefore be safely argued that the introduction of ePapers has changed the reading patterns of readers compared to traditional newspapers, attracting new audiences (Veluchamy et al., 2021).

Today, ePapers have gained immense popularity worldwide due to their style and presentation, triggering new digital audiences in countries like Uganda (Nakiwala & Kakooza, 2020). In the global ePapers market, the number of readers is expected to amount to 0.56bn users by 2027 with a user penetration of 6.6% in 2023, expected to hit 7.1% by 2027 (Statista, 2023). Therefore, ePapers have become part of the broader media industries where several platforms with capitalist tendencies are dedicated to generating maximum returns to shareholders through crafting symbolic goods for direct sale or by assembling new audiences to market to advertisers (Murdock and

Golding, 2016).

By implication, ePapers offer the possibility of publishing a portable digital newspaper with the same readability as in print media, converging print and online content, made possible by the ongoing diffusion of personal computers and hand-held devices (Abbey, 2019; Hassan et al., 2021; Veluchamy et al., 2021).

Proponents argue that digital media threaten the survival of print newspapers because people easily access news online for free, making profitability difficult for newspaper companies (Simutanyi et al.; 2015). However, major global publishers such as *Le Monde* and *Vogue* have taken note of this wave. They use digital technologies to generate higher volumes of traffic (Smith & Mark, 2016; Tayebwa, 2016). From a TD perspective, new media technologies are facilitating new audience terrains and turning the traditional reporter into a multi-media journalist with the possibility of reporting the news through various technology channels- including ePapers for reader satisfaction.

3.2.6.2 Media Roles Expectations

Traditional newspapers have a long tradition of providing accurate, reliable, and current news that contains thought-provoking and informative content. Their role expectations are expressed through news articles, features, editorials, sub-editorials, analyses, and observations (Abbey, 2019; Akanda & Haque, 2013). Newspapers have always been a source of information for people to make them aware of the happenings in their world (Hassan, 2015; Ihlström, 2005; Mathew et al., 2013; Veluchamy et al., 2021). Traditional newspaper companies that are embracing an innovation have the incentive to provide the same reader experience, content, and efficacy as physical newspapers (Ihlström, 2005). Consequently, assessing whether ePapers are enabling newspaper companies to fulfil their traditional role-expectations becomes critical in this study.

Given that the ePaper is contemporary, its editorial content distributed via the internet and made possible by the ongoing diffusion of personal computers, hand-held devices and the advent of new technologies, a new pattern is set apace in the way news is produced and consumed (Hassan et al., 2021). The internet enables ePapers to innovate in order to appreciate their (newspapers) roles and expectations (Abbey, 2019; Angelucci & Cagé, 2019; Mbozi, 2021), so that traditional functions, roles and expectations of media that have revolved around surveillance of the environment, correlation of parts of society, transmission of the cultural heritage, and entertainment for people

(Laswell, 1948, Mendelsohn, 1966) can survive the digitalization process.

Media are performing a mobilizational role. They demonstrate the application of mass communication to political and commercial propaganda (McQuail, 2007) against which their contribution can be appreciated. Traditional newspapers are expected to provide a platform for the wretched of the earth whose voice in holding the powerful accountable is never heard.

Existing media theories also illuminate the traditional roles and expectations of media. Today, these theoretical resources fall short of conceptualizing the contribution of ePapers. The functionalist theory of media (Merton, 1957), for example, observes that media provide platforms for ‘information’ about events and conditions in society, thus facilitating innovation, adaptation and progress. Functionalists also aver that media serve a ‘correlation’ function in which they explain, interpret and comment on the meaning of events and information. The media also serve a ‘continuity’ function, expressing dominant cultures and recognizing subcultures and new cultural developments. An ‘entertainment’ function obtains in terms of providing amusement, diversion and means of relaxation. Mobilisation occurs by way of campaigning for societal objectives in the sphere of politics, war, economic development, work and religion. Indeed, contemporary debates regarding the role of media and communication in the context of a global COVID-19 pandemic clearly suggest its mobilization role (Deuz, 2021).

However, these functional roles pose theoretical and conceptual challenges for especially new media such as ePapers. The functionality of media to society needs to be reformulated in order to take into account the perspectives of either the media’s own view of their tasks or of the individual user of contemporary mass media (McQuail, 2007). By emphasizing that society is orderly and stable in which media play a critical role, functionalist conceptions of the media are inadequate in explaining social and technological changes such as ePapers.

From a CPE viewpoint, media play a critical role holding authorities to account. They privilege us as forums for citizen debate, comprehension and civic education. In so doing, their contribution should also be envisaged in a CPE lens because media organisation and funding is central to their role (Hardy, 2014). CPE perspectives provide the main theoretical and conceptual tools for critically analysing media organisations and media processes in society (Jansen, 2013). Uganda’s media landscape is the sort of structure that speaks to the political economy of communication

industries and the roles they play in a given political economy landscape (Mosco, 2015; Schudson, 2000).

This study's focus on print ownership and its broad societal effects presents ePapers as commercial institutional products with cultural effects worth a critical lens for their normative functions as highlighted in the introduction. A critical review of dominant theorists in the political economy of communication reveals a consistent concern with how media ownership structures shape cultural production and public discourse. Garnham (1990) argues that media must be situated within broader capitalist frameworks, where ownership determines both content and societal influence. McChesney (2000) builds on this by exposing how concentrated media control erodes democratic values, framing media institutions as vehicles for commercial and ideological consolidation. Wasko (2014) reinforces this critique, emphasizing that media commodities reflect class hierarchies and institutional power, necessitating rigorous analysis of their economic underpinnings. Extending these arguments into the digital realm, Mosco and Foster (2001) challenge techno-utopianism by highlighting the mythic narratives surrounding digital media and urging scrutiny of the institutional forces behind products like ePapers. Collectively, these scholars fortify the need to interrogate media not merely as cultural artifacts but as embedded instruments of power within capitalist systems.

But the proliferation of new media, technological shifts within print media, media convergence and concentration, pose regulatory challenges and prompting scholars to suggest self-regulatory mechanisms to foster public trust in the media (Mbaine, 2019; Mijatovic, 2013). The rise of ePapers has contributed to the mediation of socio-economic imperatives and helping citizens make sense of critical issues such as the COVID-19 pandemic (Abbey, 2019; Angelucci & Cagé, 2019; Chrina & Farouk, 2015; Ekeanyanwu et al., 2017). With internet penetration, contemporary media have morphed into centralized, commercialized, state-controlled, professionalized and concentrated media ownerships (Baran & Davis, 2012; McQuail, 2000). This has influenced the way in which they enhance traditional roles of media.

3.2.6.3 Revenue Generation

Newspapers are investments. They are first and foremost profit-seeking capitalist industrial and commercial communications organisations engaged in constant production and distribution of

communication commodities (Murdock & Golding, 2016; Wasko, 2014). In capitalist societies, the major producers of public communications are privately owned, dedicated to generating maximum returns to shareholders by crafting symbolic goods for direct sale or by assembling audiences to market to advertisers (Murdock & Golding, 2016). This places a revenue and profit maximization motive at the centre of management of contemporary media such as ePapers. Profit-generation is usually achieved through processes such as content, cover price, circulation, distribution, subscription and advertising.

The viability of ePapers has been felt more around the world than locally in Africa where there are a recent innovation (Huded et al., 2021; Bokesoy, 2008; Kalombe & Phiri, 2019). With growing and projected growth in revenues from ePapers (to rate of 6.43% leading to US\$7, 247m in 2021 - World Digital Report, 2021), the resulting market volume of US\$9,297m by 2025 (Statista, 2021) means that subscriptions, readership, circulation, and advertising revenue (Hassan, 2021) are critical for the efficacy of ePapers. This is because online presence is touted to explore cheaper production and distribution methods, save on buying costly paper, attract a new base of young readers and develop new advertising potential. For instance, a study conducted in Kenya on the effectiveness of digital subscriptions models at Standard Group PLC concluded that the most popular type of digital subscriptions model is the freemium paywall followed by ePaper subscriptions with mobile money the most preferred mode of payment, underscoring the growing viability of ePapers (Eshitemi, 2025).

As advertising communication gradually shifts from traditional mass media platforms to new media spaces with colorful visual presentation for advertisers and advertising agencies (Zhu & Chen, 2022), the use of visual symbols on new media platforms is growing. This enables the transmission of advertising ideas so that advertising clients respond to incentives offered by ePaper companies. As ePapers attract new circulations and advertisers (Harris, 2020; Hassan et al., 2021), revenues grow.

Jenkins and Nielson (2020) reveal how newspapers in Europe are adapting to emerging new audience consumption trends. They show that newspaper companies prioritize the economic importance of their print products despite declines in advertising and subscriptions. They acknowledge the value of experimenting with new approaches to monetization, including implementing paywalls and using analytics to personalize content (such as ePapers). Leckner and

Appelgren (2007) confirm excellent experiences with monetization of subscriptions in Western Europe and North America, observing that the future of ePaper publishing as a viable newspaper publication channel was promising due to its ability to display content in a paper-like manner.

In Zambia, low subscription pricing made ease of access to ePapers possible. With declining cost of internet, newspaper revenues improved (Kalombe & Phiri, 2019). Print media ought to diversify their media channels and start to use digital to reach more customers and promote more benefits to their advertisers (Tamara, 2020). Online media are impacting print newspaper revenues in developing countries like Zambia. Low cost ePapers are easy on the pocket. Accessibility, sales and revenue collection (Kalombe and Phiri, 2019) prove that they are essential media market enablers in terms of revenue generation and profit maximization for media industries.

While there are endless opportunities for ePaper companies, the innovation has many more pains to overcome. Spil and Suijkerbuijk (2015) observed that ePaper readers have problems with screen sizes, internet speeds, and difficulties with ICT systems. These barriers affect adoption, especially among older users who often prefer traditional print formats. But Tarus (2017) guides media houses to make ePapers easy to search and access through most devices that have internet connectivity. Once ePapers improve company revenues, they can serve as a potential solution to the declining print circulations. Thus, digitizing newspapers through ePapers could rekindle public interest in newspaper consumption (Erniwati et al., 2023). This reinforces the fact that ePapers are driven by revenue generation and profit maximization motives, and that their potential to attract new circulations and advertisers is significant in contributing to the overall growth of the newspaper market (Harris, 2020; Hassan et al., 2021; Jenkins & Nielson, 2020; Kalombe & Phiri, 2019).

In Uganda, media scholarship conflates ePapers with social media and other online news sources and platforms. The evolution from print to digital newspapers remains less well examined in existing studies (Namasinga 2018; Tayeebwa 2016). Studies about the *New Vision* and *Daily Monitor* acknowledge their digitalization in passing (Kamanzi 2015). The different perspectives informing these studies – networked journalism (Namasinga 2018); political economy of media communications or normative theories of media (Mbaine 2019), and social network and social learning theories (Kakooza 2017) have yet to examine the implications of media digitalisation that Twaha (2021) attempts to examine with reference to *New Vision*.

3.2.7 Research Gaps

The foregoing literature and theoretical review shows commendable scholarly effort in understanding the technological imperatives of media transformation. But existing knowledge reveals a dearth of empirical data about the ongoing transformations in the Ugandan newspaper industry. The justification for this empirical observation is that identifying research gaps is a fundamental goal of literature reviewing (Müller-Bloch & Kranz, 2015).

Matters are not even helped further by the glaring dominance, in communication theory, of epistemological perspectives about digitisation in the media from the Global North (Mare, 2019). These gaps present serious challenges that hinder comprehensive understanding of the evolution, adoption, and contribution of ePapers in the Global South, specifically the Ugandan press. A key gap to be addressed, therefore, is the relatively less-well examined relationship between the metamorphosis of ePapers and their efficacy as digitalized print outlets in an African context.

A key epistemological challenge is the glaring dominance of perspectives about ePapers from the Global North. The epistemological frameworks that prioritize Western contextualization, for instance the promise of the ePaper giving the reader the same experience as physical newspaper as espoused in Ihlström (2005), limits the applicability of these frameworks to the African and Ugandan media contexts. Uganda's unique socio-cultural, political, and technological conditions militate against applicability of western epistemological framing. Furthermore, ePapers are often conflated with social media platforms in scholarly discourse. This ontological confusion conflation is highlighted by Kamanzi (2015) and Nyombi (2020). We need nuanced discussions on ePapers as distinct from other digital news channels.

Empirically, the literature shows limited research on the evolution, adoption, and contribution of ePapers in Africa, particularly in Uganda. Western-oriented communication studies examine the impacts of digital transformations on media (Jacobs, 2011; Miles, 2017) but rarely address the specific experiences of African media houses transitioning to ePapers. Extant studies on Uganda's digital media landscape, including efforts by Tayeebwa (2016), Kakooza (2017), Walulya and Moges (2022), Taremwa (2021), Atuhaire (2023), Namasinga (2019), Nakiwala & Kakooza (2020), Kagolo (2024), have focused on broader topics like social media use, media sustainability and digital transformations. They hardly delve into the empirical nuances of how ePapers are not

only evidence of an evolving media-technology landscape, but have to struggle to fulfill similar traditional media roles, or meet audience expectations. The transition to ePapers in Uganda is relatively recent. Major newspapers are still undergoing this transformation. While these transitions are documented (Auhaire, 2024) studies examining their contribution remain sparse, leaving gaps in understanding the specific opportunities and challenges of ePapers in Uganda.

From the literature, theoretical limitations also emerge in the study of ePapers. One significant gap is the absence of a comprehensive framework that integrates technological, political economy, and sociocultural elements of this digital transformation. As Puijk et al. (2021) argue, digitalization encompasses multifaceted transformations that include technology, organizational structures, economics, cultural dynamics, and journalism. However, existing theoretical approaches often relegate this complexity. Current analyses are predominantly rooted in authoritarian, social responsibility, and democratic-participant theories (Mbaine, 2019), public sphere and agenda setting theories (Alina, 2020), social network theorizing (Kakooza, 2018) and technological determinism (Ihlström&Kalling, 2007). While these perspectives acknowledge the role of technology and organizational structures, they overlook other crucial aspects, such as financial sustainability, profitability motives, regulatory influences, and sociocultural impacts of ePapers. This limits our theoretical understanding of the broader implications of ePapers in Uganda.

Furthermore, conceptual clarity eludes studies of ePapers. The distinction between ePapers and other digital platforms such as Facebook, X and Google, is often blurred. Social media and ePapers are sometimes conflated. This conceptual ambiguity in Ugandan media discourses, as noted in Kamanzi (2015 and Nyombi (2020), hinders conceptual appreciation of the unique roles of ePapers as a distinct platform in the digital media ecosystem. This is not to forget the dearth of historical analysis regarding the evolution and adoption of ePapers in Uganda. While the evolution of the Ugandan press has been documented (Gariyo, 1993; Mwesige, 1998, Isoba, 1981 and Ntulume, 2020) little attention is paid to the specific trajectory of ePapers as digital evolution and innovation in the Ugandan press.

Significant methodological limitations on specific to ePapers are equally glaring. We lack geographical and empirical representation of ePapers as an emerging technological adaptation in the Ugandan mediascape. Research on ePapers focuses largely on the Global North and to minimal extent in the greater sub-Saharan Africa (Kalombe & Phiri, 2009). This methodological challenge

limits observations on how media systems in Uganda are transforming. Explorations of general digital transformations in the media as utility platforms fail to examine ePapers specifically. For example, studies by Kakooza (2018), Namasinga (2018); Kagolo (2024) and Waiswa (2024) provide valuable insights into digital transformations in legacy media but do not address the unique features, opportunities, and challenges of ePapers. This methodological gap limits the scope of digital media scholarship and hinders a nuanced understanding of ePapers in Uganda.

CHAPTER FOUR

METHODOLOGY

4. 1. Introduction

The central objective of this study is to explore the evolution, adoption, and contribution of ePapers in the Ugandan press. To test the SPEF framework and understand these dynamics, the study locates data collection within the Research Onion metaphor proposed by Saunders, Lewis, and Thornhill (2023). This framework provides a systematic approach to organizing the methodological process, starting from broad philosophical paradigms and narrowing down to specific techniques and procedures. Furthermore, by grounding the study in Hegelian Dialectical reasoning (Hegel, 1807) and Peircean logic (Niiniluoto, 2024), the research design ensured a rigorous alignment between the objectives, the theoretical crosspollination of SPEF and empirical data collection.

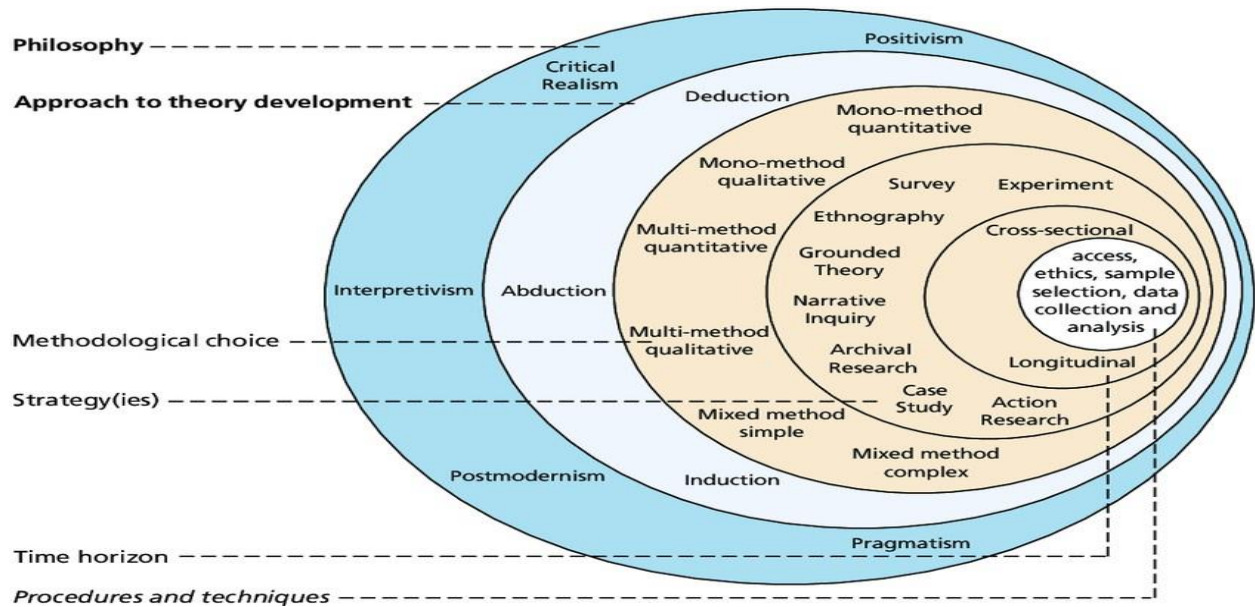


Fig. 5: The research onion (Saunders et al., 2023)

4.2 Philosophical and Paradigmatic Underpinnings

Following the outer layers of the research onion, this study adopts an interpretive critical realism philosophical strand. This approach combines the ontological depth of critical realism—which acknowledges real social and technological structures - with the epistemological sensitivity of interpretivism, which focuses on human meaning-making (Bhaskar, 1979; Archer, 1995). As Krauss (2005) emphasizes, aligning research paradigms with theoretical frameworks is essential for producing credible qualitative research, especially when exploring complex phenomena like digital media systems.

The study utilizes Hegelian dialectics (1807) to interpret the transformation of the Ugandan press as a "negation of the negation." In this context, legacy media serves as the thesis, which is challenged by the digital antithesis, eventually resulting in a synthesis: the ePaper. To analyze this transition, the study employs Charles S. Peirce's triadic model of reasoning (Kapitan, 1992). Specifically, abductive and inductive logics are used iteratively to identify emerging themes and causal patterns (Niiniluoto, 2024). While deductive reasoning is common in quantitative work, this study relies on abduction to suggest what might be operative in the ePaper phenomenon and induction to confirm these dynamics within the Ugandan landscape (Tumwebaze, 2016).

4.3 Research Design

This study employs an exploratory case design for New Vision newspaper, a strategy recommended by Creswell (2014) when seeking to gather original insights into a phenomenon that is not yet well understood. Exploration is particularly vital here, as ePaper adoption in the Global South, and specifically Uganda, remains an under-researched area. This design allowed for a flexible yet deep investigation of New Vision, which served as the primary focal point. As a pioneer in Uganda's ePaper shift, New Vision provided a representative foundation for examining broader trends in media viability, monetization, and readership (Annamalah, 2024).

The unit of analysis is the ePaper platform and its users, while the level of analysis is the national context of Uganda. This choice is justified by Uganda's long history of a liberalized media landscape, providing a rich environment for studying sociotechnical transformations. By centering the ePaper as the unit of analysis, the researcher can generate nuanced findings about the interplay between institutional strategies and the lived experiences of the audience.

4.4 Methodological Choice: The Qualitative Research

This study adopted a qualitative methodology because qualitative research permits in-depth exploration and description of new phenomena (Creswell, 2017). Given the novelty of this study, and while qualitative research is criticized for being biased, small-scale, anecdotal and/or lacking rigor, it was hoped to generate unbiased, in-depth, valid, reliable, credible, and rigorous data about newspaper transformations in Uganda. The qualitative research process involves the collection, analysis, and interpretation of data that are not easily reduced to numbers, relating to the social world and the concepts and behaviors of people within it (Anderson, 2010).

As noted in the previous chapter, the new phenomenon of ePapers has not received adequate scholarly attention within Ugandan and largely African media studies. This means there is limited empirical evidence of scholarly interest in the extant African (specifically Ugandan) media studies. Therefore, for any scientific inquiry into a new phenomenon to achieve comprehensive revelations, a qualitative study would suffice. This is why qualitative research takes different forms of inquiry and methodological practices that engage a variety of theoretical lenses, strategies and techniques of data collection (Bryman, 2012).

Among the many methods within the qualitative research design, I employed in-depth interviews and netnography since they are easily customized to individual participants for more detailed

collection and treatment of the data (Tayeebwa&Kayiira, 2024). This enabled the achievement of detailed understanding of the evolution, adoption and contribution of ePapers in the Ugandan press. Quantitative methods might have provided numerical data and statistical analysis (Dawadi et al., 2021) but would not sufficiently provide a deeper grasp of non-numerical perceptions, views, and opinions about ePapers. Qualitative methods help the researcher to delve into the subjective experiences, perceptions, and contextual factors that have shaped the adoption and contribution of ePapers. That is, qualitative methods, provided rich insights into the complexities of a new phenomenon (Harrison et al., 2020) of ePapers in Uganda.

Data collection about ePapers were envisaged to come in the form of words and verbal expressions from which insights, perspectives, and opinions about ePapers, were gleaned. It was necessary to adopt this approach because qualitative methods provide data in the form of views, assumptions and perspectives about evolution, adoption and contribution of ePapers, thus enabling inquiry into ePapers in their naturalistic setting by describing behaviours from insider perspectives and actors as well as through commitment to the field (Berg, 2004; Denzin & Lincoln, 2011; Kirk & Miller, 1985; Silverman, 2006).

In-depth interviews were conducted with key stakeholders who included editors from the major print media. The other stakeholders were journalists, ePaper teams at New Vision and media scholars at Makerere University and Uganda Christian University, Mukono. Additional stakeholders included media thought leaders, experts and users (subscribers) of ePapers. These were privileged in order to gather detailed insights into their experiences and perspectives on ePapers. Netnography was employed to observe and analyze online interactions and discussions related to ePapers on social media platforms, forums, and news websites. This combination of methods allowed for a comprehensive understanding of the ePaper phenomenon, capturing both the individual and collective dimensions of the subject.

In addition, netnography also facilitated rich, context-specific data collection from New Vision, revealing unforeseen factors and generating valuable insights into the socio-cultural, economic, and technological contexts influencing ePapers. This ensured that the study captured voices and experiences of those directly involved in the phenomenon of ePapers, leading to more thorough and credible analysis.

4.5 Research Scope

This sub section introduces the scope that guided this study. This scope played a crucial role marking the boundaries of the study these boundaries delineated to cover the study in terms of the geographical, time and content definition.

4.5.1 Geographical Area

I focused this study on both the cyberspace for electronic ethnographical data and Kampala City where the top two ePapers, *New Vision* is headquartered. Kampala City is located in Central Uganda where much of the digital media consumption in Uganda is located due to ease of internet access and political economy imperatives (IPSOS, 2024; UCC, 2024, World Bank, 2020). This geographical focus was privileged to target key informants in the media, academia, civil society and the print media houses, particularly *New Vision*. Kampala has the highest newspaper readership concentration in Uganda (IPSOS, 2019).

4.5.2 Time Scope

The study focuses on the period 2015–2025. This was purposefully chosen because it reflects the time when digital media technologies in Uganda increasingly became visible, especially among the young people sparking the transition to ePapers (Kakooza, 2017; UBOS, 2024).

4.5.3 Content Scope

In this study, *Evolution* entails the historical and structural shift and transformations of media formats. This traces the shift from print media to ePapers in the Ugandan mediascape over the past two decades in response to technological, economic and socio-political pressures. *Adoption* implies the institutional processes and agency dynamics through which the Ugandan press are integrating ePaper technologies and functionalities into their operations. These include infrastructural adjustments, editorial copy flow and audience management strategies. *Contribution* implies the impact of ePapers on journalistic practice, media accessibility, public discourse, and the sustainability of Uganda's press ecosystem, particularly in terms of expanding reach, enhancing interactivity, and reshaping content delivery. Concentration is on the factors animating the evolution, adoption, and contribution of ePapers, not on whether or not they are endogenously or exogenously driven. This study does not compare the profitability of print newspapers vis-à-vis ePapers, nor does it analyse the differences and similarities between ePapers and other online information sources.

4.6 Study Population

The population in this study included categories of qualitative interest, namely: newspaper companies (print media organizations), journalists, editors, multimedia editors, publishers (top managers) of the media houses, readers (ePaper subscribers), marketing and IT managers, technology providers, advertising agencies, experts on digital media, and political economy analysts. I briefly describe each category as follows;

Media Organisations: This study chose to focus on *New Vision* as the leading ePaper in the country but had occasional references to other ePapers in the industry such as *Daily Monitor*, *Red Pepper* and *Bukedde*. These organisations were included because they are the ones that have adopted the use of ePaper technology prominently as described in detail in Chapter One. These traditional newspaper outlets in Uganda have adopted ePapers and other online news platforms, primarily operating a dual format- traditional press and the digital formats.

Journalists and Editors: This category included individuals responsible for creating and curating content for ePapers. This comprised of editorial teams engaged in the transition from traditional to digital formats at the media organisations mentioned. The editors, such as the multimedia editors at *New Vision*, who are responsible for overseeing the content of ePapers, were included in the study to help to provide insights into how ePapers have evolved at their workplaces, how they are being produced and how they differ from traditional print newspapers, among other deep insights in line with objective One and Two. The study also sought to capture their motivations for the ePaper innovation, challenges faced and future plans for the platform.

ePaperReaders/Users: This category included readers who are also subscribers/users of ePapers. I settled for this category to provide first hand insights into user experiences, satisfaction, consumption habits and preferences. The idea was to get them to articulate the factors that influence their decision to use the ePaper over traditional formats in line with objectives Two and Three. Their preferences, behaviors, and feedback regarding ePapers, was invaluable to the study.

Casual and Non-Adopters of the ePaper: To balance my findings, it was essential to interview readers who either seldom use or have not adopted the ePaper. The intention was to have this category highlight for me the barriers to adoption, such as access, usability, technological limitations, or preferences for traditional print media formats. This was in line with objective Two.

Media Industry Experts and Scholars: Experts and scholars in media and technology such as journalism educators and media researchers, government and Civil Society actors were targeted. The idea was for them to provide a broader perspective on the role of digital papers such as ePapers in Uganda's media landscape, grant insights into the broader trends, and their contribution, and adoption. I also aimed at this category to provide critical analysis of the ePapers' contributions to media innovation, revenue models and potential for sustainability. Indeed, they provided insights and scenarios about the future of the newspapers, potential and contribution of ePapers in the Ugandan press in line with all the objectives of this study.

Publishers: The publishers in this study refer to owners and top management who take decisions at *New Vision*, and *Daily Monitor*. These were often individuals who have invested in ePaper technology. They were included in the study to help provide insights into why they decided to adopt ePapers, what challenges they faced during the adoption process, and how they are monetizing their ePaper products. In this category, I sampled owners, senior managers such as managing directors, board members, marketing managers, IT managers and editorial directors of qualitative interest in line with objectives One and Two.

Advertisers and Business Partners: Adverts and business partners are critical drivers of revenue generation for media in Uganda. This category comprises the advertising agencies that place adverts in the newspapers and other business partners interested in paid editorial known as native advertising. This category was included in the study to provide insights into how businesses perceive the ePaper as an advertising platform. They provided feedback on the effectiveness of digital adverts compared to print, and their role in revenue generation. Their experiences and perceptions regarding the contribution of and effectiveness of ePaper advertising, was invaluable to my study, especially in line with Objective Three and Four.

Marketing and IT Managers: interviewing members of the marketing team digital strategy teams was intended to help uncover strategies employed to promote the ePaper, target specific user demographics, and generate revenue. They provided insights into the uptake of the ePaper and efforts being made to attract and retain digital subscribers. They constituted a qualitative interest to me because they are responsible for drawing sales strategies, copy distribution and electronic copy subscription protocols, and executing promotional efforts to drive ePaper adoption.

IT Managers, who are charged with overseeing the technical infrastructure and cybersecurity aspects of ePapers, were included because they provide crucial insights into the technological dimensions of ePaper implementation. By including these vital roles in the study population, I aimed to unravel the intricate factors influencing the success and challenges in transitioning to ePapers, thus offering a holistic understanding of the ePaper landscape in Uganda's media industry.

4.7 Data Collection Methods and Instruments

The study privileged in-depth interviews and netnography as data collection methods using interview guide and netnographical guide as instruments. These were essential for defining how the study systematically captured evidence while maintaining methodological rigor.

4.7.1 In-depth Interviews

This study employed in-depth interviews twined with key informant interviews, to collect rich qualitative data. Data was collected using an interview guide. As a discovery-oriented method, in-depth interviews are ideal for exploring complex phenomena like ePapers, allowing participants to share detailed perspectives, experiences, and narratives (Ntulume, 2019; Osborne & Grant-Smith, 2021).

Grounded in critical realism in a grounded theory lens, this approach enabled the exploration of the evolution, adoption, and contribution of ePapers. Open-ended and semi-structured questions facilitated deep engagement with participants, revealing underlying mechanisms and contextual factors shaping digital transformation (Brönnimann, 2022; Rutledge et al., 2020).

A sample of up to 20 key informants was selected, consistent with recommendations by Creswell and Poth (2018) and Dworkin (2012). Participants included editors, journalists, media regulators, academics, and digital media professionals from institutions such as Makerere University, Uganda Christian University, Uganda Journalists Association, and the Uganda Communications Commission.

The interviews provided insights into the historical evolution of ePapers, motivations and barriers to adoption, and their contribution to journalistic practice, audience engagement, and media sustainability. Unstructured interviews allowed for flexibility and depth, capturing subjective

experiences and process-oriented narratives across stakeholder groups (Hirose & Creswell, 2023; Smith & Elger, 2014).

This method was essential for uncovering the socio-cultural, technological, and institutional dynamics driving Uganda's shift to digital formats, addressing gaps in literature and informing both scholarly debate and media policy. Yin (2016) avers emphasizes the importance of studying real-world phenomena through the perspectives of participants and within their contextual settings. He calls for particular focus on meaning-making, contextual depth, and the use of multiple sources of evidence to ensure analytical rigor. The study undertook this approach to fill the dearth of empirical data about the ePaper complexity in the Ugandan press.

In-depth interviews have been widely used in Ugandan media scholarship to obtain comparable data on phenomena of journalistic interest. For instance, in a study on COVID-19 and the economic downturn of the indigenous press in Uganda, Tayeebwa and Kayiira (2024) asked interviewees in the same category the same basic questions in the same order to facilitate the comparability of responses while organizing and analysing the data. They used an interview guide to obtain responses from five editors of seven closed local language newspapers in Uganda yielding significant results that informed scholarship about the drivers behind the closure of several local titles in the period before and during the COVID-19 pandemic. Hence, the In-depth interviews method was appropriate for this because it allows for lengthy observations of non-verbal responses, and are also suitable for small sample sizes which make it possible to structure the interview questions in a manner that allows each respondent to answer different questions (Alina, 2021). This eventually leads to detailed information especially since each response can generate another question on its own, rendering the In-depth-interviews method a more reliable instrument in providing accurate responses to sensitive topics, mainly because of the rapport created between the interviewer and interviewee (Wimmer & Dominick, 2006).

4.7.2 Sampling frame

The sampling frame for this study consisted of institutions and individuals who are directly engaged with or possess knowledge about the evolution, adoption, and contribution of ePapers in the Ugandan press ecosystem. The frame included participants such as journalists, media experts, scholars, senior editors, media regulators, digital content managers, sales and marketing managers,

social media influencers, journalism educators, ePaper users, and social media influencers. These were selected based on their professional roles, institutional affiliations, and relevance to the thematic focus of this study. Thus, key informants were drawn from media houses such as *New Vision*, *Daily Monitor*, *Red Pepper*, Makerere University, Uganda Christian University, Uganda Communication Commission, Ministry of ICT and National Guidance, Uganda Journalist Association, and the Editors Guild, among others. This frame was guided by the inclusion-exclusion criteria, which prioritized experience, knowledge, expertise, a diversity of perspective, and user experiences, ensuring that the selected participants had the reputation to provide nuanced insight into the socio-technological dynamics of ePaper transformation in the Ugandan mediascape.

4.7.3 Sampling for In-depth Interviews

For the sampling phase, purposive sampling was the preferred technique to recruit participants from the categories above for in-depth interviews. Purposive sampling, also known as judgmental sampling, is a non-probability method that allows for the intentional selection of participants based on their ability to contribute relevant and informative data to the research topic (Creswell & Clark, 2017). Whitehead and Whitehead (2020) note that purposive sampling is commonly applied when participants are chosen in line with the specific question. It is created to give data where in-depth knowledge is required because participants are selected based on exposure or are known to have a particular in-depth knowledge about the information sought. Purposive Sampling was used to choose participants who would share valuable or helpful information (Matsiko, 2024).

Purposive sampling aids the researcher to sample cases/participants in a strategic way, so that those sampled are relevant to the research questions that are being posed (Bryman, 2012). This kind of sampling was done on the assumption that different individuals may have contradicting and vital ideas regarding the questions raised (Campbell, et al., 2020). I preferred the sampling technique due to its effectiveness in identifying and selecting information-rich cases and participants of qualitative interest and relevance to the research topic (Palinka et al. 2015; Saudagar 2018; Tongco 2007). It is suitable for qualitative studies where the researcher is interested in informants who have the best knowledge concerning the research topic (Elo et al., 2014). Creswell (2013) warns about shortfalls of purposive sampling: it can be difficult for the reader to judge the trustworthiness of sampling if full details are not provided. To cure this, I determined which type of purposeful

sampling would be best to use and description of the sampling methods are provided (Creswell, 2013). This is why I used homogenous sampling to ensure the inclusion of participants that share similar characteristics and profiles (Etikan et al., 2016), such as senior managers, journalists, editors, IT personnel, marketers and other key positions.

Expert Sampling was central to this judgmental-sampling process. This strand of purposive sampling involves selecting experts in the field to be subjects for the study (Palinka et al., 2015). With this, I was able to identify knowledgeable experts from academia, the IT landscape, the media fraternity and thought leadership. To ensure an adequate number of expert participants, snowball sampling was engaged to target additional individuals with expert knowledge in digital media, specifically ePapers as guided by Naderifar et al. (2017) and Parker et al. (2019). This approach ensured the inclusion of key stakeholders, such as newspaper editors, industry experts, and technology providers, who had the potential to provide valuable insights and enrich the qualitative data (Bryman & Bell, 2015; Creswell & Clark, 2017; Patton, 2014).

The rationale for the multi-perspective informants and participants was driven by the need for expert triangulation and utilized to bridge the gap between street-level digital practices and the overarching regulatory frameworks that govern them. These participants were categorized into three distinct knowledge silos to ensure a holistic analysis. These were: Practitioners to provide the operational reality of the ePaper production and distribution, Regulators/Government to provide the structural and technical constraints of ePapers and finally, Academics/ Scholars to provide the critical – analytical distance necessary to situating Ugandan ePapers with the broader national, regional and global discourses.

4.7.4 Exclusion-Inclusion Criteria

In this study, it was imperative to establish a clear inclusion and exclusion criteria. Gard (2024) argues that inclusion-exclusion criteria include factors or characteristics that make the recruited population eligible or ineligible for the study. The inclusion criteria helped identify the study population in a consistent, reliable, uniform and objective manner. It is important that investigators define the appropriate inclusion and exclusion criteria when designing a study and evaluate how those decisions will impact the external validity of the results of the study (Patino & Ferreira 2018). Hence, establishing inclusion and exclusion criteria for subjects was an important step in designing

rigorous process during this study.

In so doing, I focused on individual participants who have used ePapers or interacted with them, journalists, editors, sales people and IT managers at the print media houses where ePapers are existing. I did this to avoid what Patino and Ferreira (2018) warn about. They observe that common exclusion criteria should look out for eligible of individuals basing on their likelihood to be lost to follow-up, miss scheduled appointments to collect data, provide inaccurate data, and have comorbidities that could bias the results of the study, or increase their risk for adverse events. These criteria helped define the boundaries of the research and ensured that the collected data was meaningful and applicable to the study's objectives.

4.7.5.Purposive Sampling Matrix and Participant Rationale

Informant Category	Example Stakeholder	Epistemic Rationale (Why this perspective was important)	Contribution to Empirical Findings
Media Practitioners	Editors & Journalists	To capture the operational reality and daily routines of e-paper production.	Insight into digital newsroom workflows and professional identity.
Media Regulators	UCC / Government Officials	To understand the structural and legal constraints governing digital media in Uganda.	Evidence of policy impact on digital innovation and censorship.
Academics / Scholars	African Languages Scholar (Makerere)	To provide socio-linguistic context and a critical-theoretical lens on local content.	Analysis of how local languages and cultural nuances influence digital adoption.
Digital Media Professionals	Tech Leads / Multi-media Specialists	To provide technical insights into platform affordances and digital business models.	Data on the technical limitations and "digital-first" revenue strategies.

Informant Category	Example Stakeholder	Epistemic Rationale (Why this perspective was important)	Contribution to Empirical Findings
Policy Experts	Academic & Policy Researchers	To bridge the gap between theory and practice , offering a "big picture" view of the media ecosystem.	Triangulation of practitioner claims against broader industry trends.

4.8 Netnography

To supplement the in-depth interview method, I employed an internet-research technique known as *netnography* using a netnographical guide adopted from Kozinets (2020) to observe and study this new online community. Netnography is a qualitative research approach. It adapts traditional ethnographic techniques to the study of the "net", that is, the internet. Its focus is on the online communities, their practices and cultures, which are formed and reformed through computer-mediated communications (Addeo et al., 2019). The netnographic method was propounded by Robert Kozinets in 1998. It adapts anthropological techniques of ethnography which *uses participant observation*. Under netnography, participant observation is applied online, among the internet community, to study communications and connections that people form online with one another.

Given the novelty and centrality of netnography in this study, as elaborated in chapters 2 and 3, contemporary internet-powered digitisation has reshaped traditional global press in unprecedented ways. The digitisation wave has triggered major shifts in how news is generated, produced and distributed beyond the traditionally closed newspaper enclaves, and influenced how newspapers are able to reach new and borderless media markets. Importantly, a new kind of audience has emerged, known as the "Netizens." Simply put, netizens are citizens who virtually reside on the internet. The power of the internet has created a people who can freely carry out data transmission and information conversations, bringing changes in all walks of life including the communication industry. Netizens are internet citizens who have the purpose, initiative, and enthusiasm to consume and disseminate internet-based information (Zhang, 2024). The ePaper phenomenon in

the Ugandan press has created a new form of netizens in the Ugandan media landscape who, as the gaps in scholarship have shown in Chapter Two, must be studied.

Netnography is ethnography on the internet. It is a qualitative interpretive research methodology that adapts traditional ethnographic techniques to the study of online media especially, social media (Koznets, 2015). It enables researchers to describe and interpret the meaning of the behaviours, the languages, and the interactions, among members of a culture sharing group online. Its foci are the reflections and data on human communication—textual or multimedia such as video, audio, pictures – provided by online communities (Alina, 2021).

In other words, netnography can be used to analyse data from various online sources such as blogs, social media, websites, and online platforms where people engage in conversations related to such a topic as ePapers in the Ugandan press and achieve good results. Where ethnography focuses on physical communities, netnography maps and studies digital communities with big-data focus on online/electronic/internet-based conversations in a statistical and decontextualized way so that the researcher can be more precise (Kozinets, 1998).

Netnography dives deeper into the context behind the individual conversations, postings, interactions and experiences, focusing more on meaning than on precision. In applying netnography, the interest of the researcher is not necessary about what the tweet or how many people tweeted with a particular hashtag. Kozinets (2002) guides that netnographers want to know who tweeted with that hashtag and exactly how they tweeted it. The researcher should have interest in telling a whole story beyond the number of online activities in order to understand the kinds of cultures, communities, gatherings, understandings, interactions and experiences people have online.

Kozinets applied it to understand how consumers play with the stories they are told about products and services, then go online and create their own story-telling words. He studied an online coffee culture on a site called www.alt.coffee to try and understand how people were teaching each other about coffee and what they said about coffee. He uncovered how hundreds of coffee consumers discussed their coffee tastes, appropriate coffee equipment and coffee making. The data spoke to nuance in consumer communication, revealing a complex vocabulary that people had figured out

describing how exactly the perfect coffee shot of espresso was like. They used words like ‘astringent,’ a ‘taste of bitterness,’ and even the timing of tastes was described.

Kozinets reported that there was a sense of how much can be communicated and just how strongly a taste can be challenged and recreated through these online conversations. The online space was a place where people went to learn and other people clearly influence their tastes. For example, a lead user had strongly influenced a particular task that his followers talked about a lot hence indicating where the taste of the mainstream coffee might have been going. From his study, Kozinets recommended that anyone who wants to understand online brands and branding, online communication products and communication, a holistic contextualized understanding of online interactions is incredibly valuable.

Netnography is privileged for this study because of its ability to make meaning of traces such as posts, comments, experiences and interactions within digital platforms such as ePapers. This technique, therefore, fits the choice because it facilitates the exploration of how people engage with new forms of online media like ePapers (Kozinets, 2019). I chose netnography because of:

- (i) the increasing importance and adaptations of digital platforms in the wider print media landscape in Uganda which are creating new online communities and phenomena worthy academic inquiry;
- (ii) it offers the most appropriate method to study evolving online engagements (Kozinets, 2019);
- (iii) it gives an opportunity for researchers to immerse themselves in digital environments to gain authentic insights into the behaviours, values, and cultural practices of online communities beyond the precision of online statistical data; and
- (iv) it is advantageous in exploring the dynamics of digital interaction and the unobserved cultural practices in cyberspace in an unobtrusive, naturalistic, and objective way (Addeo et al., 2019; Tavakoli and Wijesinghe, 2019).

This role fits perfectly in my study because it is vital to obtain knowledge about the evolution and adoption of ePapers in the Ugandan press through interactive practices among users and consumers, their behaviour, views and opinions, their feelings, interactions.

4.8.1 Sampling for netnography: A case of *New Vision* newspaper

The netnographic approach was applied to *New Vision* ePapers, to examine ePaper engagements among its most popular online community - the *New Vision* Paper's WhatsApp Messenger Channel. This was selected as a Unit of Analysis. Using purposive sampling, I selected the *New Vision* from other Ugandan ePapers, such as *Daily Monitor* and *The Observer*, because *New Vision* has a larger and more active digital audience (IPSOS, 2024). The *News Vision* Paper's WhatsApp channel, in particular, was chosen for its high level of user interaction, direct communication, and real-time discussions. This was in comparison to the other platforms such as the X handle, Facebook page and MailChimp, where the ePaper is marginally discussed.

By focusing on this channel, I aimed to gather in-depth insights into user behavior, preferences, and engagement patterns within this digital community. This informed my second objective of assessing the adoption of ePapers in the Ugandan press. Besides, Ugandans are progressively relying on digital media platforms (Matsiko, 2024). Therefore, newspapers which have established ePaper versions to adapt to these shifts, provided an opportunity to mine rich data. Such data reflected how users discuss and engage with the ePaper format, providing rich, culturally embedded data about their adoption and perception of this digital innovation.

In approaching the *New Vision*, I applied a six-step process for conducting netnographical research involving starting with clear objectives. This involves initiation, investigation, immersion, interaction, integration and incarnation. "Initiation", the first step/movement gives the project its investigatory direction by focusing on a certain research objective (Kozinets, 2019). Accordingly, the researcher should have curved out his objective for the research which includes identifying and choosing his or her unit of analysis. With a clear objective, the second step follows.

Called "Investigation", this step involves the mapping the "investigative space" of the project. Kozinets guides that these online spaces should be treated as spaces not just as a public forum for communication, but also as cultural research sites. Thus, the researcher begins by simplification of the investigatory process. This is done by translating the research questions into searchable terms. The next process in this step is the "Search." Here, the researcher looks for specific sections within the online spaces that uncover options for further exploration (Kozinets, 2019). From this, stage, the researcher then "Scouts" by looking for specific sections within all the online spaces

already identified that can help him or her to answer the research questions. After this, the researcher then applies a criterion to filter the results from data site searches and scouting and in process called “Selection.” The data is then properly collected and “Saved” in preparation for the third step.

The next step is called “Immersion.” This involves immersing oneself (researcher) in the relevant digital space especially in the cultural flows of social mediascapes (Pink et al., 2015). Accordingly, this relies on the notion of there not being a singular site that is bounded by “geography.” Instead, it is bounded by cultural concepts. Kozinets alerts that the researcher will examine large amounts of data, so it is crucial to note only the pieces that will be useful. He suggests the use of an immersion journal, which is a place for the researcher to write his or her thoughts and analytical decisions as he or she navigates the project.

The next step after this immersion is known as “Interaction.” Here, Kozinets guides that the researcher should explicitly question and engage with online participants. This is important because studying this a specific community through interacting with online participants, helps to capture the cultural and behavioral nuances in an online setting- in this case, the ePaper WhatsApp Channel of the *New Vision* (Kozinets, 2008). In this step, this data is coproduced or elicited rather than simply observed and recorded, although there are instances where people just do “observational” netnographies (Kozinets, 2015). Yin (2016) guides that conducting a successful qualitative study involves collecting data through interviews and observations, and analyzing findings with transparency and trustworthiness. He opines that, observations (such as in netnography in this context), are valuable to researchers seeking to navigate complex social realities, offering both methodological clarity and conceptual grounding for producing credible, insightful qualitative research results.

The second last step is the “Integration.” Here, the findings are analysed by connecting data fragments with broader cultural understandings. This becomes an ongoing process of decoding, translating, cross-translating, and code-switching between parts and wholes, between data fragments and cultural understandings. Basically, the process of data analysis. However, Kozinets opines that there are several approaches to netnographic analysis depending on one’s study (Kozinets, 2003).

Finally, the last step entails a procedure known as “Incarnation.” During this step, the researcher concludes the netnographic study by effectively communicating research outcomes. An entire chapter is dedicated to netnographic findings in this dissertation. This six-step approach helps the researcher to emphasize structured exploration and adaptability to cultural contexts in digital spaces (Kozinets, 2015). I now turn to how I applied this netnographic process.

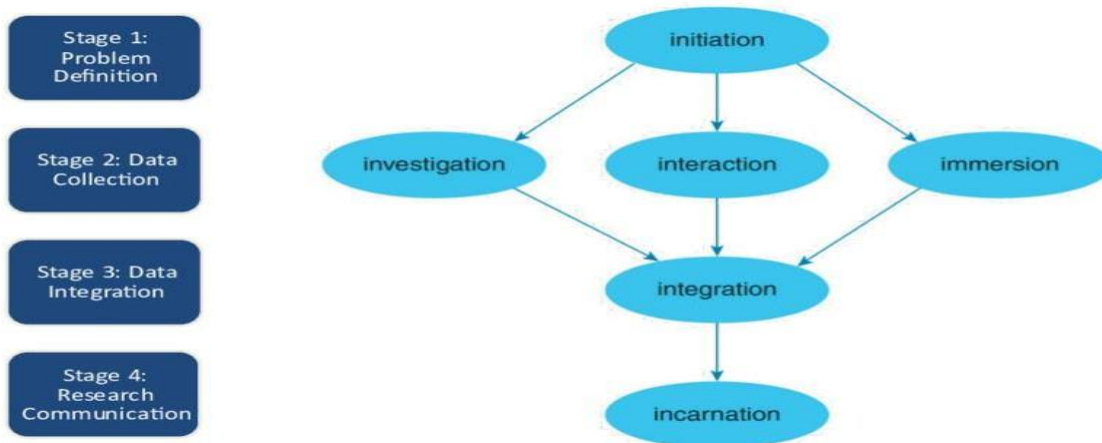


Fig 6: The stages and operations of the netnography guide for New Vision (Kozinets, 2020).

4.8.2 Applying the netnography Guide at New Vision

During the Initiation phase, I designed a netnographic research instrument that underwent supervisor and departmental review and clearance. The instrument contained my objectives for the netnographic study. These were:

1. To investigate how ePaper users discuss the platform, including their opinions on its accessibility, content delivery and overall experience.
2. To uncover the key drivers and barriers to the adoption of ePapers in the Ugandan press including technological, economic, and social cultural factors.
3. To understand what motivates or deters users from engaging with the ePaper as opposed to the traditional print version.
4. To establish how techno-cultural factors shape the acceptance or resistance to ePapers within the Ugandan population.

Data Type	Collection Method
Textual Posts & Comments	Screenshot, copy-paste, or scraping of public posts (with ethical considerations)
Emojis & Reactions	Contextual interpretation of exclamation marks emojis, and engagement metrics
Multimedia Content	Analysis of shared videos, memes, infographics, and ePaper previews
Direct Messages	With consent, analyze WhatsApp or inbox feedback from readers
Observational Notes	Reflexive journaling of researcher’s immersion and platform navigation
Interactive Threads	Mapping conversations around ePaper usability, pricing, access, and trust
Engagement & Interaction	Observe without disrupting natural flow, Engage selectively to elicit deeper insights (e.g., ask clarifying questions, thank users for feedback) and Maintain ethical boundaries and transparency

Table 2: Author’s tabulation of netnographical data collection toolkit for New Vision

I thereafter launched the “Investigation Phase,” which involved mapping the digital space for ePapers in Uganda using keywords related to “ePapers,” “digital news consumption,” and the “Ugandan press” to scout and select my digital field sites. During this mapping exercise, I identified digital platforms and social media sites with active mentions about ePapers. This included online websites and social media platforms such as Facebook and X. The searches returned four platforms that prominently contained the “ePaper” words that were replicas of their mother print editions: *New Vision*, *Daily Monitor*, *Bukedde* and *Red Pepper*.

I also found a stand-alone ePaper – the *Matooke Republic* – which was only a replica of its online-only news website and had no print edition. Other ePapers were informational ‘billboards and newsletters for corporate companies and government departments, targeted specific readerships, and lacked a mass reach and appeal from which I would obtain data of high qualitative interest relevant to this study. I, therefore, identified the *New Vision* ePaper because of prominent leadership and history as the first ePaper in Uganda.

Having identified *it* as a constituent unit of analysis, I obtained a cover letter from the university addressed directly to Mr. Don Wanyama, the Chief Executive Officer of the Vision Group, the *New Vision* ePaper’s parent company. I followed this up with an email. The CEO He responded positively and encouraged me to make contact with the head of the ePaper division. I later physically visited the digital division office on Pike House, 3rd Street industrial Area, Kampala, for my initial interaction and presentation of study objectives.

This process resonates with recommendations of Kozinets (2019): netnographic researchers must approach its ethical dimension with sensitivity to participants’ rights, privacy and unique dynamics of digital spaces; be transparent about their identities and intentions; and seek consent in sensitive contexts where members may not expect their interactions to be studied especially when the study is not purely observational. The CEO referred me to the digital section where a senior manager who preferred to remain anonymous for this study, guided that the ePaper WhatsApp Messenger would be most relevant because of its superior vibrancy compared to other social media platforms where the company’s ePaper is often discussed. The head insismanager that I could only access data that the support team would download for me. The manager reasoned that much as this was an academic study backed by ethical clearance instruments; they did not find it appropriate to allow me enter their system during which I would also access user details. I respected their decision and instead opted to an immersion of the data and not a participant observational study – a choice which is also recommended in situations where access to participants’ identities is restricted (Kozinets, 2019).

I scouted and explored various online sections of *New Vision’s* digital platforms, X (formerly Twitter), Facebook, and Mail Chimp, to find the most relevant discussions about the ePaper. The *New Vision’s* X and Facebook did not have much activity nor discussion apart from the platforms

being used as advertising spaces for flagging the ePaper's front pages of the day's print and ePaper editions. The Mail Chimp, on the other hand, served as a platform for the company's promotional messages and technically, did not provide a feedback mechanism for interaction with users. It was a one-way channel of communication from the company to the ePaper users.

When I went through my objectives with the top manager. We came to a conclusion that a more vibrant platform among the company's social media accounts would serve the study better. I, therefore, focused on the *New Vision* ePaper WhatsApp messenger. The reason for choosing the WhatsApp Messenger was not only because of its vibrancy but because netnography especially studies online communities on social media (Kozinets, 2019). More importantly, The top manager has worked in the ePaper division since its inception in 2015, and advised that the *New Vision* WhatsApp Messenger serves as a vibrant online community where ePaper readers actively share feedback, discuss news stories, showcasing the role of ePapers in modern journalism. This rendered the WhatsApp Messenger relevant to this study because it featured ePaper users who engage in discussion and offer their opinions on its accessibility, content delivery and overall experience.

To effectively interrogate the adoption of ePapers in the Ugandan press, this study focused on the period from 2015 to 2024. This nine-year timeframe was strategically selected to capture the transformative growth of digital news media in Uganda, beginning with the launch of the country's first ePaper by *New Vision* in 2015. It coincides with pivotal shifts in digital infrastructure, increased internet accessibility, and the disruptive effects of the COVID-19 pandemic. These years reflect significant trends in digital adoption as news providers responded to evolving consumer preferences and technological innovations, resulting in a varied landscape of online news consumption.

Given the volume of data across this decade, a qualitative approach was adopted to allow for deep, contextual analysis. As Saini (2024) notes, qualitative research offers the privilege of selecting representative samples for rich interpretation. Due to time constraints and the vastness of the dataset, I purposively sampled five months from the ten-year span of *New Vision's* ePaper existence. Specifically, I selected one month from every two-year interval: December 2016, June 2018, March 2020, October 2022, and September 2024. This interval-based sampling enabled

longitudinal analysis of user engagement, technological adaptation, and cultural shifts—core components of a netnographic study.

However, the first two sampled months—December 2016 and June 2018—yielded limited qualitative data due to low platform adoption and the absence of a discernible online community. In contrast, March 2020 marked a turning point. According to Janat Nalindwa, head of *New Vision*'s digital division, “Ugandans started renewed interest in the platform when the company announced free subscription due to COVID-19 restrictions.” This surge in engagement provided fertile ground for examining user behavior and platform evolution.

Data collection involved electronic observation of activity within the *New Vision* ePaper WhatsApp Messenger group, supplemented by follow-up interviews with users and platform managers. Purposive sampling, complemented by snowball techniques, facilitated access to key informants and enabled qualitative exploration of this complex social phenomenon (Tondok et al., 2024).

September 2024 was particularly significant due to heightened news activity. On September 3, opposition leader Bobi Wine was shot during a police confrontation, and on September 5, Olympic athlete Rebecca Cheptegei died from burns after a domestic attack. These events drew global attention and intensified user interaction with the ePaper platform, making it a critical moment for analysis.

The selected months represent key inflection points in Uganda's digital media trajectory, shaped by factors such as improved mobile access (UCC, 2020), digital payment systems (Taremwa, 2021), and pandemic-induced shifts (Walulya & Moges, 2022). This sampling strategy allowed for the identification of authentic patterns in user engagement and community interaction, offering a rich context for analyzing the social and cultural dimensions of ePaper adoption in Uganda.

The next step was to interact with participants while gathering netnographic data. Kozinets (2019) advises researchers to actively engage with participants in addition to observation. He further encourages netnographers to elicit responses from the online community members in order to co-produce knowledge. The WhatsApp messenger for the *New Vision* ePaper provided some vibrancy in terms of reader feedback and interaction with the platform. But I was not allowed to observe

this from the company's electronic system and interface. Instead, data was compounded by the *New Vision* ePaper support team for my immersion. Therefore, I could not initiate discussions around key topics such as how ePapers compare with print in various respects. Instead, using an immersion journal, I write my thoughts and analytical decisions as recommended by Kozinets (2019), then immersed myself into the large amounts of online data to understand how the ePaper adoption in the Ugandan press is progressing.

While such data can be obtained through interaction with online participants, elicited or co-produced with them, ethical considerations regarding to data privacy issues at *New Vision* ePaper did not allow me to reach this far. However, after obtaining sufficient data from the *New Vision* WhatsApp Messenger support team, I decided to immerse myself in it looking for patterns and occurrences so as to deepen my understand of users' experiences with ePapers. After all, there are instances where researchers just do observational netnographies (Kozinets, 2019).

For the fifth and sixth procedural steps, namely; "Integration" and "Incarnation," I deal, first, with Incarnation through an ongoing process of coding, decoding, translating, cross-translating, and code-switching between arts and wholes, and thematic analysis in the next section. In dealing with incarnation, which is basically about communication with others about the project (results), I address this more succinctly in Chapters Four and Five.

In sum, netnography complimented in-depth interviews by collecting data about online activity around ePapers, tracking the manner in which newspapers raise awareness about their ePapers to attract subscriptions, how they advertise their presence in various online spaces, and ePaper users' perspective therefrom. This is why scholars observe that once adopted, netnography helps in analysing data from situations where participants may be hesitant to disclose their personal information to the research team (Addeo et al., (2019). Because netnography enabled collection and analysis of data from an online forum since it is not limited to passive observation and study multiple digital platforms such as forums and can involve contextual interpretation depending on research goals(Morais et al., 2020), it was possible to follow the top manager's advice and focus on the *New Vision* WhatsApp messenger forum.

4.9 Data Analysis

This study has combined two fields of analysis, namely: thematic analysis, and grounded theory to enable the inductive and abductive interpretation of interview and netnographic data. This was important for locating the study in the broader debates of how ePapers evolved and contributed value to the Ugandan press. Inductive appreciation of the evolution, adoption, and contribution of ePapers in the Ugandan press means that the study needed thematic analysis to derive insights, themes and conclusions based on patterns and experiences of ePaper users, especially in the online spaces. This approach involved analysing data in the context of emerging trends, behaviours and impacts of ePapers in the press, allowing the researcher to develop conclusions based on the specific characteristics and dynamics detected within the Ugandan print mediascape.

By abductive appreciation of the evolution, adoption, and contribution of ePapers in the Ugandan press, thematic analysis and grounded theory enabled me to combine empirical evidence from the data with emerging themes to most credible explanations about the adoption and contribution of ePapers in the Ugandan press. In seeking to develop a coherent understanding of ePaper evolution in Uganda, I inferred the best possible interpretations about the phenomenon, striking a balance between empirical evidence and existing theoretical knowledge.

4.9.1 Grounded Theory

The study adopted the grounded theory to understand ePaper adoption and contribution in the Ugandan press. This model, developed by sociologists Barney Glaser and Anselm Strauss in the 1960s, is an inductive strategy in the research process, generating theories, themes, or concepts grounded in the data itself. The model allowed for the use of open coding to analyze data from interviews and content analysis related to ePapers (Strauss & Corbin, 1990).

The process involved constant comparison of data from different datasets, time periods, and stakeholder perspectives, leading to the development of more nuanced and context-specific themes and theories that are “grounded” in the data and were helpful to explain the ePaper phenomenon. The literature opined that the digital transition has led to a paradigm shift in audience and market response, leading to alterations in traditional mass media like newspapers. The transformation presents challenges such as shrinking margins and declining circulations, which have compelled newspapers to publish online versions to reach a global audience. The process involved constant

comparison of data from the different, time periods, stakeholder perspectives, leading to the development of more nuanced and context-specific themes and theories.

Particularly, grounded theory involved selecting new participants or data sources based on emerging insights especially when new ideas occurred to me late during the research process (Charmaz, 2006; Charmaz & Belgrave, 2012). I anticipated to access key informants of qualitative interest such as journalists, media scholars, managers and readers/users to deepen my understanding of specific aspects of the ePapers in the Ugandan press. I conducted semi-structured interviews with purposively selected key stakeholders in the press industry, including newspaper publishers, editors, journalists, and digital media experts.

In the process, I was able to further explore participants' fresh perspectives, experiences, and challenges related to the adoption and contribution of ePapers. I then used thematic analysis, as the next section shows, to identify common themes and patterns emerging from the interview data, as espoused in Braun and Clarke (2006). This is in line with what Glaser and Strauss (1967) position on grounded theory as a process where the human agency is central in engaging a method of discovery and treating categories as emergent from the data (Charmaz, 2006).

4.9.2 Thematic Analysis

Thematic analysis is a versatile analytic technique that identifies, analyzes, and reports patterns (themes) within data (Squires, 2023). By examining recurring themes or concepts, it helps researchers understand and interpret complex data sets through a structured coding and theme development process. Braun and Clarke (2012) describe thematic analysis as “an accessible, flexible, and increasingly popular method of qualitative data analysis.” They argue that while it shares similarities with other methodologies like grounded theory, thematic analysis does not require their theoretical and technological knowledge (Braun & Clarke, 2006). Hence, thematic analysis is a good method for analysing data in an iterative research process such as this one.

In this study, it was important to thematically analyse the volume of data obtained from in-depth interviews and netnography in order to interrogate deeper assumptions and meanings derived about the transformations taking place in the Ugandan print media. The study utilized a manual qualitative data analysis procedure which grants a five-phase process of data analysis as espoused

in Bingham (2023) and in Creswell and Poth (2022)'s Data Analysis Spiral. It incorporates both deductive (what he calls a *priori* codes developed before analysis) and inductive (codes developed during analysis), along with guided memoing and analytic questioning. This was also in line with Pierce's iterative analytic that I explained in earlier in this chapter. As Nowell et al. (2017) state, a trustworthy qualitative study should demonstrate that data analysis is conducted in a precise, consistent, and exhaustive manner, with detailed documentation to allow readers to assess the credibility of the process. Below, I demonstrated how I applied the Five-Phase approach to develop themes for this study.

Bingham (2023) suggests a five-phase analytical process that can be applied to qualitative analysis. I adopt this phased approach to structure my data and help to produce themes for theory generation.

Phase One - 'Organizing the Data.' This initial phase involves deductive coding strategies to create an organizational schema through 'attribute coding' (Miles et al., 2020). It helps researchers in sorting the data into manageable categories based on attributes such as data type, source, and time period. I utilized this phase to support proper data management which enabled me to familiarize with the collected data and setting the stage for subsequent analytic work.

Phase two - 'Sorting Data into Relevant Topical Categories.' This phase according to Bingham (2023) employs inductive, abductive and deductive analysis to further refine the data organization. Here, the researcher uses topic codes aligned with the study's purpose and research questions to sort the data into relevant categories. I used this phase to filter out non-relevant data and identifying cross-coded data, thereby facilitating deeper inductive analysis in later phases.

Phase Three - 'Open/Initial Coding,' the researcher engages in inductive analysis – which is all about reading through the data within the established categories to identify emerging themes and patterns. I used this phase to allow me to develop new codes that had not been predetermined but arose naturally from the data, supporting the emergence of new insights and theories. Data obtained from both the in-depth interviews and netnographic observations were transcribed and subjected to manual open coding. This involved breaking down the text into meaningful segments and assigning initial codes that represented specific ideas or phenomena. For instance, codes related to “technological challenges,” “audience engagement,” and “revenue models” were grouped under broader categories like “Adoption Challenges” and “Accessibility.” Using axial coding, these were then grouped into categories based on patterns and relationships.

This phase further involved ‘Selective coding.’ This stage called for refining the categories into core themes that captured the essence of the data. Key themes that emerged from the data included, Evolution of ePapers -Highlighting the shift from print to digital, including the technological innovations that facilitated this transformation, Adoption Strategies -Exploring how media organizations have adopted ePapers, including changes in business models, editorial strategies, and content distribution andContribution to the Press - Assessing how ePapers have impacted traditional media roles, readership, revenue, and overall media landscape dynamics. I extrapolate each of these and their attendant sub-themes in Chapters Four and Five.

Phase Four - ‘Memoing to Develop Findings,’ the process integrated memoing throughout the coding process to capture thoughts, decisions, and reflections that emerge during data analysis. This was especially true with netnographical data.

For example, throughout the immersion and interaction stages of the netnographical application, I began the process of integrating and analysing the data collected from *the New Vision* WhatsApp Messenger. Following Kozinets’ (2019) framework, I organized the data thematically, focusing on the evolution of user preferences, the factors driving adoption, and the overall contribution of the ePaper format to *New Vision*. This ongoing process involved cross-referencing the online posts in the messenger with the theoretical framework.

Thus, memoing supported the transparency of the analytic process and contributed to building a comprehensive audit trail. This was done to ensure enhancement of the confirmability and dependability of the study’s findings.

Phase Five - ‘Applying Theory and Literature to Findings.’ This involved examining the findings through the lens of existing literature and theoretical frameworks. This helped in contextualizing the findings within the broader academic discourse on digital media. This helped to enhance their credibility and transferability by linking them to established concepts and theories (Bingham, 2023), especially the theoretical framework used in this study in the analysis Chapter Six.

4.10 Research Rigor and Interoperability

Any qualitative study requires meticulous adherence to established research rigor to avoid biased results. This ensures that the full story is told, that rigor is pursued to the letter, that qualitative findings truly reflect the methodological choice, respond to the objectives, and answer

the research questions, and that the design, method, conclusions are explicit, public, replicable, and open to critique, and free of bias (Leung, 2015). I also invoked research interoperability, derived from a definition by the Institute for Electrical and Electronics Engineering in the IEEE Standard Computer Dictionary.

It defines 'interoperability' as the ability of two or more systems or components to exchange information and to use the information that has been exchanged (IEEE Standard Computer Dictionary, 1991). Research interoperability in this study means how the triangulated data from two data collection systems (in-depth interviews and netnography) was able to produce results that were exchangeable and transferable in other settings. This test of rigor is reflected in what Johnson et al (2020), write:

Attributes of rigor and quality and suggested best practices for qualitative research design as they relate to the steps of designing, conducting, and reporting qualitative research must be clear and focused. Qualitative data collection and analyses are often modified through an iterative approach to answering the research question. Researcher reflexivity, essentially a researcher's insight into their own biases and rationale for decision-making as the study progresses, is critical to rigor.

In *A Review of the Quality Indicators of Rigor in Qualitative Research*, Johnson et al recommend a step-wise approach to ensure rigor in a qualitative study. They opine that the first step takes the identification of a research topic, second step is the qualitative study design, the third step involves data analysis, the fourth encompasses the drawing valid conclusions and the last step is the reporting research results. These steps have constituent sub-steps such as credibility, transferability, dependability, and confirmability in steps three and five. Rigor in the research process and results are achieved when each element of the study methodology is systematic and transparent through complete, methodical, and accurate reporting (Patton, 2014).

To achieve rigour, I ensured that the research process reflected the trustworthiness and integrity expected of a successful qualitative study such as mine which is underpinned by critical realism, multifaceted theories, the Hegelian dialectical reasoning, the pierce abductive-inductive reasoning and grounded theory. I was also able to select and apply the chosen methods and tools of research to address each research question for rigor and quality. This took a thoughtful and deliberate planning, diligent and ongoing application of researcher reflexivity, and honest communication between the researcher and the participants.

4.11 Trustworthiness and Integrity

During this study, I laid great emphasis the trustworthiness and integrity of the research process. In order to instil confidence in the truthfulness of the research, findings, protocols, and processes, Amankwaa (2016) and Polit & Beck (2014), emphasize that the research process ought to exhibit significant levels of rigor. Some scholars have previously criticized qualitative research methodology for lacking rigour, transparency, justification of data collection and analysis of methods being used, and hence the integrity of findings (Hadi & José Closs, 2016).

However, qualitative studies that use terms such as credibility, dependability, conformability, transferability, and authenticity to scrutinize every phase of the analysis process, including the preparation, organization, and reporting of results, give the reader a clear indication of the overall trustworthiness of the study (Elo et al., 2014).

To achieve this, the study implemented standard procedures and techniques commonly employed in qualitative studies, such as reflexivity, Peer reviewing and member checking, validity, reliability, replicability, and confirmability. Great emphasis was placed on the credibility, truthfulness, and confirmability of the collected data (Noble & Smith, 2015). I employed the following strategies to establish these aspects of trustworthiness and integrity in the research process.

I also employed peer review to essentially enhance the trustworthiness and integrity of the study. The constant search for input from fellow doctoral peers, writing communities, research networks and research assistants through peer reviews, mock presentations at doctoral conferences, ensured a rigorous study design, data collection methods, and analysis techniques. The aim of peer debriefing and member checking is to ensure dependability and enhance credibility and trustworthiness, thereby demonstrating rigour in qualitative studies which is essential for the research findings have the “integrity” to make an impact on practice, policy or both (Hadi & José Closs, 2016). Initially, I had been able to pre-test research instruments in Kampala and Mbarara cities to obtain more insights about their ability to generate quality data.

Credibility – the truth value of the findings in a qualitative theory building study that asks how congruent the findings are with reality (Stahl & King, 2020) – was built into the study via triangulation, member checking, peer debriefing, reflexivity, saturation, and external audits.

Triangulation involved using several sources of information or procedures from the field to repeatedly establish identifiable patterns and recognize similar outcomes through various data sources (Stahl & King, 2020). This includes methodological triangulation (combining both interviewing with netnography), data triangulation (gathering data from various sources), investigator triangulation and theoretical triangulation (Stahl & King, 2020).

I used in-depth interviews, Key informant interviews and complimented them with netnography to collect data. The thematic analysis, and the human element were relied on to analyse the data and build themes to form a theoretical claim, rather than rely on software that had the potential for mechanical errors and data misinterpretations. I privileged interview hand written notes, transcripts and audio recordings of interviews and netnographical views and opinions, which were all focused on the same ePaper phenomenon. I used three research assistants to fully analyse and evaluate data from the various datasets and scrutinize it to ensure it answered the research questions. I relied on the TD, the SST and CPE (Chapter Two), to ground this study in a cogent framework that draws from multiple theoretical postulations. This was also underpinned by an iterative grounded theory and critical realism philosophical resources for a robust inquiry.

Dependability, the stability of data over time and under different conditions (Elo, 2024), which Lincoln and Guba (1985) call the trust in which researchers, both producers and consumers, actively build their trust in the events as they unfold, entailed peer scrutiny. Peers help to read and react to field notes, interpret data which conveys a sense of self-credibility providing an insider analysis and feedback (Stahl & King, 2020). I ensured that there was consistency in coding and interpreting of data over time through regular reviews and a clear coding protocol. For example, I kept an audit trail detailing the records of the research process through clear documentation and the decisions I had to take in the data collection and analysis phase of the research process and decisions made.

Confirmability, another perspective on trustworthiness, presupposes that, researchers get as close to objective reality as qualitative research can get (Stahl & King, 2020). For researchers to engage in a scientific inquiry process such as auditing datasets, there must be some observable reality present. Rather than constructing a reality in findings, Stahl and King (2020) argue that qualitative researchers who believe and pursue objectivity, should rely on constructs like precision and

accuracy in their research practice and the involvement of other researchers. Researchers ought to aim for shaping research findings based on participants' perspectives rather than researchers' biases through maintaining an audit trail and engaging in reflexivity.

I relied on grounded theory and Pierce's abductive-inductive conceptual resources to sustain an iterative process in order to obtain quality data that was meaningful and relevant to the objectives. I was cognisant of the fact that dependability is high if another researcher can readily follow the decision trail I used (Thomas & Magilvy, 2011). This is why I emphasized the vividness for results by presenting them as rich, vivid, faithful, and in artful descriptions such as quotations which helped me to highlight the salient themes in the data (Whittemore et al., 2001). For example, quotations from as many participants as possible, helped me confirm the connection between different data as sources well as ensure richness of data about the extensity of the ePaper influence in the Ugandan press as each main concept is linked to the data by a quotation (Elo et al., 2014).

4.12 Positionality, Reflexivity and Addressing Biases

Positionality of a researcher means the personal expertise, cultural principles, power dynamics, and preconceived notions regarding research which assume a central role in shaping the perspectives of researchers (Mthombeni, 2024). Positionality matters, particularly to qualitative scholars, because it helps to draw attention to the impact of researchers' multiple identities on research findings and knowledge production (Türkmen, 2023)

Reflexivity on the other hand is the act of examining one's own assumption, and the active acknowledgement of one's own belief, bias, and judgement systems before, during, and after the actual research process (Jamieson et al., 2023). How researchers think critically and carefully about these biases, influences the research process. I was not only cautious about the need for trustworthiness of our scientific inquiries; I was self-reflecting about myself as a researcher, how my subjectivities and biases guide and inform the research process, and how my worldview is shaped by my research and vice versa (Wilkinson, 1988). If positionality refers to what we know and believe, then reflexivity is about what we do with this knowledge (Jamieson et al., 2023).

To address existential biases, both as a practicing multimedia journalist in Uganda, media co-owner of one the major newspapers (*Red Pepper*) in the country, I employed the reflexivity and positionality conceptual resources to manage any biases, assumptions, and values that had the

potential to influence the study's design data collection and analysis. I employed a research assistant to collect the netnographical data from *New Vision* after the initiation stage. I also emphasized that this was a purely academic study using the clearance from Makerere Research and Ethics Committee as well as a letter from the head of the Department of Journalism and Mass Communication at Makerere University. I also ensured transparency and documentation of the research process and decisions I made throughout the study. These measures helped me to open about the limitations, biases, and potential conflict of interest in appreciating the research process.

At every stage, I acknowledged these biases in order to enhance objectivity and seeking peer reviews further enhanced the trustworthiness of the research process and the quality of data to reinforce a robust interpretation of evidence. Of particular value was the fact that in order to generate theoretical and contextual understanding of the subject of ePapers in the Ugandan press, my skills and background as a practicing journalist were essential in conducting productive interview sessions. After all, possession of communication skills is essential for researchers to conduct successful and productive interviews (Alina, 2021; Keyton, 2006).

4.13 Transferability (Applicability)

Transferability refers to the extent to which the findings can be transferred to other settings or groups (Koch, 1994; Polit & Beck, 2012). While qualitative research may not (cannot) aim for board replicability, patterns and descriptions from one context may be applicable to another. Researchers may offer suggestions about transferability, but should ultimately go down to the reader's judgment as to whether or not the reported results are transferable to another context (Elo et al 2014; Graneheim & Lundman, 2004). This calls for meticulous reporting of the results reflecting the true descriptions of participants' views, voices and opinions, which this study achieves.

Throughout this study, I have provided vivid, rich and thick descriptions of the research process within the Research Onion metaphorical context. I have reported the findings and demonstrated their applicability to other settings within the print media industry, especially in Africa. In selecting participants for example, I have purposively ensured that key informant interviews formed a representative sample reflective of the diversity within the local, national and international press industrial ecosystem. I have also ensured that the netnographical research protocols as proposed in Kozinets (2019). Therefore, through this rigorous process, I was able to demonstrate the extent

to which the results would be deemed authentic. Qualitative research results are considered authentic when researchers fairly and faithfully, show a range of realities (and thick descriptions) during the research process (Lincoln & Guba, 1985; Polit & Beck, 2012).

4.14 Ethical considerations

In planning this study, I anticipated ethical issues considering that it would involve human subjects and intrusion into institutions, particularly media and public offices for both primary and secondary data. Before engaging in the data collection process, I developed research instruments which went through the relevant supervision for approval. When this was done, I sought out the Makerere University Research Ethics Committee (MUREC) for a clearance certificate. This certificate enabled me to seek data without attracting suspicion from participants and to demonstrate my commitment to ethical research practices and give participants the confidence they needed to trust the study. I later designed and sought out informed consent of the participants. Before their participation, all participants were informed ahead of time and the of the study's purpose, protocols, potential risks, and benefits. I gave them the opportunity to provide informed consent voluntarily, and in doing this, I secured their understanding and willingness to be involved. For netnographical data, I respected the *New Vision's* decision and policy on data protection. All participants' names and WhatsApp numbers in the database I analysed were erased.

I emphasized confidentiality and anonymity throughout the process which I conducted from two regions of the country and at the *New Vision* headquarters. I ensured that to protect their identities and their personal information, I maintained strict confidentiality. In cases where my positionality was a limitation, as explained in the previous subsections, I deployed research assistants in order not to pick biased and hyped data. To ensure anonymity, views, perspectives, voices, gestures and opinions requiring anonymity, were duly respected throughout the study. While the study did not anticipate the inclusion of minors, special consideration was given to the protection of vulnerable members of society, including women and individuals with disabilities. I made sure that protection of vulnerable populations was paramount and ensured their safety and well-being throughout the research process. To achieve this, I complied with the professional standards as outlined in the Graduate Handbook of Makerere University and the Journalism and Communication department.

Finally, through my study, I have attributed through citations and referencing, all information I obtained through secondary data collection and literature review. This gave the study the much-needed trustworthiness and integrity. That way, I avoided plagiarism and built transparency by reporting all aspects of the research process, like the research progress reports to the university, and the data. I have also acknowledged the limitations of the study and provided guidance for further research and how to address the challenges.

4.15 Methodological Challenges

When considering the challenges of the study, several factors were anticipated that could affect the research process and outcomes. These limitations included the challenge of the scope of the study that was limited to individual profiles and one newspaper, despite the presence of more print media outlets in the country and ePapers.

To mitigate these limitations, a comprehensive unstructured interview guide was developed to address questions regarding the evolution, adoption and contribution of ePapers in the Ugandan press. The instrument was pilot-tested in Kampala and Mbarara cities with purposively selected participants to ensure its validity. However, for areas that remained unanswered, further research was recommended as a future course of action.

The other challenge was the access and recruitment of participants because of their limited availability. Many of the participants were envisaged to be busy people due to their technical and professional characteristics. However, I made every effort to minimize this challenge and overcome its attendant limitations by exercising flexibility in order to accommodate participants' schedules and secure access at their convenience.

Due to professional constraints, accessing certain participants would prove a big challenge. Some individuals were hesitant to share their informed experiences and opinions which poised to hamper the quality of data. This challenge was managed through robust triangulation of datasets. At *New Vision* for example, I was not given full access and participant observation and participation while collecting netnographical data because of the company's data protection policy.

Lastly, I anticipated technological limitations as a possible implementation challenge for the study. Technological challenges such as internet connectivity and technical glitches were encountered many times, considering the study's focus on ePapers and the potential issues with internet connectivity or technical glitches that affected data collection and analysis.

4.16 Chapter Synthesis

This chapter outlines the research design, data collection methods, and data analysis techniques in the mold of the Research Onion espoused in Saunders and Bristow (2023) that had guided this study. The chapter describes the sampling strategy, participants, and ethical considerations involved in the study, as well as the limitations and potential challenges of the research process. By presenting a rigorous and transparent methodology, this study ensured the validity and reliability of the findings for the understanding of the role of ePapers in the Ugandan press.

The methodology chapter has also emphasized the importance of considering the social, cultural, and economic context in which ePapers are adopted and used, and the need to engage with the perspectives and experiences of key stakeholders in the newspaper industry. Having presented the methodology used in this study, I now turn to the findings which provide a nuanced and comprehensive understanding of the evolving media landscape in Uganda and the role that technology is playing in this transformation.

CHAPTER FIVE

DIGITISATION OF UGANDAN NEWSPAPERS: FACTORS THAT HAVE INFLUENCED THE EVOLUTION OF ePAPERS IN THE UGANDA PRESS

As noted in Chapter One, I privileged digitisation, digitalisation and digital transformation to annotate the technological transformation process that has underpinned the Ugandan press since the early 1990s. I observe that technological shifts in the print media have occasioned processes of “digitization,” “digitalization” and “digital transformation” (Bloomberg, 2018). Drawing on Maltaverne (2017) and Unruh and Kiron (2017), I define and situate these processes to characterize the broad themes in order to answer the objectives in this chapters four and five.

‘Digitisation,’ is the conversion from analogue to digital. This is the process that the empirical data will historicize in this chapter, hence answering the first objective: *To establish the factors that have influenced the evolution of ePapers in Uganda.* ‘Digitalisation’ means the process of digital transformation involving the rise of digital technology the innovation of business models and processes that exploit digital technologies to produce formats such as online publications and ePapers by the Ugandan press. This process answers the second objective: *To examine the drivers that have influenced the adoption of ePapers in the Uganda press.* ‘Digital Transformation’ means designing new technological ways of doing things that generate new sources of value by opening borderless opportunities for media to curate stories and distribute them across multiple platforms (Khan, 2021). I used this concept to deal with findings answering the third objective: *To assess the contribution of ePapers in the Ugandan press.*

This chapter deals with findings on factors influencing the evolution of ePapers in the Ugandan press and directly answers the first objective of this study. In this chapter, I answer the question: *What factors have influenced evolution of ePapers in Uganda?* This question sought to:

- a) *Find out the socio-economic factors that have influenced the evolution of ePapers in the Ugandan press*
- b) *Establish how technological advancements have influenced the evolution of ePapers in the Ugandan press*
- c) *Find out any contextual factors such as media industry trends, and the regulatory environments have been behind the evolution of ePapers in the Ugandan press*

Beyond capturing current practices, the empirical interviews in this chapter were strategically designed to reconstruct the historical trajectory of digital media in Uganda which is largely missing. In a landscape where formal archival records (secondary sources) of early technological shifts are fragmented, the lived experiences and longitudinal insights of veteran practitioners, regulators, and policy experts, served in this study as a vital primary source to map the evolutionary milestones of the ePaper from its inception in 2015 to its current state. This historical data obtained through interviews is not just background; it is empirical data that explains the *causality* of current ePaper strategies, providing the "Why" behind the "What" in this trajectory, contributing to the historicization discourse of ePapers in the Global South.

Furthermore, the interview approach in this chapter demonstrates that the ePaper's archival functionality transforms the medium from a transient daily news source into a durable, retrievable digital repository. Empirical data from September 2024 for example, reveals a recurring user pattern, ranging from requests for "Archives access" to inquiries about long-term subscription packages. Which demonstrates a shift in the perceived "substance" of the newspaper; it is no longer bound by the temporal constraints of print but is treated as a persistent resource for research, professional reference, and personal documentation. By facilitating manual retrieval and guidance for historical editions via WhatsApp, the *New Vision* ePaper platform for example shows an evolutionary process taking place in the digital media ecosystem, operationalizing a digital materiality, and proving that the value of the publication lies as much in its preserved "back-catalog" as in its immediate daily reportage.

5.1 From print to digital: A historical origination of ePapers in the Ugandan Press

Under this broad theme, I interviewed media executives, journalists, editors, IT managers and circulation/subscription managers (from both digital and print media, particularly *New Vision*, *Daily Monitor* and *Red Pepper*). This was important for the study because of their knowledge of the transition to ePapers, the factors that inspired this transformation and also their roles and experiences in relation to production, distribution and digitisation of the news products in Uganda.

Further, I interviewed ePaper users, media thought leaders, academicians and, Information Communication Technology experts. I was particularly interested in their industry knowledge views, opinions and meanings they attached to the evolution of ePapers in the Ugandan press, particularly the adaptations to emerging technologies. They were specifically asked the question: *What are the factors that have influenced the evolution of ePapers in the Ugandan press?*

5.1. 1 ePapers as a Neoliberal Consequence of Structural Adjustment Programmes (SAPs) in Uganda

Evidence from interviews with media executives, journalists, editors, IT managers and circulation/subscription managers (from both digital and print media, particularly *New Vision*, *Daily Monitor* and *Red Pepper*) traces the evolution of ePapers in the Ugandan press to the country's adoption of Structural Adjustment Programmes (SAPs) of the International Monetary Fund (IMF) and World Bank. Both Bretton Woods institutions influenced key political economy decisions in 1992. The NRM government under Yoweri Museveni faced conflict in northern Uganda, the collapse of the communist bloc in 1991 (McMeekin, 2024), and was forced to embrace SAPs, which dictated privatization of state enterprises and liberalisation of the economy.

Ugandan authorities embarked on an extensive Economic Recovery Program (ERP) (Mawejje & Odhiambo, 2021; Sharapova, 2024). Embracing the SAPs, which imposed neoliberal policies like liberalisation of the economy, reduced government intervention in economic activities, privatization of state-owned enterprises, and promotion of free-market principles, suggests two things: first, a private-sector policy landscape would allow ePapers to emerge in Uganda given neoliberal economic policies; and second, reforms like deregulation, privatization of government enterprises, and a shift to market-oriented policies, extended to media industries, ushered in private media ownerships, and adoption of emerging technologies such as the internet were sure to occur with limited policy restraints.

A top government commissioner and, former participant on the ICT Committee in Uganda's Parliament and notable ICT leader in the country's digital transformation process since the early 2000s, stated:

You cannot talk about the evolution of ePapers in the Ugandan press without referring to the economic liberalisation process and the Structural adjustment of Programmes of the early 1990s. The process as marked by general

deregulation of the media, leading to the emergence of private television in 1992 and the emergence of private radio in 1993, with the first FM radio Sanyu Radio, starting broadcasting in a sector that was once dominated by the state-owned Radio Uganda (KII, at Ministry of Foreign Affairs, Kampala, 19 June 2024).

From the participant's revelation, the origin, evolution and development of ePapers in the Ugandan press can be well understood from the broader neoliberal economic policies initiated by adoption of the IMF/WB SAPs that freed the market to allow private media enterprise and innovation. Liberalization set in motion key milestone epochs that defined major technological transformations in the Ugandan media landscape, specifically the press, for the past three decades. Any exploration of the evolution and adoption of ePapers on the Ugandan press cannot be complete without tracing it to this SAPs-driven process.

The transition from print to digital media (news websites, social media and later on ePapers) was possible under SAPs because the programs drove the liberalisation agenda in supportive sectors such as the telecom industry. Literature supports this position: liberalisation, particularly the reform of the telecommunication industry and the adoption of the internet on the backdrop of the adoption of the SAPs, set the stage for digital transformation (Shirley et al., 2002). SAPs meant that economic reforms would ultimately open up markets, encourage private investment and reduce state control, leading to increased competition and innovation across industries, including the media:

This economic liberalisation directly impacted the media sector, resulting in the deregulation of media ownership, the emergence of private radio and television stations, and the diversification of content. These media transitions during this period reflect broader societal changes including increased freedom of expression and access to information, which played a critical role in shaping Uganda's media environment in subsequent years (KII).

Another perspective was captured in another interview with Mr. Robby Muhumuza, a thought leader in media affairs and a Communications and Management Consultant. He observed that the liberalisation and privatization of media systems, at the time, ushered in innovations and audience shifts, giving way to the first signals at digital transformations in the Ugandan print media:

There were significant audience shifts at the time and media systems had to respond. Even today, media are evolving because technologies are changing

and reshaping different industries including the media and responding to free market forces of supply and demand (Roby Muhumuza, Board Member Monitor Publications Limited, 20 July, 2024).

Muhumuza's revelation underscores the technological drivers akin to TD: audience shifts at the time also triggered commercialisation in the media market and innovations especially of a digital nature. This is also supported by literature on how liberalisation process ushered in a free market and commercialized environment that the media in Uganda adopted and still operates in (Mbaine, 2019). Scholars capture this political economy shift when they argue that the neoliberal processes of privatization and liberalization, such as those adopted in Uganda in the late 1980s and early 1990s, while widening the public sphere, made media and communication institutions too dependent on market forces (Tayeebwa&Kayiira, 2024).

With privatization and liberalisation of the Ugandan economy, two fundamentals triggered changes to the largely traditional and state-owned media in Uganda: liberalisation of the media, and the opening up of the telecommunications sector. The liberalisation of the telecommunications sector started in the early 1990s and materialized in 1997 when a formal law was enacted and a regulatory body established in mid-1998 (Bagiire, 2005: Tsubira, 2003). This accelerated media transformations at the time. For instance, Journalist Timothy Kalyegira, a media commentator, and researcher, observed in another interview:

These fundamentals helped to trigger significant shifts in the Ugandan mediascape riding on the nascent Information and Communications Technologies (ICTs) and the subsequent spread of the internet (KII Timothy Kalyegira, Kampala, 22 July 2024).

In Uganda, the process was marked by the general deregulation in a number of sectors, including the communications sector, leading to the emergence of private television in 1992 and the private radio stations thereafter. With the first FM radio, Radio Sanyu, hitting the airwaves in a sphere that was dominated by the state-owned radio and television, the process would trigger a visible shift in the print media that was dominated by the state-owned *New Vision*. *Daily Monitor* (then known as *The Monitor*), was founded in 1992, joining *New Vision* (then known as *The New Vision*) to blend with the new FM radio waves to churn out the most important stories of the day. Says Kalyegira:

The situation before liberalisation of the media market in Uganda had been that of a thriving pre-digital analog world touching every sector- from music to

education, health and photography. This time, a new media terrain was set in motion though still under strict state watch (Kalyegira, KII, Op Cit)

This position by Kalyegira about state control of media is supported by literature. A strong government hand in communication sector still rested with the Ministry of Works, Housing and Communication, largely responsible for postal and telecommunications matters, except broadcasting which was fell under the Ministry of Information (International Telecommunications Union, 2001). The nascent expansion of the mediascape following media liberalization would later on bring about the widespread adoption of new media technologies, but the benefits that should accrue from these changes have been undermined by a regulatory regime that remains beholden to those in power (Mbaine, 2023).

5.1.2 ePapers Evolution: The Role of Internet Technologies in Newsrooms

What was the role of the internet in the transition and eventual evolution of ePapers in the Ugandan press? This question focuses on the early assimilation of internet and digital technologies in traditional newsrooms as Uganda transitioned into liberalisation and privatization. This too laid the foundation for the evolution of ePapers in the Ugandan press. Thus, to appreciate the evolution of ePapers in Uganda is to suggest a look at the technological deterministic role of the internet as a key driver in the mid-1990s. With liberalisation especially of the telecom sector in the mid-1990s, came the adoption of the internet. The internet is an important infrastructure in the transition of the press from print to digital formats and a critical driver in understanding print media adaption to digital formats such as ePapers (Namasinga, 2018).

Interviewees generally agreed on the role of the internet in shaping and reshaping media processes in Uganda. This dates back to the country's interaction with global processes at the time such as the SAPs which forced it to liberalize in the early 1990s, setting the foundation for the adoption of global digital processes such as internet in 1996. Liberalisation of the post and telecommunications sector in Uganda saw the birth of the first mobile telephony service, CELTEL, which hit the market in 1995 followed by MTN Uganda in 1998:

The launch of these telecoms revolutionized the communication landscape for good. It meant that media companies, especially newspapers began to look to digital devices and their internet offerings from these companies to reshape the way they sourced the news and communicated it (KII, at Ministry of Foreign Affairs, Op cit).

This is supported by literature. For instance, the 2001 report by the ITU observed that the growth in the sector showcased the reach and breadth of telecommunications and internet services by the two major players- CelTel and MTN Uganda. Using the GSM digital service, CelTel Uganda grew to 22,000 subscribers while MTN Uganda's subscription base stood at 60,000 across 46 cities and rural towns in Uganda. The participant at Ministry of Foreign Affairs stated:

While MTN Uganda seemed to succeed on the rollout for mobile telephony service front, it increased focus on the business market, providing wireless interface to buildings and businesses within sight of its customers. These customers were able to provide local wiring for end users who included internet, fax, and telephone users such as computer distributors, hotels, shops, and media companies such as print media (KII, at Ministry of Foreign Affairs, July 22, 2025).

He further observes that all this was made possible by a four-part strategy of liberalisation of the telecom sector which was outlined in the Communications Act -1997. He stated:

This strategy focused on one; Restructuring Uganda Posts and Telecommunications Corporation (UPTC), two; Creation of an Interdependent Telecommunications Regulator, three; Introduction of Competition which gave birth to CELTEL and MTN Uganda, and four; Privatization of the incumbent operator, Uganda Telecom. It is this liberal communication architecture that I can confidently say facilitated the print media transitions to digital spaces. (KII, at Ministry of Foreign Affairs, July 22, 2025).

The internet therefore, fundamentally altered the landscape of news consumption, enabling instantaneous access to information in the Ugandan press at the time, hence laying the foundation for the evolution of digital platforms such as ePapers. As noted by Alex Taremwa, a digital media scholar and journalist at the Uganda Christian University (UCU) in the central district of Mukono, the internet which made it possible, and still does, for people to connect, creating opportunities for them to want to connect to information on-site and on demand.

This immediacy not only created opportunities for media houses but also challenged traditional news cycles and structures. It can be further observed from this empirical experience that the internet's influence disrupted conventional media by introducing flexible, on-demand news

services that catered to the evolving preferences of readers. Robby Muhumuza concurred with Taremwa by stating that

The internet revolutionized many things. The first thing was the media, especially print media. Ugandans didn't have to wait for the 7:00 o'clock or 9:00 o'clock news or wait for the newspaper the next day. Readers felt a sense of connection with their news or information instantly and this brought a whole new dynamic to the newspaper terrain in Uganda (Muhumuza, KII, 20 July, 2024)

Indeed, given the technological shifts, *The Monitor* newspaper (now *Daily Monitor*) became the first Ugandan newspaper to launch an internet version in 1998.

5.1.3 Social Media Factor in the Print-to-Digital Transition

If the internet era (1992 to 1999) was not enough to trigger transformations in the Ugandan press, the millennium decade (2000s) ushered in a transformative wave in communication and information dissemination via social media networking sites such as Facebook and X (formerly Twitter). This rise of social media platforms and news aggregators like Google prompted print media to adapt strategies such as building and developing online presence and content distribution methods, setting the stage for the second wave of digital transformation, the ePapers. Timothy Kalyegira, who was one of the first Ugandans to join Facebook in 2008, revealed as follows about the role of social media in the evolution of ePapers in Uganda:

As the press was still enjoying its nuptials with the newfound internet phenomenon in 2006, Ugandans in the diaspora started talking about some networking platforms. Indeed, in 2004, the internet social networking site, Facebook, had appeared in Silicon Valley, USA. Two years later, the micro blogging site Twitter (Now X) was born. These in no mean fit, instantly became alternative news sources and an existential threat to the very essence of print media (KII, Kalyegira, KII, Op Cit)

Riding on the power of these social networking sites, especially Facebook, during his 2008 presidential campaign, U.S. presidential candidate, Barack Hussein Obama, mobilized campaign funds very easily from among young people (Nguyen, 2024). He went on to become the first Black U.S. President and 44th President of the United States of America, attesting to a new and emerging sphere of influence outside of print media. Slowly, news junkies, radio and TV presenters as well as music and film celebrities, globally embraced networking sites in droves. Uganda was no

exception. An anonymous top lawyer and technology enthusiast revealed that around this period, as the bulk of the Ugandan elite in academia, legal and media practitioners, embraced a computer-like mobile phone, the BlackBerry, to instantly communicate and share information, print media were grappled with a new wave of alternative media (Anonymous KII, Kampala, July 2024).

Courtesy of emerging social media technologies, Uganda entered an era of alternative media with print still looking at it as a source of information and tool for sourcing the news and marketing its products (Namasinga, 2018; Tayeebwa, 2016). But print media, which run replica news websites, saw it fit and strategic to create social media pages. In successive adoption, radios and TVs followed this wave but the revenue sources for traditional media, the culture and the optics still characterised the printed newspaper. This lawyer noted:

But as this new digital ear was fast penetrating every aspect of life and physical dwellings in the main Ugandan cities of Jinja, Masaka, Mbarara, Arua, Hoima Mbale, Gulu and Fort Portal, Ugandans began to take social media as a means to influence governance issues and foster conversations outside of mainstream media, forcing print media to return to the drawing table (Anonymous, Kampala, 20 July, 2024)

This new reality presented a dilemma for print media who held sway of the public sphere. And as James Tumusiime, a former Managing Director of the *Observer* newspaper noted in an interview, print circulation and advertising numbers started plummeting in the fall of the year 2010 as print media readers and advertisers looked to the new and alternative sources of information which proved cheaper, faster and efficient:

We panicked and tried to post all of the print version stories on our website. The reason was that we had started losing numbers to social media. Even by posting the stories, this affected the circulation of the print version because readers accessed the stories online for free (KII, James Tumusiime, former Managing Director, The Observer, 12 August 2024)

Tumusiime's revelation was complimented by Venencious Kiiza, the Managing Editor of the Ugandan Tabloid *Red Pepper* newspaper, who revealed in a separate interview that the advent of social media posed serious threats to the paper's print version by driving away readers. Kiiza further noted that a decision was taken around the year 2009 to post a different type of content on the paper's website from that of the print in order to keep both readers' attention.

His assertion was complimented by Tumusiime who revealed that conversations in *The Observer* newsroom would later on start around the year 2014 about whether it was a good idea to keep up all the content online and continue losing print revenue:

Keeping all the print content online meant that those who were buying the print version would not have reason to continue to do so since the content was coming off free. We decided to post some and withhold others to give our readers a bit of both. We also got to the point of implementing payrolls but were financially constrained to do so (KII, Tumusiime, ibid).

It is imperative to note that the new era of social media in Uganda fundamentally shifted traditional audiences to digital spaces, creating opportunities for fast delivery, packaging, and access to news on digital platforms, enabling quick and efficient production of news, a major affordance of digital journalism (Orgeret, 2020). Tumusiime's observations were corroborated by Kalyegira who argued that, previously disjointed audience segments like the conservative 'Digital Natives' (so-called "analogue old" conservatives like senior religious leaders, politicians, senior citizens and institutions) and 'Digital Migrants' (the youths) started getting integrated in one combination of platforms such as Mobile Applications, WhatsApp, Facebook, Twitter, Instagram and TikTok.

The literature shows that private-sector brands that used to run adverts in print media, such as banks, telecoms, beverages, and breweries, now acquired significant presence on social media on their own, reducing the importance of long-established stakeholders such as print media (Rocque & Sisodia, 2023). To demonstrate how this process had now become complex, in Uganda, radio announcements of the 1990s that would last two hours on air started disappearing. This gave way to social media announcements. The centrality of social media as alternative media in the Ugandan mediascape cannot be overemphasized. Its role and influence in setting the stage and accelerating the evolution of ePapers is a critical factor in contemporary Ugandan print media systems.

5.1.4 The Tipping Point: From Social Media to ePapers

As early as 2014, a tipping point in the Ugandan press terrain had been reached. Several print media executives I interviewed pointed to a worrying situation by 2014. Several newsroom leaders thought about ways of levelling with the virulent alternative media in the form of social media.

The newspaper executives like James Tumusiime reported that around this period they started to assess not just the consequences of the internet but also social media, with some viewing the diffusion of social networking sites as a threat to their industry:

Ideas started flowing in about a newspaper replica online called electronic Paper. Many colleagues thought this would keep the feel of the print paper alive. So we were now faced with a dual situation. Running a print edition and a replica online to keep the online readers from running away to social media (KII, Tumusiime, Op Cit).

As Kalyegira would state in a follow up interview, by 2016 Uganda, the threat of networking sites became more visible in Uganda formidable and more effective media spaces than newspapers for political mobilization. He revealed that a presidential candidate, Amama Mbabazi, relied on Twitter (now X) to draw significant followers among the young voters, prompting state actors to take action against social media for the first time in Uganda.

This political action would become the first tell-tell sign of the potential impact of social media on not only on media industries but the political economy of Uganda and political contestations in the highest echelons of power. Tumusiime spoke of tell-tell signs:

By 2014, it had become clear that print media everywhere was endangered as result of the rise of social media platforms. Everyone was looking at possible ways to respond to audiences which were drifting away and digital platforms were becoming the in-thing. Newspaper owners and senior managers started debating about ways to mitigate the gaps because, clearly, the numbers of readers and adverts were dropping due to social media and other economic imperatives (KII, Tumusiime, ibid).

The threat of social media and its disruptive nature within the Ugandan print media industry was exacerbated by the growing adoption and usage of smartphones by majority Ugandans to effect digital transactions. For example, Robby Muhumuza, who is a senior board member of *Daily Monitor* newspaper, observed:

The digital migration wave around 2014 dictated that everything was going digital. The people who were using the mobile phones, especially the smartphones to do a lot of transactions, was a definite indicator of a technological era that would help to propel the transition from print to digital. Given the attachment to social media platforms that churn deliver information as a supersonic speed, the legacy newspapers had to adopt quickly (KII, Robby Muhumuza, Board Member, Monitor Publications Ltd, Kampala, 20 July 2024)

This speaks to literature as observed in Chapter Two. The instantaneous nature of sharing information accorded by social media has made it harder for traditional media to exercise the requisite controls and distribute content effectively (Tayeebwa, 2016). The competition between media houses made it is easier for false and defamatory information to be disseminated via social media platforms, further complicating the normative roles of print media.

With big social media users commanding a combined audience larger than all newspapers combined, previous traditional media consumers in Uganda became their own media houses and content creators, particularly those with over 200,000 social media followers commanding rival media audiences. By May 2015, a decision was reached at *New Vision*: launch an ePaper version that would become the first on the history of the online/digital Ugandan press.

Bruce Byaruhanga, the Senior Circulation Manager at *New Vision*, revealed in an interview that a steering group, composed of editors, senior managers, and IT experts, was constituted to realize the new adoption. While management reports had shown significant threats, they also forecasted substantial opportunities for the newspaper industry in Uganda where the expertise and trusted brands of legacy newspapers like *New Vision*, typically built over decades, were seen as advantages over alternative platforms like Social Media. He stated:

The digital migration wave around 2014 dictated that everything was going digital. 2015, vision launched the ePaper but the ePaper then was rudimentary. It was like an envelope in a traditional post office. We would bring our newspaper and insert it in a digital envelope. It lacked some functionalities of a modern ePaper 2015-2017, we were there (present) with a few people (KII, Bruce Byaruhanga, Senior Circulation Manager, New Vision, Kampala, 20 August, 2024)

The *New Vision* ePaper kicked off in earnest but was never short of challenges especially design and access by a typically indifferent population used to the fast and easy to navigate social media. Byaruhanga speaks of the structural and adaptation challenges which characterised the ePaper's evolution and adoption in the first three years from 2015-2018:

The early adapters were Ugandan embassies abroad, international research organisations, banks, insurance companies and one on one buyers but the numbers were not of any significant value. The slow adaptation forced us to offer a free annual subscription to the ePaper to anyone who consistently bought the hard copy for a month (KII, Byaruhanga, ibid).

With adoption challenges still rage on, the *New Vision* management decided to engage in partnerships with telecom companies, particularly MTN Uganda, in 2017. Byaruhanga revealed that the partnership centered on offering subsidized data bundles that would enable the user easily access the ePaper on revenue-sharing model. After around two years, for some reason, there was a call off on the collaboration. The partnership failed to work. Having failed to strike a deal with the telecom company, the Vision Group embarked on building its in-house mobile application to try and tap into the growing mobile device adoption in Uganda.

Market competitors, especially *Daily Monitor*, were facing similar structural challenges that ranged from adaption, to access, to advertiser satisfaction, and to navigation. A top executive from the sales department at *Daily Monitor*, who was at the centre of the ePaper adoption in 2015 but has since quit the company, stated:

Whereas the other dynamics centered on the feel. Most clients still wanted the ePaper to have the feel of the newspapers on the street. Advertisers were more interested in having their adverts displayed in the hardcopy rather than the softcopy. We then decide to replicate the designs for both copies in order to retain the advertisers (KII, Former top executive, Daily Monitor, Kampala 13 August, 2024)

Byaruhanga mentioned a similar trend at *New Vision*, particularly in the content offering and also in the need to improve navigation especially around the year 2019. He revealed that key to stress is that readers were paying for *New Vision* “the newspaper” not the brand itself and hence management had to continue carrying similar features to the print version, sustain the legacy product “...just like Coca-Cola and its consistence in name and products.”

Without significant progress, the company took a decision to redesign *New Vision* paper. The design was officially rolled out on 1st April 2020 following the breakout of the COVID-19 pandemic. This time, the company had attained a sophisticated information technology software, known as Page Suite, from Europe. It was buttressed by another one known as “Flutter Wave.” To respond to COVID-19 lockdowns and keep its readership, *New Vision* launched a free access ePaper for the first year. The decision was also informed by the need to keep the print subscribers who had already paid annual subscription but could not read the hard copy due to the COVID-19 lockdowns. However, there was a sudden fundamental shift in access, adaptation and interest in the ePaper when the free version was announced. Besides, the lockdowns had restricted physical movement; there was no way to access the physical copies of *New Vision*. Byaruhanga stated:

This was a significant shift from years when the ePaper was slugging on with no hope of taking off. This time, the renewed interest forced us to adopt the “ePaper extra” totaling to more 16 pages in the digital version. We were including pullouts about Ugandans in diaspora, football, sports extra, features and opinions that were not including in the print. (KII, Byaruhanga, Op Cit)

However, this idea of “ePaper extra” was later dropped due to financial constraints as all those extra stories would attract additional commissions paid per story count despite not attracting more readership. In the meantime, the company resorted to the “mail chimp” technology which not only measured email deliveries but also tracked response rates and subscriptions. This enabled the company to track the ePaper growth in both numbers and new revenues.

A similar situation defined a related transition to ePapers platforms by Swedish and US newspapers in 1995. Describing the early adaptation to ePapers at the *Washington Post*, McAdams (1995) portrayed the design challenge as taking;

“...a lot of large pages that are covered with printed text arranged almost haphazardly and that are worthless twenty-four hours after they appear and translate them into a medium where their contents will have value indefinitely, be part of a much larger collection of data, be read on small screen in scrolling format, and be searchable in various ways.”(p. 64).

Indeed, the new media involved many important design decisions. These decisions included issues such as the degree of print newspaper resemblance, pros and cons of the newspaper metaphor, and the possible elimination of page one. In view of such design issues, McAdams concluded that an online newspaper cannot be a strict translation of the print product.

5.1.5 The Take off Stage: The unintended COVID 19 Pandemic Boost and the move to Digital-First Strategies

More findings from various key informants and responses from key stakeholders within the media landscape show that the evolutionary process of ePapers in the Ugandan press reflects a socio-economic trajectory. This was catapulted by the COVID-19 pandemic that struck the globe in 2019 and spread almost globally around 2020 (World Bank, 2020). The year 2020 was the spark that pushed the appreciation of ePapers as a central solution to a print media landscape whose physical

distribution was greatly hampered by COVID-19 restrictions that the Ugandan President, Yoweri Museveni, imposed on the country with militaristic fervour (Khisia & Rwengabo, 2022).

In similar manner as though seeking effective control over security forces under emergency conditions, the president used multiple security agencies, all reporting to himself (Rwengabo 2022) under the guise of Covid-19 control. It increasingly became difficult to distribute newspapers in their physical form during the Covid-19 lockdowns. Access to and/or distribution of newspapers would be possible only through digital formats as physical distribution became increasingly difficult.

One can observe that the COVID-19 pandemic, which forced events previously known for sources of information for media to move from physical to virtual, created so many alternative media people with their own social media spaces (Kumari & Choubey, 2024). During the Ugandan political campaigns of 2021, aspiring presidential candidates, local and parliamentary contestants, for example, visibly used social media spaces to market their programmes, a role previously exclusive to traditional media (Lemaire, & Karyeija, 2024). The digital spaces also became effective avenues for youth agitation, questioning government excesses (Bareebe, 2023). During the pandemic period, 2020-2022, the *New Vision's* ePaper attracted massive subscriptions as readers looked for safer ways to interact with the hard copy. The ePaper received a spike in subscriptions from a paltry 2,300 subscribers to over 25,000 during the pandemic. The management had apparently decided to allow a free subscription during this period in order to garner a critical mass of ePaper enthusiasts for future monetization. He stated:

From the year 2015 to around 2020, the ePaper version was not taking off. Readers were not as enthusiastic as we had hoped. Readers were not seeing a big difference between the physical and the digital versions. But when COVID-19 hit us, our readers realized the importance of the having adopted an ePaper and quickly subscribed when we announced free access (KII, Byaruhanga, Op Cit)

This was collaborated by Kwezi Tabaro, a media analyst and CEO of Leo Africa Institute, who described his first experience with ePapers because of the COVID-19 restrictions. According to Kwezi, the evolution of ePapers in Uganda can be traced back to the mid-2000s chapter, a period marked by early attempts at digital adaptation as indicated at the beginning of this chapter. However, he shared his experience and reflections on his initial encounters with ePapers, noting

in particular the *New Vision's* early efforts to promote its digital version during the COVID-19 period. He asserts that his substantial engagement with ePapers did not occur until the COVID-19 pandemic in 2020, which necessitated access to news that he could not obtain physically. He stated:

I first got to know about the ePaper platforms during COVID-19 around April 2020. As our movements were restricted, it became difficult to access the physical newspaper. There was also fear it could spread the infection through exchanging of copies between vendors and readers. So I resorted to downloading the ePaper (KII, Kwezi Tabaro, Media Analyst and CEO Leo Africa Institute, Kampala, 25 August 2024)

Similarly, Dr. Innocent Nahabwe, the Chairperson of the National Association of Broadcasters, a media entrepreneur who runs *Galaxy* Television and is also a sales and marketing expert, recounted his experience with ePapers: his encounter with ePapers during this same period was as a matter of convenience though he admits he found the navigation cumbersome compared to traditional newspapers:

The only time I really read the ePaper was during the intense COVID-19 lockdowns. In the past, I was used to accessing both the New Vision and Daily Monitor physical papers. I can confidently say it was not until the year 2020, during COVID-19 time, that the country witnessed the actual evolution of print to ePapers in terms of presence and access (KII, Dr. Innocent Nahabwe, Chairman National Association of Broadcasters, Kampala, 12 July 2024)

The pandemic's unintended consequence and impact cannot be overstated. It significantly accelerated the digital transformation within many industries including the Ugandan press. The pandemic compelled media houses to innovate rapidly in response to evolving consumption patterns. The urgency to evolve and adapt was palpable. Considerations regarding monetization of online audiences become increasingly critical. It became necessary at that time for media to maintain relevance in a rapidly changing environment such as the pandemic and the demographic dividend in Uganda with one of the youngest populations in the world. Tumusiime revealed:

On top of the demographic trend at the time, while the realization that younger people are more drawn to digital products rather than the print that we were doing exclusively was as clear as the morning sky, the pandemic was a bonus for this evolution (KII, Tumusiime, Op Cit).

This claim is consistent with literature in as far as the pivot towards digital formats is concerned, underscoring a fundamental shift in the operational and strategic focus of Ugandan press. The

outbreak of the COVID-19 pandemic disrupted industries with many media firms implementing online events and experimenting with new sources of income (García-Avilés et al., 2024).

Yet, the COVID-19 crisis only accelerated a digital media crisis that had started way back in mid-2010s. Several Ugandan newspapers gave up the concept of multiplatform and closed several non-profitable print platforms. The *New Vision* closed regional titles, such as *Etop*, *Rupiny*, *Orumuri* and *Kampala Sun* (Tayeebwa&Kayiira, 2024). While the pandemic took its toll on traditional media, the crisis speeded up some ongoing innovations in news production (adoption of ePapers), newsroom organisation, distribution, and commercialisation in a significant way (García-Avilés et al., 2024).

As García-Avilés and others further contend, COVID-19, understood as a crisis situation, impacted on news products and affected journalistic culture. With newspaper closures, it had been evident that COVID-19 lockdowns shocked the traditional press terrain. The writing had been on the wall. Newspapers needed to return to the drawing board and chart a new era.

In the broader context of the survival newspaper, the lockdowns spelt the end of an era that had been going on globally for over two decades, from where the internet was seen as an enabler, to now a rival. To the print media, television and radio, this new rival arrived in the form of a smartphone screen, and with it the reading public decisively moving on to social media. The country witnessed an increase in internet penetration, evidenced by the growing number of individuals worldwide who rely on the internet through their smartphones for business opportunities and social connections especially during the COVID–19 period (Chen et al., 2023).

For example, there were 11.77 million internet users in Uganda at the start of 2023, when internet penetration stood at 24.6 percent (DataReportal, 2023). Majority of them are very active in digital media platforms such as X (formerly *Twitter*), *Facebook*, *Instagram*, *LinkedIn*, *Facebook Messenger* and others. By the post COVID-19 period, this internet penetration had created about 2.05 million social media users in Uganda, equating to 4.3 percent of the total population.

This is supported by data that shows that there were 30.55 million cellular mobile connections in Uganda at the start of 2023 equivalent to 63.8 percent of the total population (GSMA Intelligence, 2023). Coupled with this is the fact that government had already set the ball rolling in responding to new communication dynamics accorded by novel technologies by crafting new laws such as the Computer Misuse Act to regulate the digital space (Tayeebwa, 2021).

The COVID-19 catalyst speaks to processes akin to both the SST and CPE theoretical predictions. From an SST theoretical perspective, the interaction between technology and social factors like COVID-19 significantly influence how ePaper technologies were developed in Uganda and adopted by the press to stay afloat. Important to note is the fact that the pandemic created an urgent need for digital distribution of newspapers to even the remotest locations. The ePaper versions came in handy, driven by readership vulnerabilities and the need for rapid innovation in the press. The pandemic exposed the limitations of traditional methods of newspaper distribution and underscored the need for digital solutions that could swiftly deliver the news to readers' smartphones and desktops during the lockdowns.

5.2 Conclusion

In a brief conclusion, this chapter has empirically traced the evolution of ePapers in the Ugandan press. The findings present a multifaceted process influenced by historical, socio-economic, technological, and cultural factors. The transition from print to digital formats is characterized by a complex interplay of drivers, including mobile technology, economic considerations, and changing consumer preferences. The COVID-19 pandemic in particular, has acted as a catalyst for this transformation, compelling print media organizations to adapt and innovate in an increasingly digital world. I now turn to findings on Adoption of ePapers in the Ugandan press looking at the specific broad themes obtained from thematic analysis of the netnographical data. I relied on netnography to weave the case of New Vision into the next chapter in order to make meaning of the findings on Evolution.

CHAPTER SIX

DIGITALISATION: FINDINGS ON ADOPTION OF ePAPERS IN THE UGANDAN PRESS

This chapter presents findings related to the second objective: *examining the drivers behind ePaper adoption in Uganda’s press*. Drawing on the concept of digitalisation—where digital technologies reshape media production and delivery—the chapter explores the transition from traditional print to digital formats, with ePapers emerging as a key innovation. Using netnography, over 300 user interactions from the *New Vision* WhatsApp Messenger platform in September 2024 were documented to capture real-time engagement with the ePaper service.

These observations reveal recurring patterns in subscription inquiries, access challenges, archive requests, and interest in educational and employment content. The WhatsApp platform functioned as a dynamic interface between the media institution and its readership, offering insights into how users navigate digital journalism. The findings are presented thematically and descriptively to reflect the lived experiences of users and the structural, technological, and cultural factors shaping ePaper adoption in Uganda’s evolving press ecosystem.

This methodological effort was intended to answer the broad question: What are the drivers behind the adoption of ePapers in the Ugandan press? This question sought to:

- a. *How do users engage with ePaper platforms beyond daily news consumption?*
- b. *What socio-technical factors influence user adoption and sustained engagement with ePaper platforms?*
- c. *In what ways do ePapers contribute to media sustainability and digital inclusion in Uganda?*

The findings offer clear answers to the three guiding sub-questions. First, the motivations driving the adoption of ePapers in the Ugandan press are primarily economic and strategic: declining print circulation, rising distribution costs, and the need to engage digitally savvy audiences have compelled media houses to embrace digital formats. Second, attitudes, beliefs, and social norms among readers reveal a growing openness to digital news consumption, especially among younger, urban users who value convenience, mobile access, and multimedia features. However, older readers and those with limited digital literacy exhibit resistance, preferring the tactile familiarity of print. Third, techno-cultural and economic factors—such as mobile optimization, payment

flexibility, and content relevance—play a decisive role in shaping acceptance or resistance. While users appreciate the immediacy and accessibility of ePapers, challenges like screen fatigue, static content, and high data costs continue to hinder widespread adoption. These findings affirm that ePaper uptake in Uganda is not merely a technological shift but a socio-cultural and economic adaptation shaped by institutional decisions, user expectations, and infrastructural realities. Below,

I now present the thematic findings from the netnographic inquiry, which explored user usage, interactions, engagements, access, pricing models and digital literacy on the *New Vision* ePaper platform. Once again, I weaved the SPEF as a critical instrument to unpack the layered drivers in the ePaper adoption at the New Vision. SPEF ultimately offered a lens that connects technological infrastructures with institutional dynamics and socio-political economy dynamics at the New Vision and the broader press landscape in Uganda. The framework further enhanced a nuanced interpretation of these findings by situating user behaviour within broader structural conditions—such as internet infrastructures, the regulatory regime, and economic precarity in Uganda. This illuminated the complex interplay between agency and system in the Ugandan digital media transformations.

6.1 The ePaper Integration and Subscription Process at *New Vision*

A key netnographical finding at *New Vision* was the subscription journey that totally differs from that of the print version. This journey is a critical component of the user experience and demonstrates the integration of ePaper technology in media consumption in Uganda.

From online observations, I discovered that the *New Vision* ePaper subscription process is designed to be user-friendly. It provides potential readers with a straightforward journey to access the digital edition of Uganda's leading daily newspaper. It only requires users to fill out forms with basic personal information and to choose a subscription plan based on their reading needs. I observed, over a span of selected months, that the pricing structure offers flexibility with a variety of plans: from a single-day subscription, costing 1,000 Uganda Shillings, to a year-long access at 360,000 Uganda shillings – an equivalent of US\$ 100. The subscription journey, observed over several months, reveals how technological, institutional, and user-centered factors interact to shape the evolution, adoption, and contribution of ePapers in Uganda's press.

(for example one day for 1,000 Uganda shillings) as well as frequent consumers (for example 1 year for 360,000 Uganda shillings). Below is a screenshot for the *New Vision* ePaper rate card.

VISION GROUP
NATIONAL PRIDE + GLOBAL EXCELLENCE

E-Paper Subscription Application Form

Company Name: TIN Number:

Contact Person: Office Telephone:

Mobile Phone: E-mail Address:

Address (Building, Plot No., Street, Town):

Number of Users

NV New Vision **BUKEDDE** Bukedde

Subscription period (Start Date): (End Date):

Method of payment or as agreed with the Circulation Manager below:

Amount paid: In words:

Corporate Digital Newspaper subscription rates

E- Paper rates per user per day login in Ugandan Shillings – (No PDF Downloads)

New Vision E-Paper

Volumes/ Users	1 Month Subscription	3 Month Subscription	6 Month Subscription	1 Year Subscription
1-99	1500	1400	1300	1200
100-499		1300	1200	1000
500-999			1000	900

Bukedde E-Paper

Volumes/ Users	1 Month Subscription	3 Month Subscription	6 Month Subscription	1 Year Subscription
1-99	1000	1000	1000	900
100-499			900	800
500-999				700

Fig 8: The New Vision ePaper subscription form

Step 3 – Payment options: During my immersion phase, I noticed that payment is facilitated through the Rave platform, which supports local currency transactions (Uganda shillings). This strategic integration provides convenience for Ugandan readers by allowing them to transact in their familiar currency. I also discovered that the system ensures that even short-term access (1-day) can be obtained with minimum financial barriers. The payment option seems to have been adapted to Uganda’s socioeconomic conditions and considerations about possible individual

subscriptions that may not allow for longer-term, more expensive, subscriptions. From a business point of view, even a poor subscriber brings in some income and ought to be given options. Using local currency also avoids exchange rate vagaries, unpredictability, and other costs, which a foreign-currency-based platform might have caused to both subscribers and newspaper managers.

NEW VISION
E-PAPER CORPORATE RATE CARD
 *Per User In Ugandan Shillings (No Pdf downloads)
Effective September 2024

New Vision E-Paper

Volumes/ Users	1 Month Subscription	3 Month Subscription	6 Month Subscription	1 Year Subscription
1-99	1500	1400	1300	1200
100-499		1300	1200	1000
500-999			1000	900

Bukedde E-Paper

Volumes/ Users	1 Month Subscription	3 Month Subscription	6 Month Subscription	1 Year Subscription
1-99	1000	1000	1000	900
100-499			900	800
500-999				700

Single copy readers paying via flutter wave shall pay New Vision 1000 and Bukede 1000

Title	Name	Contact	Email
Circulation			

Fig 9: The New Vision ePaper payment options

Step 4 – User Agreement: This is perhaps the most crucial step. The agreement is used to help comply with legal and privacy standards at the *New Vision* ePaper. Here, users are required to confirm their age (over 13 years) and to have their information shared with PageSuite software, which is also the digital platform provider. Unlike in print versions where nothing like this happens, this indicates that *New Vision* leverages third-party services for not just content delivery, but also data protection of its digital users and their traces. This highlights the importance of

partnerships and legal protection in digital media. For instance, in the print versions, it is almost impossible to apply user agreements before user access of the hard copies which shows potentially serious legal breaches in user access of printed content. By adopting digitization processes to legal precepts and third-party services, the *New Vision* extends its digital paper beyond the confines of the company's rules and reach of its direct sales services.

Step 5 – Optional email preferences: In this step, the *New Vision* ePaper subscription process provides an option for users to receive emails from the publisher about future publications, while also allowing them to opt out of receiving such communications. This brings the internet closer to other digitization processes and systems.

Step 6 – Confirmation and access step: This is the final step. Here, once the form is submitted, I observed that users can immediately access the ePaper by logging in with their email and password. When I subscribed for the purposes of this study, I found a seamless transition from registration to access. This relates to the privilege of available literature on digital media about the importance of convenience of digital content as well as subscriptions. In a busy world that is today, convenience is on the rise because it positively related to consumer satisfaction and consumer decision making (Amat-Lefort Barnes, 2024). This revelation was supported by the top manager who contended that the *New Vision* ePaper subscription is on the upward trajectory because, despite a few technical issues, users generally say they find the subscription process and access very convenient, compared to the hard copy. Her observation is also supported by Nada Andersen, a marketing guru and Managing Director Star Leo Advertising agency who not only is an ePaper user, but also does so frequently because of ease of access and the convenience of subscription.

In addition, I found a “*Frequently Asked Questions (FAQs)*” section on the *New Vision* ePaper platform. This was well elaborate with the frequently asked questions well answered for purposes of guiding potential users on how to navigate, experience the ePaper and also make inquiries on anything of concern. The top manager revealed in a follow-up interview that this section has been improved overtime by harnessing the data from the massive inquiries by the users. These constant inquiries and constant feedback was collated to inform the FAQs which are not more comprehensive and grant a broader picture of the evolving ePaper platform at *New Vision*.

Accessing the e-paper:

How do I subscribe?

Visit the New Vision online portal, click "subscribe," and choose your desired subscription period (daily, weekly, or monthly). [↗](#)

What payment options are available?

Payment is typically made through mobile money (MTN or Airtel) or by bank transfer to the provided Standard Chartered or Stanbic bank accounts. [↗](#)

How do I access the e-paper after subscribing?

After successful payment, you can access the e-paper through the New Vision online portal. [↗](#)

Content and Technical Issues:

Is the e-paper an exact replica of the print version?

Yes, the e-paper is designed to be a digital replica of the physical newspaper, according to the Vision Group archives FAQ.

What if I encounter incorrect or illegible text?

The e-paper uses Optical Character Recognition (OCR) to convert the text from the original newspaper pages. This process can sometimes result in inaccuracies, especially with older or damaged newspapers, or due to font size and layout

Fig 10: A screenshot of the New Vision FAQs about its ePaper

The simplicity and accessibility of the subscription process, as elaborated above, form the critical factors in driving the adoption of *New Vision's* ePaper. In terms of the drivers influencing this adoption (second objective), I argue that the range of subscription options, supported by a localized payment gateway, serves to lower the barriers of entry, especially in a market where digital literacy and financial constraints may affect access to ePapers. More importantly is that the incorporation of privacy measures and partnership agreements with digital providers reflects the broader technological trends in media distribution compared to physical circulation and distribution of hard copies through transport systems and vendors.

The *New Vision* ePaper subscription journey reveals a convergence of independent, dependent, intervening, and moderating variables that collectively shape digital media adoption in Uganda. At the core of this transformation are strategic investments in technological infrastructure, such as PageSuite software and the Rave payment gateway, which facilitate seamless digital delivery. Institutional decisions, including tiered subscription plans and privacy agreements, reflect a broader commitment to digitization and market responsiveness.

Content delivery features—like real-time access and a comprehensive FAQ section—enhance user experience and demonstrate relative advantage, motivating readers to transition from print to digital formats. These elements, embedded within the organizational and economic context, serve as primary drivers of adoption to the ePaper platform in the Ugandan press.

6.2 Subscription Guidance as a Recurring Concern in ePaper Adoption

One of the most salient findings from the September 2024 netnographic study of the New Vision WhatsApp Messenger platform is the persistent demand for subscription guidance. Across the entire month, users consistently sought help on how to subscribe to the ePaper, revealing a critical barrier in the onboarding process. These inquiries were not isolated to specific times of day—they appeared in the early morning, throughout the afternoon, and late into the night—suggesting that the challenge was widespread and not confined to particular user segments.

On September 2 at 07:42am, a user asked, “*How to subscribe for the e-papers,*” a question that was repeated later that same day at 02:03pm. This repetition within a short time frame highlights the lack of accessible, self-explanatory instructions on the platform. Even when guidance was provided, confusion often persisted. For instance, on September 21 at 08:04pm, a user noted that he “couldn't get the full information” despite receiving support. This suggests that the instructions may have lacked clarity or failed to address specific user needs. On September 27, two separate users asked the same question at 04:54am and 06:00pm, with responses indicating that the “procedure [was] shared.” However, the recurrence of this query across multiple dates and time blocks points to a systemic issue in the platform’s onboarding design.

The phrase “*accessed after guidance*” appeared frequently in the dataset, indicating that successful subscription often depended on direct, real-time support from platform administrators. This

reliance on mediated onboarding reflects a broader usability challenge. While the ePaper represents a significant innovation in Uganda’s media landscape—offering digital replicas of print newspapers and expanding access to journalism—findings show the process of initiating access remains opaque for many users. The frequency of subscription-related inquiries suggests that the platform’s self-service features are insufficiently intuitive, requiring human intervention for routine tasks.

6.3 Access Failures Following Payment Transactions

A recurring theme in the September 2024 netnographic study of the New Vision WhatsApp platform and the dataset generated by the platform staff was the challenge users faced in accessing the ePaper after completing payment transactions. These access failures were documented across various time blocks and typically required manual intervention to resolve, revealing systemic weaknesses in the payment-to-access pipeline.

On September 2 at 12:11pm, a user reported, “*Failed to access after payments,*” with resolution noted fifteen minutes later as “*Accessed after guidance.*” Similar cases followed throughout the month. On September 11 at 01:11pm, another user echoed the same concern, which was resolved at 01:29pm. On September 17 at 09:44am, a user noted, “*Failed to access because the account was blocked,*” and was advised to “*always use only 2 devices in a 24 hour period.*” These entries suggest that users often lacked clarity on device limits, login protocols, and post-payment confirmation procedures.

The reliance on WhatsApp-based support for troubleshooting at New Vision shows the platform’s limited automation and error recovery mechanisms. Users frequently expressed confusion or frustration, using phrases like “*not working after payment,*” indicating that the system did not consistently provide seamless access or feedback. These technical barriers act as intervening variables, undermining perceived ease of use and trust in the ePaper platform at New Vision.

While it was observed that the New Vision ePaper model offers convenience and digital reach, its backend infrastructure appears insufficiently robust to support autonomous user engagement. The findings reveal the need for improved system integration, clearer user guidance, and enhanced digital literacy support to ensure that payment transactions reliably translate into uninterrupted

access. Without these improvements, the platform risks alienating users and compromising the broader goals of digital media adoption in Uganda.

6.4 Archive access as a valued feature of the ePaper platform

Throughout the month of September 2024, archive access emerged as one of the most frequently requested features on the New Vision ePaper WhatsApp Messenger platform. Users engaged with the service at various times of day and night, seeking historical editions of the newspaper for a range of purposes including reference, research, and personal interest. These requests reveal that the ePaper was not perceived merely as a source of daily news, but as a repository of valuable historical content.

On September 3 at 11:21am, a user initiated a request for “*Archives access,*” which was later confirmed as “*Accessed after activation.*” This early interface set the tone for a recurring pattern that continued throughout the study period. On September 7 at 08:35pm, another user asked for “Archives access,” and was promptly provided with an “Archives link.” The responsiveness of the platform in these cases suggests that archive retrieval was a well-supported function, albeit one that still required manual facilitation.

The demand for archived content intensified toward the latter half of the month. On September 20 at 10:44am, a user submitted a similar request, which was resolved at 01:23pm with the confirmation “Accessed after guidance.” On September 24 at 07:19am, a user inquired specifically about accessing previously paid archives and was advised to “subscribe for a longer package,” indicating that users expected continued access to past editions beyond the initial subscription window. This expectation points to a perception of the ePaper as a durable and retrievable resource, not limited by the temporal constraints of daily publication.

September 26 was particularly active, with multiple users requesting archive access at 02:42pm, 10:22pm, and 09:02am. Responses included “Archives link shared” and “Accessed after activation,” reflecting the platform’s reliance on support staff to facilitate archive retrieval. These entries demonstrate that users were engaging with the ePaper in ways that extended beyond immediate news consumption, treating it as a tool for long-term information access.

Thus, the frequency and consistency of these requests suggest that archived content holds significant value for the readership. Whether for academic research, professional reference, or personal documentation, users appeared to rely on the ePaper's archival function as a key component of its utility. This behavior aligns with broader trends in digital journalism, where the preservation and accessibility of historical content contribute to media sustainability and civic knowledge.

6.5 The ePaper as a gateway to education and employment

Observation made on the New Vision ePaper platform's WhatsApp Messenger show it has evolved into more than just a digital conduit for daily news. Netnographic findings from September 2024 reveal that users increasingly engaged with the platform to access educational materials and inquire about employment opportunities. This reveals the platform's normative role as a multifunctional public service tool within Uganda's digital media ecosystem.

On September 8 at 01:05pm, a user asked, "*How to subscribe for the new curriculum schooling material,*" to which the platform administrator responded that the "*schedule was shared.*" This interaction marked a shift in user expectations, positioning the ePaper not only as a source of current affairs but also as a repository for academic resources. A similar inquiry followed on September 27 at 11:25am, this time focused on O'level curriculum materials, reinforcing the demand for structured educational content on the ePaper platform

The platform's utility extended further into the realm of employment. On September 13 at 05:11pm, a user asked, "*When to subscribe for job opportunities,*" and was promptly provided with a "*schedule shared.*" This pattern repeated on September 21 at 08:55pm and again on September 28 at 09:40pm, when users inquired about job subscriptions and advertisement schedules. In each case, responses were delivered shortly thereafter, indicating a responsive support system and a clear recognition of the ePaper's role in disseminating employment-related information.

6.6 Trends, sequential patterns and contextual dynamics in ePaper adoption

More netnographical data from the platform *at New Vision* reveals that during the month of during September 2024, a rich pattern of user engagement that spanned the entire day, reflected diverse

routines, content needs, and infrastructural realities defining the ePaper platform. These sequential patterns offer insight into how users interact with the ePaper service and illuminate the study's variables shaping its adoption dynamics.

User engagement was observed from the early morning hours through to late night, with distinct rhythms emerging across time blocks. Between 5:00am and 10:00am, users frequently initiated subscription and archive requests. For instance, on September 2 at 07:42am and September 5 at 07:20am, users asked, "How to subscribe for the e-papers," while on September 23 at 06:03am and September 24 at 06:41am, users requested archive access. These interactions suggest that digital news consumption begins early for many, possibly aligned with workday preparation or morning routines. This behavior reflects the moderating variables of demographics and device usage, where mobile-first access and flexible scheduling enable early engagement.

During the daytime period from 10:00am to 4:00pm, the platform experienced the highest volume of troubleshooting and content-specific inquiries. For instance, on September 3 at 02:49pm, a user asked, "*Inquiry if the govt allowed coupling in schools,*" and was provided with "*Correct information published by NV (New Vision).*" Similarly, on September 23 at 01:29pm, a user inquired about ePaper charges and received a response indicating that "rates [were] shared." These interactions demonstrate the platform's responsiveness and its role in delivering timely, credible information. They also reflect dependent variables such as platform reliability and user satisfaction, which contribute to sustained adoption.

The evening engagement, between 4:00pm and 9:00pm, remained strong, with users continuing to seek archives and resolve access issues. On September 14 at 06:01pm, a user asked, "How to subscribe for the e-papers," and was promptly guided. On September 21 at 08:04pm, another user sought subscription help but noted incomplete information even after receiving guidance. These cases highlight intervening variables such as digital literacy and perceived ease of use, which mediate the relationship between infrastructure and adoption outcomes.

The nighttime engagement, from 9:00pm to 2:00am, was particularly notable for archive requests and access troubleshooting. On September 15 at 12:31am, a user requested "Archives access," which was resolved at 06:54am. On September 27 at 03:08am, a similar request was made and

addressed later that morning at 07:52am. These interactions suggest that users engage with the platform outside conventional news cycles, reflecting on-demand consumption habits shaped by personal schedules and internet availability. This supports the moderating variables of connectivity and socio-economic context, as stated in Chapter 3, where users may rely on off-peak data usage or shared devices.

	A	B	C	D	F	G
1	DATE	LOGIN TIME	CUSTOMER INQUIRY	ASA [averag	Escalation	Results
2	9/2/2024	07:42am	How to subscribe for the e-papers	08:08am		Accessed after guidance
3		12:11pm	Failed to access after payments	12:26pm		Accessed after guidance
4		02:03pm	How to subscribe for the e-papers	02:04pm		procedure shared
5		07:33am	How to subscribe for the e-papers	11:06am		procedure shared
5		11:15am	How to subscribe for the e-papers	11:16am		procedure shared
7		01:20pm	Failed to access after payments	01:23pm		Accessed after guidance
8		06:06pm	How to subscribe for the e-papers	06:14pm		procedure shared
9		05:02am	How to get the app	08:50am		procedure shared
0		08:33pm	How to subscribe for the e-papers	08:47am		procedure shared
1		07:35pm	How to subscribe for the e-papers	08:45pm		procedure shared
2		04:19pm	Archives access	04:21pm		procedure shared
3		07:42am	How to subscribe for the e-papers	08:05am		Later bought a hard copy
4		04:17pm	How to subscribe for the e-papers	04:20pm		procedure shared
5	9/3/2024	10:21am	How to subscribe for the e-papers	10:23am		procedure shared
6		11:21am	Archives access	01:07pm	Janat	Accessed after activation
7		02:49pm	Inquiry if the govt allowed coupling in schools	02:52pm		Correct information published by NV shared with client
8		02:07pm	How to subscribe for the e-papers	02:31pm		procedure shared
9		08:39am	Archives access	09:16am		procedure shared
10		02:50pm	Archives access	02:54pm		procedure shared
11		01:45pm	Archives access	02:04pm		procedure shared
12		06:44pm	Failed to access after payments	11:13am	Janat	Accessed after account was reviewed

Fig 11: A Section of the September 2024 dataset obtained by the researcher from the New Vision ePaper’s WhatsApp Messenger platform

6.7 Customer support as a critical enabler of adoption

The adoption of New Vision’s ePaper service via WhatsApp reveals a compelling narrative: customer support is not merely a supplementary feature—it is a foundational enabler of user access and satisfaction. Netnographic data from September 2024 reveals the centrality of human mediation in facilitating digital engagement, especially in a context where users frequently encounter technical and procedural barriers.

Across the dataset, users consistently relied on direct intervention from support staff to complete subscriptions, access archives, and troubleshoot platform errors. For instance, on September 23 at 09:27am, a user inquired about how to subscribe and successfully accessed the ePaper following

guidance. Similarly, on September 25 at 09:17am, a user reported “Failing to access Bukedde (a vernacular sister newspaper to New Vision),” and was promptly informed once the error was resolved. On September 26 at 01:39pm, another request for archive access was addressed by a back office staff—a frequently mentioned support staff member—at 03:34pm. These interactions demonstrate a pattern: nearly every successful access was preceded by direct support intervention.

The role of this staff and other support personnel emerges as pivotal. Their presence in resolution logs reflects a high level of engagement and responsiveness, often within minutes. For example, on September 12, a user experienced access issues and received immediate guidance, demonstrating the platform’s capacity for real-time support. On September 6 at 12:08pm, another user who had “Failed to access after payments” was able to proceed after receiving help. Likewise, on September 18 at 11:27am, a user noted “Failed to access,” followed by “Guidance given.” These examples reinforce the idea that customer support functions as an intervening variable—mediating between user intent and successful adoption of ePapers in the Ugandan press.

In sum, customer support on New Vision’s WhatsApp platform plays a critical role in enabling ePaper adoption. It bridges the gap between user aspiration and digital access, especially in a context marked by varying levels of digital literacy and infrastructure.

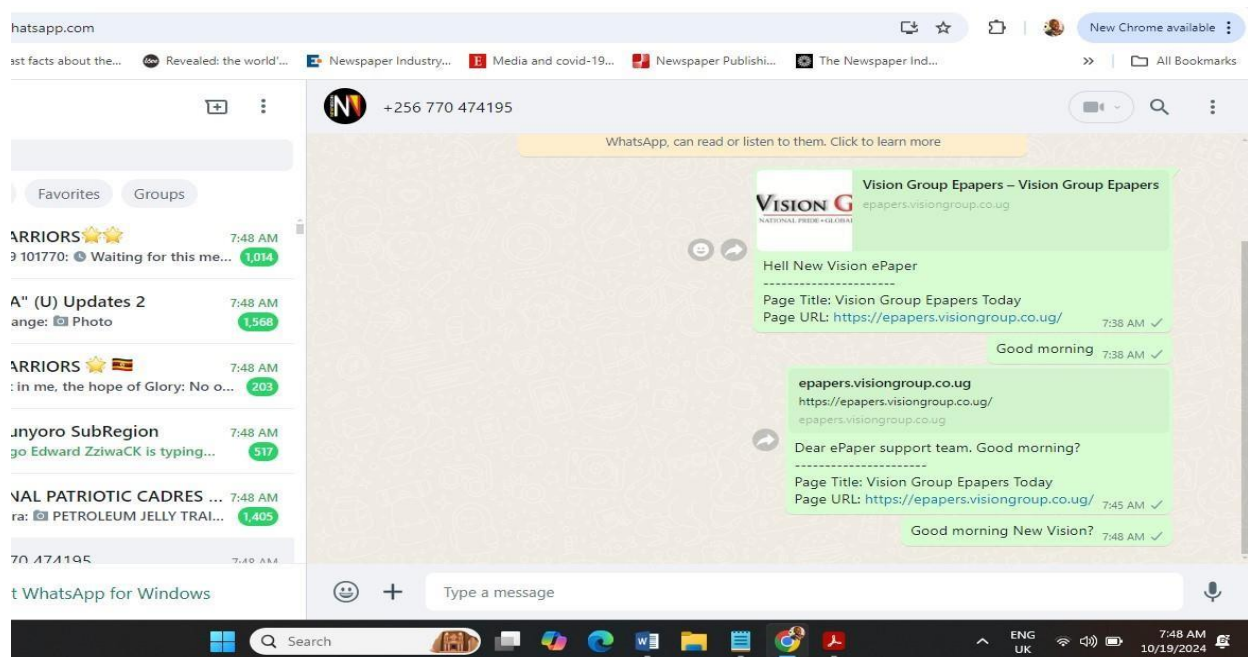


Fig 12: A screenshot of the New Vision ePaper WhatsApp messenger platform showing customer support

6.8 User inquiries as catalysts for monetization and content tier awareness

More findings from the New Vision’s WhatsApp messenger -based ePaper platform reveals a compelling shift in user behavior. The shift, signals growing sophistication in how audiences engage with digital media offerings. As the month progressed, user inquiries transitioned from basic access questions to more nuanced explorations of subscription packages, magazine access, and pricing structures. This evolution marks a critical turning point in the platform’s adoption trajectory, lending weight to both the potential for monetization and the need for strategic communication around ePaper value delivery.

A cluster of interactions in the latter part of the month exemplifies this trend. On September 23 at 09:55am, a user asked, “How to subscribe for a monthly package,” and was successfully guided through the process. Earlier that same morning, at 08:06am, another user inquired, “How to subscribe for the magazine,” and gained access following activation support. Just days later, on September 27 at 01:58pm, another user posed the question, “Inquiry on the e-paper rates,” and was

informed that “Rates [were] shared.” These entries are not isolated. They rather represent a thematic emergence of monetization awareness and content tier exploration.

From the findings, the timing and nature of these inquiries suggests that ePaper users are becoming more familiar with the platform and beginning to consider longer-term or specialized access options. Rather than simply consuming daily news, users were actively seeking differentiated content packages that aligned with their interests and needs. This behavioral shift points to a latent demand for tiered access models such as monthly subscriptions, magazine bundles, and premium content offerings that could support audience segmentation and revenue diversification for the Ugandan press. This signals progressive adoption.

Furthermore, the findings reveal a critical gap: pricing communication remains insufficiently clear. While users were informed that “rates were shared,” the reactive nature of this response implies that pricing structures are not prominently or proactively displayed. Therefore, in a digital environment where trust and immediacy are paramount, opaque pricing risks undermining user confidence and delaying adoption. Clear, upfront communication about subscription benefits, pricing tiers, and access guarantees is essential to converting curiosity into commitment in the context of new transformations like the ePaper service.

6.9 Conclusion

This chapter has presented a nuanced account of ePaper adoption in Uganda, drawing on netnographic data to examine the structural, cultural, and technological forces shaping digital transformation in the press. Interpreted through the Sociotechnical Political Economy Framework (SPEF), these findings reveal how institutional decisions, economic pressures, and user expectations are embedded within broader systems of technological infrastructure, media governance, and socio-political dynamics. SPEF has thus enabled a deeper understanding of ePaper uptake as a negotiated outcome of structural constraints and strategic adaptation within Uganda’s evolving media ecosystem. Data from *New Vision’s* WhatsApp Messenger platform illustrates a dynamic yet challenged adoption landscape. Users actively engage with the ePaper for news, archives, educational materials, and job listings. However, recurring onboarding difficulties, post-payment access failures, and heavy reliance on customer support suggest that the digital

transition remains incomplete. These interactions, occurring across all hours, reflect diverse user needs and continuous engagement. Key factors shaping user experience include pricing transparency, content relevance, and platform responsiveness. While digital literacy is growing—particularly among younger, urban users—technical glitches and usability gaps continue to hinder seamless access. The absence of interactive features and a dedicated app limits deeper engagement, reducing the ePaper experience to individualized transactions rather than participatory media consumption.

These findings affirm the study's variable framework and the interpretive critical realist approach, which together illuminate both causal mechanisms and lived user experiences. The insights offer strategic direction for media organizations seeking to improve ePaper adoption, emphasizing the need for innovation in content delivery, user interface design, and platform interactivity. Having explored the drivers of ePaper adoption, the next chapter addresses the third research objective: assessing the contribution of ePapers to Uganda's press ecosystem.

CHAPTER SEVEN

DIGITAL TRANSFORMATION AND THE CONTRIBUTION OF ePAPERS IN THE UGANDAN PRESS

As discussed in chapter five, the contribution of ePapers, constituting more findings, is viewed in this study as a ‘Digital Transformation’ of Ugandan press. By ‘*Digital Transformation*’ of Ugandan newspapers is meant the process by which digital technology is used by newspaper companies to impact and innovate business models and processes that exploit the utility of emerging technologies to enhance print media. ‘Digital Transformation’ involves designing new technological ways of doing things that generate new sources of value. In the context of media industries, these processes have not only opened borderless opportunities for media to curate stories and distribute them across the multiple platforms, they have ignited unending debates about the digitalisation of newspapers (Khan & Shnaider, 2021). I have used this concept to deal with presentation of findings in this chapter in order to answer the third objective: *To assess the contribution of ePapers in the Ugandan press.*

This chapter focuses on how ePapers have contributed to the Ugandan press. It builds upon the previous chapter by extending the presentation beyond the ones concerned with the evolution and adoption of ePapers in the Ugandan press, answering objective three. The findings on the contribution of ePapers in the Ugandan press reflect a multidimensional digital transformation, meaningfully categorized through the conceptual blocks of the SPEF theoretical constellation. From a technology standpoint, the findings show ePapers have introduced new infrastructures for news dissemination. These are enhancing portability, interactivity, and archival access, while enabling media houses to adapt to mobile-first consumption patterns.

On the social dimension, ePapers have expanded readership among digitally literate audiences, fostered civic engagement, and offered alternative platforms for expression in constrained environments. The political economy block reveals how legacy media organizations like *New Vision* have strategically repositioned themselves through digital formats to maintain relevance and operational sustainability (Nyanjeye, 2023).

Economically, ePapers have reshaped revenue models, reduced distribution costs, and opened new monetization avenues such as subscription-based access and archive commercialization. Politically, they offer potential safeguards against censorship and contribute to media pluralism by

decentralizing access to information. Together, these contributions unravel how ePapers are not just digital replicas of print—they are transformative agents within Uganda’s evolving sociotechnical media ecosystem. To gather and compound this empirical data on the contribution of ePapers in the Ugandan press, I privileged both in-depth interviews and netnography.

I set out to ask the research question: *What is the contribution of ePapers to the Ugandan press?* This question sought to:

- a) *Assess the contribution of ePapers in broadening readerships in the Ugandan press*
- b) *Analyse the contribution of ePapers in revenue generation for the Ugandan press*
- c) *Establish how ePapers have enhanced the traditional roles of newspapers*

The data from interviews and netnography was analysed manually to obtain codes and themes. Privileging thematic analysis, I themed them using the manual qualitative data analysis procedure which grants a five-phase process of qualitative data analysis as espoused in Bingham (2023) and in Creswell and Poth (2022)’s Data Analysis Spiral. In the follow report, a thematic exploration addresses these themes to understand the extent to which ePapers have impacted the print media landscape in Uganda.

7.1. ePapers are vehicles for sustaining the newspaper life in Uganda

First, ePapers serve as vehicles for sustaining the life of newspapers. The central question I asked my interviewees was: what has been the major contribution of ePapers in the Uganda press over the past one decade? From empirical findings, the major contribution of ePapers has been their role in keeping newspapers alive in the digital age. Where most of the literature, as indicated in Chapters One and Two, has spelt a death knell to the print media due to technological adaptations and political economy imperatives, a major finding of this study indicates otherwise.

James Tumusiime asserts that ePapers have contributed a critical platform for preserving the essence of print journalism without which, the print would possibly be dead:

I think the major contribution would be that they (ePapers) have managed to keep the newspaper alive. With ePaper platforms and the unforeseen potential, we can say with some confidence that the newspaper will stay alive. The ePaper has given that rare option for the printed version to recreate itself in a digital format without losing its original essence; it is as close to a real newspaper as possibly can be and for the foreseeable future. Rather than destroy it, the

ePaper platform has reinvented the newspaper. For me this is the biggest contribution. We can say with some confidence... the newspaper will stay alive via ePaper. (Tumusiime, KII, Op Cit).

This sentiment reflects not just the role of ePapers in sustaining journalism and communication, it shows the potential of the ePaper in ensuring the survival of the traditional media forms, albeit in a digital format. ePapers provide a way to continue producing and distributing newspapers in a means that aligns with changing technological trends without losing its essential self.

Timothy Kalyegira put it more succinctly when he observed that the ePaper format ensures that any edition does not sell out in the way hard copies run out of the news stands. He emphasized the ePaper is ever present through the online subscription and does not run out and that with careful study and marketing, the format can find certain strong presence in the media markets across the globe.

7.1.1 Increased accessibility and circulatory efficiency

One of the most prominent contributions of ePapers has been their ability to extend the reach of newspapers and increased their accessibility. Traditionally, the distribution of print newspapers was limited by geographical, distributional and infrastructural constraints. This was prominent in rural settings, hard to reach locations as well as across borders and oceans.

Various participants I interviewed concurred that with the introduction of ePapers in Uganda, readers can now access news content regardless of their location. This has been facilitated by the growing penetration of mobile devices and improved internet access across Uganda (UCC, 2024). For instance, one participant Dr. SabastianoRwengabo emphasized

The greatest contribution of ePapers is circulatory efficiency and reach compared to print papers. The ePapers can reach anywhere in the world within seconds of their upload.

What this suggests is that the digital format not only reaches a wider audience but also contributes to the economic vitality of print media companies in Uganda through increased readership and revenue generation. While they provide the potential for preserving the newspaper life, this study has also found that ePapers in Uganda have democratized the access of newspapers, allowing readers in remote areas or abroad to access news that would otherwise be unavailable. Robby Muhumuza offers a personal anecdote:

When I am in Kanungu (a remote rural district in western Uganda) visiting my in-laws, I just cannot get a physical newspaper in the small town of Kambuga. It is practically impossible to deliver newspapers in that remote place. But with the coming of the ePaper, I only need to go where there's an internet network and read my newspapers.

This increased accessibility is a major contribution of ePapers, particularly for readers in rural or hard-to-reach areas, where traditional newspapers are often difficult to obtain. His analysis was supported by Nada Andersen, a top marketing and communication consultant in Uganda who observed that newspapers in Uganda are now able to cross borders and circulate in different parts of the world. Bruce Byaruhanga, the Senior Circulation Manager at *New Vision* acknowledged this contribution of the ePapers in the Ugandan press when he stated that:

“Previously, it was difficult to send newspapers to all our missions abroad and all the Ugandan groups in the diaspora. But with the adoption of ePapers, we have massive subscriptions by all our embassies abroad and very many Ugandans living in those locations. They get their daily newspaper at the click of a button and affordable subscription.”

The interviewees emphasized the critical role ePapers have played in democratizing access to news and information beyond the traditions confines in which the print versions operate. In fact, Kwezi Tabaro noted in support of this key finding that ePapers allow people in remote areas to receive the news simultaneously as those in Kampala City, mitigating the delays in print delivery and constraints associated with physical distribution.

The ePapers have definitely democratized access to news and information... If you are in a far part of Uganda, you will receive your news at the same time as a person in Kampala. This is a great contribution by ePapers. (KII, Kwezi, June 23, 2025, Makerere Univeristy)

7.1.2 Broadening Newspaper Readership

Another key research question I asked my participants was seeking to establish the contribution of ePapers in terms of broadening the readerships of newspapers in the Ugandan press. It was assumed that beyond the traditional readership, ePapers must have either shrunk or broadened their audiences. But Mr. Byaruhanga offered insights into how the ePapers have added new readerships to the existing print audiences but that readership often fluctuates. He noted that at *New Vision*, daily ePaper readers range between 1,000 and 2,000 with lower engagement on weekends. Despite

these fluctuations, ePapers generate valuable data on audience preferences, which helps the media house build customized content targeting community segments around specific interests:

There is evidence to show the ePaper audience at New Vision is largely additional, especially the audience from the diaspora. Our data shows that the information got from ePaper subscription aids in market character formation which in turn helps us to increase revenue from subscription as well as print sales(KII, Byaruhanga, New Vision- June 05, 2025)

This suggests that ePapers not only provide a platform for news delivery but also create opportunities for new audience engagement and market analysis.

The evolution and adoption of ePapers in the Ugandan press has led to an expansion in readership of newspapers, as noted by participants in the study. One participant who works at *Daily Monitor* observed that the newspaper readership has generally expanded because someone doesn't have to struggle to find a physical paper. The immediacy with which digital newspapers can be accessed has also increased the speed of news consumption.

Another respondent who works in the sales department at *New Vision* but did not want her name mentioned in this study, adds that, the speed of readership has also increased because the time it takes an ePaper to be accessible to the reader is shorter than the time it would take for someone to walk and get a physical paper. This instant accessibility enhances the reach of newspapers, especially among tech-savvy audiences and younger generations who prefer digital formats over print. This sentiment was echoed by Muheereza Kyamutetera who stated that:

I believe the ePapers, as add-ons to the print, have broadened newspaper readership in Uganda. They are people who because of geographical constraint, can't access a print newspaper anytime anywhere. But with the availability of the ePaper, this problem is solved. All one needs is to have reliable internet on their phones (KII, Kyamutetera, Kampala, June 05, 2025).

7.1.3 Democratization of Information

Another important finding to note here is the ePaper's ability to democratize access to information. A number of participants pointed to their availability anywhere as an indicator of democratization of access to information, which is not usually the case with printed newspapers. The democratization of access through the ePapers is evidenced by its ability to bypass the traditional logistical bottlenecks of physical distribution, thereby extending the reach of journalism across geographical divides and lower-income strata through mobile-optimized, low-bandwidth

interfaces. This transition has shefted the ePaper from a luxury digital product to a socially inclusive tool that accommodates varying levels of technological literacy and educational backgrounds, effectively decentralizing information for a more diverse Ugandan public.

The participants agreed that this is one of the key contributions of ePapers because in democratizing information, news is made more accessible to a broader range of social groups. Unlike traditional print newspapers, which may be restricted by distribution networks and affordability, ePapers can be accessed by anyone with an internet connection. This has particularly benefited marginalized communities, who now have greater access to news content that is relevant to their lives. In the context of this study, 'marginalized communities' refers to populations in remote or hard-to-reach districts, such as those the Karamoja sub-region, Kalangala, Bundibugyo, or rural island communities on Lake Victoria, where the prohibitive costs of physical newspaper transportation, coupled with lower-income levels and limited digital infrastructure, have historically excluded them from the national information loop.

A respondent noted, that while it was possible to access a given number of newspapers in the traditional distribution, it is now possible to access narratives from competing newspapers which are digital. Muheereza Kyamutetera rendered an explanation when I probed him further, stating that: "I don't have to read Ugandan newspapers only; I can also read Chinese, American or British newspapers." This exposure to multiple perspectives means that the ePaper technology is very important to the newspaper industry not just in Uganda but globally. The technology enriches readers' understanding of global and local events, thus enhancing the diversity and democratization of information available to the public.

Furthermore, it was also discovered during the interview process that ePapers have shifted news consumption habits amongst Ugandan newspaper readers. From a number of participants, ePapers were found to offer a more convenient option for news consumption compared to traditional print newspapers. My empirical findings show that ePapers have shifted news consumption towards convenience compared to the mother print versions. For example, Lawyer Sandra Mwesigye argues that the ease of accessing news digitally, especially via ePapers, is seamless which was not possible when she used to read print versions. She stated:

ePapers have enabled me to access news in my comfort and convenience. News finds me on my phone. I do not have to find news either at the newsstand or a news vendor kiosk. There is no need to sit and read something in print. I can

read while moving or even taking a ride, something very impossible with a physical newspaper. (Mwesigye, Kampala, July 08, 2025)

Correspondingly, Robby Muhumuza and SabastianoRwengabo, in separate interviews in Kampala and Entebbe on July 12 and July 18, 2025 respectively, mention the convenience of being able to access newspapers at any time. He says he can get his ePaper for the following day as soon as it is ready and does not have to wait for it to be physically delivered. This fundamental shift towards convenience is an important factor in changing news consumption habits in Uganda.

With ePapers offering the ability to access news on-the-go, at their own pace, and without the constraints of traditional print media, print media news consumption in Uganda has characteristically shifted. Dr. Rwengabo asserted the utility of ePapers in expanding readership saying someone does not have to struggle to find a physical paper. He observed that the speed of readership has also increased because the time it takes an ePaper to be accessible to the reader is shorter than the time it would take for someone to walk and get a physical paper. This is a crucial indication of democratization of content in form of quick and affordable access.

7.1.4 ePapers as vehicles for advancing media roles

The cardinal role of media is to act as a watchdog, a voice of the voiceless, and a champion of transparency, and accountability in governance, often scrutinizing the actions of public officials and institutions. This also entails advancing press freedoms and holding the powerful to account. A key question in the contribution of ePapers in the Ugandan press sought to understand whether these platforms have enabled the Ugandan press advance traditional media roles such as education, information, holding the powerful accountable and press freedoms. The media are also expected to serve as a vital conduit for information and education of the public, especially the wretched of the earth, on critical issues, thereby sharing public opinion and fostering informed citizenry. Furthermore, media are platforms for public discourse enabling diverse voices to be heard and facilitating democratic deliberation. They also entertain and offer a creative outlet, thus enriching cultural life and reflecting societal values.

Two interviewees I encountered touched on how technology and ePapers can enhance press freedom in Uganda. Kwezi Tabaro pointed out that by their nature, ePapers transcend national boundaries, making it harder for illiberal governments to suppress legacy news as they often do with print. For example, newspapers in Uganda have often, and historically, faced state

harassment, closures and raids, especially those critical of government or for highlighting issues that are sensitive such as corruption, human rights abuses, or political dissent (Namasinga, 2018). Prominent examples include the 2013 raid on *Daily Monitor* offices by security forces and a similar raid on *The Red Pepper*, both known for political critical reporting.

The two were temporarily closed for two weeks for publishing reports about a purported plan to groom the country's president's son for succession. *The Red Pepper*, known for its sensational and political critical reporting was raided and shut down in 2027 for publishing a story that allegedly endangered national security. These actions, often seen as efforts by the state to regulate media, have had a chilling effect on limiting press freedoms to the confines of state repression and censorship. Tabaro suggested that the opportunity of ePapers extends the boundaries of press freedoms and that one person needs to have a copy of the ePaper published virtually to share it with millions of readers across the globe thus navigating the confines of illiberal state censorship.

Alex Taremwa concurred with Kwezi when he argued that ePapers present an opportunity for newspapers to break through the shackles of the regulatory framework, the only problem being that they still operate within the eco-system that has physical confines. He stated:

Newspapers still have their own confines in terms of how much they can overstep that boundary. You wouldn't expect a state-owned newspaper like New Vision to publish certain stories. So, while there is an opportunity, it is not for the mainstream media house. I think it is an opportunity for other ePaper publishers. (KII, Kwezi Tabaro - Makerere University, June 2025).

Kwezi Tabaro still sees an opportunity even within the established confines that newspapers operate. He observes that press freedoms have a window of chance within the orbit of ePapers because they operate in spaces where restrictions that countries place on physical newspapers are blurred. He stated:

If a newspaper is on WhatsApp, anyone on WhatsApp can read it. Kenya can ban The Nation. Uganda can ban Daily Monitor but readers will still find their ePaper versions through various channels. This in a way extends the boundaries of press freedoms.

Kwezi explained his point more succinctly by observing that previously, governments would confiscate copies and shut down offices. But now, just one person would need to have a copy of the ePaper in order to share it to millions.

A number of participants further acknowledged the potential of ePapers as platforms for education, information and entertainment. Alex Atuhaire, Alex Taremwa and Muhereza Kyamutetera, all senior journalists and scholars, agreed. Alex Atuhaire stated:

I think they are in a position to play this role perfectly very well. Since the Ugandan ePapers in their current format are extensions of their print versions, they are resourced in terms of equipment of credible personnel to create compelling and informative content. They have the best knowledgeable people in the industry with so much clout and credible profile. This is not the case with the mushrooming online news outlets and the open virtual space where bloggers who are not trained journalists be the ones leading discussion in the media.

On his part, Alex Taremwa acknowledged the power of credibility that legacy media bring to the digital media landscape that has been diluted by unregulated social media communication. He argues:

Despite the critique of the ePapers' format, I appreciate their credibility and depth of analysis, particularly when compared to other digital sources. ePapers provide informed opinions and insightful commentary on national issues.

Taremwa illustrates his observation by stating that when he is looking for the most credible sources of information, he looks for particularly writers in ePapers such as Charles Onyango Obbo, a long serving columnist at *Daily Monitor* with nearly four decades of writing. He states: "They (ePapers) are the most credible sources of information. They offer deep analysis and... I have most recently been sourcing *Daily Monitor* ePapers for Charles Onyango Obbo's opinion on oil exploration in the country." This suggests that ePapers serve as a reliable source of in-depth journalism, filling a niche for readers seeking well-researched content rather than quick news bytes via social media platforms.

Furthermore, from the netnographical study of the month of September at the *New Vision* whose results I presented in the previous chapter, the growing demand for digital access for schooling materials and job opportunities, indicates that ePapers are becoming important educational platforms beyond just news consumption.

The netnographical data shows inquiries such as how to subscribe to the new curriculum schooling material. Uganda recently implemented a new secondary school curriculum that is largely

competence – based curriculum (World Bank, 2024). The other inquiry was about how to subscribe for the job opportunities. This demonstrates how ePapers are evolving into multifunctional platforms, providing educational and career-related information, which further illuminates their normative contribution as media platforms to reckon with.

With the transition to digital, ePapers continue to fulfill traditional roles of newspapers—providing timely and accurate information, educating the public, and holding authorities accountable. Several examples from the study illustrate how ePapers have played a crucial role in breaking news and conducting investigative journalism. However, the study also revealed challenges, such as the difficulty of maintaining reader engagement in an increasingly fragmented media landscape.

This is supported by literature. For example, as noted in Chapter Two, ePapers in Africa, including Uganda, provide a platform for independent and alternative voices, challenging the monopoly of traditional media houses. This is attributed to the proliferation of the internet, which has changed the nature of media work in Sub-Saharan Africa, creating new opportunities and challenges (Choi et al., 2019).

However, while ePapers have contributed to media freedom and other role plays by legacy media, especially by providing platforms that are harder to censor, they have not fully realized their potential in advancing the traditional roles of journalism. Timothy Kalyegira remarked on the missed opportunities in deploying well-trained journalists for digital media:

They have the best knowledgeable people, though they are not deploying these resources optimally. There is a need for ePapers to not only maintain journalistic standards but also to innovate in content creation to better engage audiences –unfettered- in the digital age. (KII, Kalyegira, Kampala, June 2024).

This observation is echoed in the study by Nahabwe who argues that despite the democratization of access and the opportunity of the virtual space, ePapers have not disrupted traditional power structures or advanced the role of media in holding public figures accountable, especially when social media dominates the space. He stated:

You cannot hold public officers to account using a platform that doesn't scare them...ePapers only further the sustainability of the newspaper for the short term. (KII, Innocent Nahabwe, Kampala, July 2024)

The study further reveals complexities in ePapers' ability to uphold media roles such as provision of platforms for public discourse and holding the powerful to account. The study showed that there

are aspects of ePapers that some interviewees pointed out would militate against media roles if not fixed. Nada Andersen, for example, held a different view when asked about the potential and practicality of the platform to augment media roles such as freedoms and holding the powerful to account. She observed that by their nature and location in an African setting where press freedoms are not e given, ePapers suffer the common disease in Uganda when it comes to transparency and accountability or the lack of it. She reasoned that it is very easy to intimidate the publishers into submission or removal of stories, something that would affect even the ePapers themselves. She stated:

I don't think our ePapers hold anyone accountable. It's more about saying it the nice way or finding excuses. I don't understand why scandals that we see on a daily basis aren't ringing a bell on ePapers. For example, the corruption of the Lubowa hospital and all similar stories die a natural death after the first publication. (KII, Nada Andersen, Kigo, Entebbe, July 2024).

Ms. Andersen further observed that like their counterparts- the print versions, ePapers are still to cowardly to follow up on important stories that hold the powerful to account. They have no stamina to follow up and unravel what is behind that first headline. She observed further:

ePapers can actually survive in the virtual space as a stand-alone without a mother print version. No doubt. However, there's no decisive move to do that on the part of the newspapers. They are afraid of the repercussions, backlash and everything else. Thus, they prefer to operate in their safe space. We have a bunch of coward media houses. And looking at their projection, it is evident that many are political appointees. You can't expect that ePapers to develop into a fearless press critical of what is going on around us.

However, she was quick to acknowledge that because they survive in the virtue space, they had a chance to provide moral leadership in holding the powerful to account. She observed that the opportunity is there to exploit this vacuum space. She stated:

The opportunity to have hundreds of ePapers without necessarily having the backup of printed versions is there. But this is only possible by a new crop of media, not the existing establishments. News sites like Chimp Reports and Mulengera have ruffled a few feathers by bringing news with a twist that are peeling layers of comfort from some people. But these are borderline gossip.

Her strong views seemed to resonate well with those from another respondent, a media scholar who preferred anonymity. He observed that that digitalization also creates difficulties of advancing certain narratives in a given social landscape. He reasoned that while it was possible to access a

given number of newspapers in the traditional distribution, it is now possible to access narratives from competing newspapers (and ePapers) from other jurisdictions which are digital, thus narrowing the possibilities of home-based narratives.

Nowadays, I don't have to read Ugandan newspapers only. I can read Chinese, British and American ePapers. Because of this, I am exposed to many perspectives and influences which make it very difficult for Ugandan newspaper like Daily Monitor and New Vision to develop a certain way of thinking in me because I read a lot of additional sometimes even contradictory information which waters down their views or motives.

He notes that this poses another challenge for Uganda ePapers. He argued that because of the competition from other global ePapers, it might be difficult for Ugandan ePapers to gain monopoly of information, even about Uganda, since there are other online sources and real-time postings. He observed that while the possibility for advancing media roles exists and should be exploited, Uganda ePapers are operating in a more open and therefore, more volatile space than they did when their circulation was physical.

7.1.5 ePapers: A Digital Shield against State Censorship

ePapers hold significant potential as an antidote to state censorship of print media in constrained settings like those in Africa where the press is often subjected to raids and shutdowns for being critical of illiberal regimes' excesses. Their digital nature allows for easy distribution and access, bypassing state-controlled media walls. A scholar in information systems and computing at the College of Computing and Information Technology, Makerere University who preferred anonymity, argues that by their nature, ePapers come in PDF formats which ensures that the content remains unaltered once distributed, preserving the integrity of the information. She stated:

PDFs can be shared via email, messaging apps, and social media, making it difficult for authorities to intercept and censor them effectively. The static nature of PDFs ensures that ePapers can be accessed offline, which is crucial for regions with unreliable internet connectivity and state controls.

Thus, the ePaper shines when faced with censorship from the state unlike physical copies that can be confiscated and locked down. The PDF version can still circulate in the public providing the rare opportunity of getting the same thing that one could have gotten from the street if it was not

for the state to impound and interfere with the paper distribution as has happened with daily Monitor and Red Pepper in 2013 when they faced closure for 13 days (Namasinga, 2018).

The study further reveals that in leveraging these advantages, ePapers have the potential to empower citizens and the newspaper publishers to navigate state controls and censorship with uncensored information, fostering a good academic debate, informed public discourse and resistance against oppressive regime propaganda. These views were echoed by a media scholar at the Department of Journalism and Communication at Makerere University who observed that:

The internet on which ePapers are able to thrive has added a new dynamic in the distribution of news products, meaning the print media can survive where traditional avenues are restricted by state controls. ePapers provide such an opportunity if they innovate better.

Both interviewees acknowledge that one of the main advantages of ePapers over print is their resilience to state censorship. The study reveals that digital platforms such as ePapers offer immense opportunity. Alex Taremwa elaborates on how digital platforms make it harder for governments to control media outlets:

If they (the Ugandan state) want to shut down Daily Monitor for example, the physical infrastructure cannot be shut down. However, the mobile can be harassed but not shut down.

This ability to evade censorship positions ePapers as a vital tool for promoting not just freedom of expression but a navigation campus in restrictive environments, allowing for more robust public discourse. Nada Andersen underscores this importance when she observes the only way this can work is by a group of incognito journalists clandestinely driving the ePaper platforms that will actually go long way in setting the agenda on critical issues beyond the reach of the repressive state.

But one respondent, Dr. Rwengabo, cautions about the exaggeration of the utility of ePapers to navigate state controls. He observes that it is important to acknowledge the fact that the information space has been a contested space, not just by the state but also by organised structures. He further states that even private sector entities actually control media houses and use them to circulate certain narratives, and so do political parties and ideological blocks. Thus, he adds, the contestation over information is neither unique to Uganda nor limited to newspapers. He reasons:

Digitalisation (of newspapers) offers some minimum opportunity for the media to bypass the state, but not wholly. The states keep monitoring the online media and often develop tools to access and analyse which information is online and which one is not. This means that the state also has the capacity to infiltrate online spaces and scrap off certain information. States can also work with internet companies behind the newspapers.

However, the study finds from his analysis that the advantage is that once something has gone online, even for a few minutes, by the time the state scraps it off, it has circulated to some groups at the minimum. He argued:

This is the same logic that informed the proliferation of WikiLeaks publications in the USA. So, the digitalization provides the opportunity to expose certain things that make the state think twice on withdrawing certain information.

7.1.6 ePapers as purveyors of new revenue models and financial sustainability of newspapers

A key question I asked participants was if and how ePaper platforms are able to provide new revenue models and streams for Ugandan newspapers in terms of digital circulation (subscription) and advertising sales, drawing from the third objective.

The study finds that in the evolving landscape of Ugandan media, ePapers have emerged as pivotal players in redefining revenue models and ensuring the financial sustainability of Ugandan newspapers. This transition has necessitated the development of new revenue models for media houses. For example, subscription-based services, paywalls, and digital advertising have emerged as key strategies for monetizing ePapers. Bruce Byaruhanga, the Senior Circulation Manager at New Vision concurs with this finding. He reveals that the revenues from the ePaper hit 500 million shillings in the year 2023 and could double in the year 2024, since its lowest recording in 2021.

He states:

As New Vision, we have experienced new revenue streams. For example, although the number of our ePaper readers keeps fluctuating, I would put it the constant monthly subscription base between 1000 and 2000, a day. Surprisingly readership levels decrease during the weekend but we have a call center and three people dedicated to the center and make follow ups. Last year, we crossed Uganda Shillings 500 million in revenue generation from the ePapers. Despite being a minute figure, these profits were not previously there when relied only print sales.

The study therefore finds that in adopting new digital revenue streams such as ePapers, Ugandan newspapers have managed to diversify their income more than ever before and increased reader loyalty. A respondent at *Daily Monitor* who preferred to remain anonymous noted:

The introduction of new revenue streams, such as digital subscriptions and online advertising, has provided media houses with alternative income sources constant monthly subscription base which has in many ways relieved the company of financial constraints.

This implies that the ePaper has granted newspapers the rare incentive of precision advertising, given the algorithmic and near accurate readership numbers that can be calculated from their electronic reach. The newspapers may not necessarily sell but the audience for news worldwide and digital consumers have exploded with the emergency of followers on the internet which the ePapers enjoy from their limitless geographical reach.

7.1.7 ePapers as preservers of culture through expanded local language newspaper communication

In an interview with an African languages scholar at Makerere University, a compelling insight emerged regarding the role of ePapers in preserving and expanding access to cultural and indigenous language journalism. The scholar emphasized that ePapers offer a unique opportunity to archive and disseminate content published in local languages—such as Luganda, Runyankore, and Ateso—which have historically been underrepresented in mainstream media discourse. Unlike print editions, which are often ephemeral and geographically limited, ePapers provide a durable and searchable repository for vernacular journalism, enabling broader access across time and space. The scholar noted, “With ePapers, we are not just digitizing news—we are preserving linguistic heritage. Articles written in Luganda or Runyankore that would otherwise disappear after a day now have a digital footprint. This is critical for cultural continuity and for academic research in African languages.”

This finding aligns with the study’s third objective on the contribution of ePapers to Uganda’s press ecosystem. It highlights the dependent variable of media sustainability, not only in economic terms but also in cultural preservation. Moreover, it reflects the independent variable of content delivery innovation, where digital formats enable the archiving and retrieval of culturally

significant material. The scholar's perspective shows the potential of ePapers to serve as tools for linguistic empowerment and cultural documentation, reinforcing their value beyond commercial and informational functions.

7.1.8 Vividness and High-Quality Graphics

The concept of vividness in digital media is derived from the assumption that people prefer to go for brands that are attractive and visible enough for the public. A contextual definition of media vividness presents the concept as the extent to which a brand post stimulates the different senses of the audience (De Vries et al., 2012). Additional scholarship argues that brand posts in social media for example should be more vivid in terms of attractiveness, clarity of picture (brand labels) which can create more appeal to the fans' senses both broadly (number of senses engaged) and deeply - degree to which the senses are engaged (Chua & Banerjee, 2015)

While vividness has been studied in various aspects, there are still questions that linger about how vividness in ePapers correlates to brand performance especially in terms of readability, shares, accessibility and content quality. Yet, from the findings of this study, vividness plays a key role in attracting the audience because most of the readers of digital media content are millennial and prefer the content to be as attractive as possible especially those that prefer to see events through photos and graphics (Taecharungroj, 2017; Virvilaite et al., 2015; Stuart et al., 2017)

Critics have for example found social media to be dysfunctional in market development. For example, Stephen and Galak (2012) investigated how social media such as online discussion forums and blogs and traditional media such as print articles and TV coverage affect sales. They demonstrate that both social and traditional media have strong effects on marketing performance and did not have significant differences in prediction.

Thus, empirical findings in this study suggest that vividness in ePapers could cure this gap and provide vitality to newspapers. Timothy Kalyegira provided that possibility when he stated that when people get tired of the endless world of social media, where everything is trend, a joke, a lie and is perishable, they will go to ePapers. He observes that unlike the printed newspaper where the quality of the ink and paper can sometimes disappoint, the ePaper allows readers to enjoy high quality graphics in their original colour.

However, the study also uncovered challenges in monetizing digital content, particularly in a market accustomed to free news. One respondent stated, "It is difficult for these ePapers to gain monopoly of information, even about Uganda, since there are other online sources and real-time postings." This competition from global news sources complicates the efforts of Ugandan media houses to retain loyal readers and generate substantial revenue through digital subscriptions.

7.1.9 ePapers and the diversification of advertising opportunities

In a dynamic media landscape such as Uganda where ePapers are a new phenomenon, the study finds that they are revolutionizing the advertising domain by offering the opportunity of a diverse and innovative advertising space for newspaper owners and businesses seeking visibility.

Unlike print media, ePapers have enabled targeted advertising through data analytics, allowing advertisers to reach specific demographics with precision. At New Vision for instance, Bruce Byaruhanga admits that the newspaper has a surcharge of 10% from every advert published in the print for the ePaper version. He stated:

It is only the ePaper version that is able to give us precise reader statistics and audience behavior which we provide clients to targeted advertising. The ePaper platform offers our clients premium extra advertising space for print clients. In this space, clients can also sponsor sub products of the ePaper to suit the targeted interests of the audiences we accurately offer.

Byaruhanga's view was explained by a senior media thought leader with a long history of print media entrepreneurship in Uganda. He observes the potential of ePapers in providing accurate analytics that could potentially make them surpass the power of print media advertising prices.

Let's look at it this way. The power print advertising is currently at an average 11 million shillings a page. Yet, the print has no precise figures. For any advertise to pay beyond the print prices, the ePaper would have to work on its magical data and surpass this print. And this is possible.

While the decline in print newspaper sales and the subsequent transition to ePapers has led the Ugandan press to explore digital advertising revenue streams, the study finds that ePapers continue to support the sustainability of traditional newspapers by offering a complementary digital product. This hybrid model allows media houses to cater to both print and digital readers, thus maintaining their market presence amidst declining print advertising revenues.

Dr. Nahabwe on the other hand pointed out the increased advertising possibilities that ePapers provide, although they are still seen as an extension of the traditional newspaper rather than an independent revenue source. He states:

ePapers are creating spaces for alternative advertising.... The only challenge is that presently, the ePaper acts as an added value to the newspaper, not bringing direct advertising revenue to the media house. I think this can be revisited to allow more innovative ways for alternate advertising space on the platform.

The study finds that as traditional advertising revenues decline, digital platforms offer innovative avenues and revenue models such as subscriptions, memberships, and micro- payments such as mobile money, which are increasingly becoming vital for survival. In leveraging these digital revenue models, Ugandan newspapers have not only been able to diversify their revenue streams/ income, but also have enhanced reader engagement and loyalty more than the previous status quo. This shift towards digital revenue models and monetization has been crucial for maintaining journalistic integrity and independence in an era where financial pressures often threaten the quality of news reporting (Vara-Miguel et al., 2021)

During this study, several participants suggested that this digital shift not only enhances the effectiveness of ad campaigns but also opens up new revenue streams such as programmatic advertising, native advertising, and interactive media content. If these circulation and advertising models are embraced, Ugandan ePapers can attract a broader range of advertisers, from local business to global brands, thereby ensuring financial sustainability and growth in an increasingly competitive market.

7.1.10 ePapers as a social-technical buffer against climate crisis

In the face of escalating climate challenges, ePapers have stood out as a vital tool for social-technological protection and environmental sustainability.

Interestingly, the study finds that by significantly reducing the need for traditional newspapers, ePapers have helped roll back deforestation in search for newsprint and decreased carbon footprints in the process, thus contributing to a healthier planet. For instance, the global consumption of paper and paperboard totaled 417 million tons in 2021, and this consumption is projected to continue rising over the coming decade to reach 476 million tons by 2032 (Statista,

2024). This implies the planet will need to lose 11.424 billion trees to produce this paper, hence reversing climate resilience efforts. Thus, ePapers contribute to environmental sustainability by reducing the reliance on paper and minimizing waste. This finding was emphasized by Bruce Byaruhanga who stated that:

Traditional print newspapers require significant amount of paper, ink and transportation, all of which have environmental costs. By transforming to digital platforms, media houses are significantly reducing their carbon footprint, contributing to global sustainability goals.

In addition to their environmental benefits, ePapers' contributions to social goods cannot be over emphasized. The study established that by providing a platform for diverse voices and perspectives, ePapers have enabled greater public participation in national discourse. This is particularly important in a country like Uganda, where certain groups may be marginalized or excluded from mainstream media channels. Bruce Baruhanga made the point about the *New Vision* ePaper platform helping to set the agenda for the print edition's content based on feedback and reading habits of the ePaper subscribers. He spoke to the unique participatory publishing at *New Vision*:

We have gone into an age where media production is based on engagement. The audience engages you and sets the agenda. The beauty with our ePapers here at New Vision is every client registers an email and contact. Last week I was engaged by a reader who had read a story we ran about the vitiligo condition. He narrated his struggle and how he has been dealing with the condition which forced us to do a follow-up. Therefore, ePapers are creating a participatory publishing community unlike previously when it was a unilineal broadcast to print newspaper readers. The information got from ePaper subscription has also aided in market character formation which in turn increases our revenue through target publishing and sales proposition.

In addition to this, the study has established this participatory publishing has also rendered ePapers as an avenue or customization or tailor-made news experience in the newspaper eco-system. Digital platforms allow for more personalized news experiences, a significant departure from the static format of print newspapers. For instance, a senior editor at *Daily Monitor* reveals that ePapers facilitate reader engagement through interactive content, such as comments sections and ePaper social media integration platforms. Accordingly, this has allowed readers to share their opinions instantly compared to the letters to the editor sections of the print version and participate

in public discourse. As the respondent further noted, "Following a particular catchy headline mainly," indicates that ePapers have encouraged selective reading, where readers focus on specific stories of interest rather than consuming an entire newspaper.

7.1.11 ePapers and the improvement of content space and user experience

One of the challenges that print media faces is the limited opportunity to improve user experience. For example, it could take hours, or even days, for a print media staff to respond to a customer query in through a public interaction section known as the "Letters to the Editor." From the data picked from the netnographical immersion of the *New Vision* WhatsApp Messenger, the speed of customer support responses plays a role in shaping user experiences and perceptions of ePapers.

The researcher notices that on average, customer inquiries are addressed promptly, as shown in the interaction logs. I noticed that most responses were provided within minutes, contributing to a positive user experience and enhancing trust in the ePaper platform. It can therefore, be argued that the speed and effectiveness in resolving issues is a vital contribution the ePaper platform has brought into the print media space, ensuring customer retention and encouraging further adoption.

On the limited content accommodation space in print media, this study found out that with ePapers, editors now have more leg-room to take on more content. Kwezi Tabaro observes that previously as print media editors, they were limited by the number of pages because the length of the article determined the cost and how many pages the publication would have. He stated:

I remember when I was still contributing to the Independent Magazine, editors would allow stories between 500- 800 words. But in 2022 when the magazine went digital, I submitted and published a story of about 2000 words for the PDF format

Given the improvement in user experience and content accommodation, this study finds that ePaper have ultimately changed public perception of newspapers as outlets that were previously limited in reach, scope and content. For instance, Dr. Rwengabo observes that ePapers have certainly changed and amplified information circulation within the Ugandan social fabric. He argues that through this accomplishment, ePapers have been able to influence public opinion and the relationship between the general public and the governance infrastructure and other social structures. The speed with which a religious or governing entity responds to an issue in an ePaper is higher than the speed it would take to respond to one in a printed paper because once you issue a paper at midnight, a response could be gotten by 6 am.

7.1.12 ePapers as enhancers of archival journalism

Archival journalism is the practice of preserving and making accessible journalistic content for future generations. It's important because traditional archives don't always preserve data journalism, which can be fragile (Cetina & Gutiérrez, 2022). This study has found out that one of the crucial contributions of ePapers to the Ugandan press has been its ability to save it from the bulky newspaper archiving that often would require huge physical space to store past editions.

The top manager further revealed in interview that the ePaper division has managed to help digitize all past editions of *New Vision* since the year 1986 when it acquired its name with the capture of power by current Ugandan president Yoweri Museveni. She told me the frequent inquiries for past editions from customers are answered instantly because it takes a few seconds to retrieve a past edition because of digitalisation. Thus, the availability of archives in ePapers has introduced a new dimension to media consumption in Uganda. Users can access and reference past issues, which is particularly important for research, historical referencing, and keeping up with ongoing stories. This archival access also preserves the longevity of media content, ensuring that it remains available beyond the day of publication and for the future generations.

This is supported by available literature as I problematized the ePaper phenomenon in Chapters One and Two. ePapers as part of the digital media eco-system, have become a new digital business model, replacing traditional newspaper archives and enabling search and location-based information due to their immediacy, multimedia publication, and interactivity (Mpoza & Maqsood, 2021; Puijk, 2021; Tamara et al., 2021). Thus the subscription-based model of ePapers makes them essential platforms for accessing and consuming digital journalism (Buschow & Wellbrock, 2023).

7.2 Limitations of ePapers in shaping the Ugandan Press

This study encountered views and opinions about the limitations of ePapers in shaping the Ugandan press. It should be noted that their integration into Uganda's press landscape presents not only a complex array of challenges, it has unraveled hurdles that impact their effectiveness and influence. For example, the study found out that despite their potential to revolutionize information dissemination and accessibility, ePapers often struggle to frame important public issues effectively within the Ugandan context. Alex Atuhaire points out that without the traditional print version,

Ugandan ePapers in their current form do not have significant media influence on their own in order to frame important issues in the public domain. He stated:

ePapers are limited by form in how to frame the issues on their own because they are a replica of the print versions in a digital format. Yet, the media is historically driven by content generation and setting the agenda from that content through distribution. What then is the unique content and agenda being set by ePapers? I think this is a technical hurdle that they still face but can look at it and think through it.

His views were echoed by Kwezi Tabaro and Dr. Nahabwe who concurred that in terms of news production, ePapers are technically challenged yet they need to come up with a content structure and format that preserves their legacy as ePapers and not as replicas of their print formats as well as adhere to ethical standard while responding to digitalization. Tabaro asked:

How do you get this content to me? You can repeat the print content about so and so said this and this. What does it mean to me especially where everybody has access to a phone and is accessing different sources of new information? There is need for critical thinking in order to respond to digital migration. They are prone to losing the solid voice of media where the proliferation of phone devices making everyone a journalist is flourishing

Dr. Nahabwe observed that in failing to frame the issues due to technical replication of the print, ePaper content is rendered obsolete in the same way print is. He argued:

This journalism of Ruyendo said this yesterday – which is what they replicate from their mother prints – Is not applicable to the ever evolving digital world. They need to come up with a content structure of saying what Ruyendo has said means this to me. Social media is likely to continue causing damage because media effectiveness comes down to instant reach and circulation, and ePapers have not been accepted as much, yet.

In sum, these participants reflected on the impact and contribution of ePapers on media consumption and journalism standards in Uganda. Tabaro expressed concern that the digital shift has diluted traditional gatekeeping functions of the press, as ePapers have yet to fully compete with social media and other digital platforms that do not adhere to strict editorial standards. Nahabwe emphasized that ePapers have yet to disrupt the social media status quo whose free-wheeling format renders them tenable for holding public officers accountable, garnering more significant attention.

Another limitation that came through was that the established print circulation and advertising model of revenue generation presents as challenge to ePaper transition and contribution to the Ugandan press. The study found that ePapers still rely on the two most traditional print models –

display advertising and circulatory subscription. A circulation manager at *Daily Monitor* admits that the ePaper has not yet innovated newer models other than expanding the reach of existing ones common with print platforms.

His revelations were confirmed by the top manager at the New Vision's ePaper division who constantly kept referring to the *New Vision* ePaper as "a replica of the print version." She admitted that their approaches to enhancing its adoption as largely print-centric and even some of the customer inquiries come through the feedback system of the print edition. She also further admitted that the ePaper team rides on the print infrastructure to grow subscription, advertising revenue and content.

This important finding implies that ePapers in the Ugandan press are, in their current form, constrained by reliance on traditional revenue models. This is limiting their potential to innovate within the digital landscape. Nada Andersen in her observation tasks ePapers to tap into the pop-up adverts such as those associated with the algorithmic Google as a new form of advertising that is additional to these traditional models. She argued that since ePapers are digital in nature and can be accessed on a smartphone, surely there must be ways of tapping into the pop-up ads software to contribute new revenues to the Ugandan press.

By primarily relying on print-centric revenue sources, such as display advertising and subscriptions, ePapers are hindered in fully capitalizing on digital opportunities like targeted online advertising. Data-driven insights, and multimedia engagement. The admission by the circulation manager at *Daily Monitor* means that a broader challenge is adapting to digital demands; without exploring new revenue models or diversifying content delivery, Ugandan ePapers may struggle to attract a sustainable digital readership and retain competitive relevance in the evolving media market. It is the considered pinion of this study that the reliance on legacy approaches could delay their growth and reduce their adaptability in a digital-first world.

Another key finding showcasing the limitations of the contributory role of ePapers is their inability to close the digital divide. It is this study's finding that the adoption of ePapers in the Ugandan press is fundamentally reshaping the newspaper industry by offering a digital alternative not only to traditional print, but also social media, contributing to enhanced accessibility, sustainability and efficiency in content delivery.

However, from multiple interviews with participants, this shift is rendering a significant challenge: the digital divide. Available literature reveals that only about 17 million Ugandans own smartphones out of 45 million people (UBOS, 2024; UCC, 2024).

Therefore, while ePapers offer immense potential, their impact is unevenly distributed, as many readers in low-income urban segments and rural Uganda face barriers to accessing digital news due to limited internet connectivity, affordability issues and technological literacy gaps. Bruce Byaruhanga who is at the centre of the *New Vision* distribution system agrees:

The main challenge we face is connectivity issues. In the rural Uganda, there are issues of internet to load these heavy pdfs. Many Ugandans are not only limited in technological literacy, they don't own smartphones. A case in point is our subscriber, at Bwindi Health Services in western Uganda that often gets network disruptions and the entire 10 staff of royal New Vision readers are forced to share the one hardcopy which arrives late.

Timothy Kalyegira concurs with this hurdle and points to an even bigger challenge where majority Ugandans who earn slightly less than one dollar a day. He observes that these Ugandans have other competing priorities such as food and transport than spend on data to read a digital newspaper which takes long to download, when they can receive instant news updates via alternative apps like X (formerly twitter) and Facebook. This speaks to current literature on extent of the digital divide in Uganda where unserved and underserved communities are outside the service delivery orbit of government, especially when it comes to such plans as the Parish Development Model where they would easily be reached through ICTs in order to support the monitoring of government programmes through promotion and information sharing via ePapers to those communities and sectors (Abaho et al., 2024).

Furthermore, it is this study's finding that the rise of ePapers has significantly reshaped the employment landscape and distribution networks within the Ugandan newspaper industry. As traditional print media adapts to digital platforms such as ePapers, roles in journalism, advertising, and distribution have either been altered or transformed.

A Senior Human Resources manager at *Red Pepper* newspaper, which is publishing purely the website news outlet and an ePaper once in a while, says the shift from physical paper delivery to

digital circulation has reduced the need for traditional distribution channels such as newspaper agents, vendors and supermarkets. She posited that:

While altering traditional print models, ePapers have created new opportunities in digital content management, IT support, and online marketing. This transition now raises questions about the future of print-based jobs and the capacity of the industry to absorb workers into new digital roles, offering both challenges and possibilities for the sector's workforce and logistical operations.

Thus, while ePapers have streamlined distribution, they have simultaneously reduced opportunities for distribution agents who traditionally facilitated the physical dissemination of newspapers. A respondent remarked, "This digitalization has cut off employment opportunities for distribution agents who might have been benefiting from taking papers from the capital to rural areas." Despite this, the study reveals that ePapers have enabled readers to access news more conveniently, thus shifting the focus towards content creation, digital marketing, and other forms of employment within the digital ecosystem.

This observation is reinforced by Dr. Rwengabo who argues that the growing digitalizations in the Uganda print mediascape have cut off employment opportunities for distribution agents who might have been benefiting from taking papers from the capital to the rural areas. They have also nearly eliminated physical newspaper vendors who might have been selling copies on the streets and in traffic jams on a daily basis. He supports his view saying that due to the adoption of digital platforms such as ePapers, it is now less common for someone to stop by a newspaper stall than to sit at home, open and download a newspaper.

7.3 Toward a New Conceptualisation of ePapers

From several participants came with the frustration with the replication of the print newspaper without a clear and unique value proposition of ePapers in the Ugandan press. Their frustration were triggered by the fact that ePapers not adding unique content to the print media apart from the PDF platform. While some participants like James Tumusiime acknowledged the contribution of ePapers in keeping the newspaper alive, others like Dr. Innocent Nahabwe expressed worry about the fact that ePapers have remained just a mirror image of the print versions. His view aligns well with the scholarly conceptualisation of ePapers as indicated in Chapter 1 where they are defined as replicas of their print versions.

However, from a media innovation perspective, James Timusiime attempted to redefine and conceptualise ePapers with a country-specific dynamic. He opines that ePapers are digitally disseminated versions of traditional print media, specifically tailored to the Ugandan context incorporating local news, cultural narratives, and community-driven stories.

He emphasized the importance of mobile-driven platforms that ensure accessibility, especially in urban and peri-urban settings where digital engagements are growing. He views ePapers as a means of bridging the digital divide between rural and urban Uganda, making news and information more accessible through a format that stays true to the print layout but adapts to modern technology.

Another respondent, Dr. Rwengabo, viewed ePapers from an academic and policy perspective saying they are technological adaptations with a transformative approach to journalism that merges the traditional media content with digital platforms. He argued that this integration allows for broader public engagement with socio-political issues, offering an alternative to the sustainable challenges faced by print media.

Kwezi Tabaro on the other hand observed the ePapers from the technologist and entrepreneurial standpoint conceptualizing them as dynamic and interactive digital publications that not only replicate the print media content but also incorporate multimedia elements. His conceptualization largely emphasizes the role digital platforms and mobile-first technologies in ensuring the ePapers remain both relevant and profitable in Uganda's competitive digital news landscape.

From these conceptualizations, the study found that the perceptions towards the platform varies from individual to individual and also in terms of their utility and value addition elements. It is basically a print version in PDF format coming off as the copy you have before you take it for printing.

7.4 Conclusion of Findings on ePapers' Contribution

This chapter has broadly reported findings on the contribution of ePapers in the Ugandan press and society, revealing a transformative process in which digital formats have reshaped the press's operational logic, audience relationships, and institutional adaptability. Viewed via the SPEF, these empirical findings on contribution align with the interlinked TD –SST-CPE theoretical domains of this study. Interpreted from a TD perspective, the move to ePapers reflects the Ugandan

press industry's response to declining print circulation, digital divide, rising distribution costs, and the desire to serve a mobile-first audience. This move has enhanced timeliness, expanded easy access to print news formats, and backed environmental sustainability efforts in line with SDG 13 through reduced paper use, thus demonstrating the press's adaptation to technological imperatives to serve digitally growing audiences.

Interpreted through the SST, these findings show that ePaper engagement is not just a technical shift but a socially negotiated practice. ePaper users at New Vision, for example, interact with the platform through archival access, educational and job listings content, civic discourse influenced by the cultural familiarity with print versions, and trust in legacy media brands and the symbolic value of newspapers in Ugandan society. These conclusions unearth the idea that technology is interpreted, negotiated, and shaped by institutions and users in a co-creation process and within specific socio-cultural contexts.

Lastly, from a CPE viewpoint, the findings show how structural constraints such as poor technological infrastructure, like limited broadband internet spread, and financial constraints, the persistent digital divide, and financial barriers to digital inclusion, continue to militate against the full realization of ePapers' efficacy and viability. Where ePapers offer fresh opportunities for revenue generation, expanded readership, and audience engagement, their potential is shaped by the larger market imperatives and ownership structures, political dynamics, and uneven access to connectivity.

Combined, these empirics show that ePapers, while not simply being digital replicas of the print newspapers, are sociotechnical innovations and adaptations by newspapers shaped by technological momenta, cultural contestations, and political-economic conditions. This is where the next chapter builds from to demonstrate a deeper analysis of their implications for media sustainability, efficacy, innovation, and policy in Uganda.

CHAPTER EIGHT

ANALYSIS AND DISCUSSION OF RESULTS

This chapter presents an engagement with the research findings on the evolution, adoption, and contribution of electronic newspapers (ePapers) in the Uganda's press. Drawing from the conceptual constellation woven throughout this thesis—Technology Determinism (TD), Social Shaping of Technology (SST), and Critical Political Economy (CPE)—I formulate a Socio-Political Economy Framework (SPEF) to guide the analysis. SPEF provides a lens through which the results are interrogated beyond technological determinism, focusing instead on the historical, institutional, cultural, and political forces that shaped ePaper evolution, adoption and contribution in the Ugandan press

Anchored in the ontological and epistemological philosophy of critical realism, the framework acknowledges the layered causality and emergent properties in technological uptake, resisting reductionist models. Supplementing this is the dialectical logic of Hegelian contradiction and synthesis, which allows for examination of media transformations as ongoing tensions between structural constraints and agentive innovations—old and new logics in collision.

What factors have influenced evolution of ePapers in Uganda?

This question seeks to:

- d) Find out the socio-economic factors that have influenced the evolution of ePapers in the Ugandan press.*
- e) Establish how technological advancements have influenced the evolution of ePapers in the Ugandan press.*
- f) Find out any other contextual factors, such as media industry trends, and the regulatory environments, that have influenced the evolution of ePapers in the Ugandan press.*

8.1 Factors and trajectory of the evolution of ePapers in the Ugandan press

Central to the evolution of ePapers in the Ugandan press is the revelation that they did not emerge from technological spontaneity but from historically layered socio-economic shifts, contextual media logics, and institutional negotiations - forces captured systematically within the Socio-

Political Economy Framework (SPEF). As alluded to in Chapter Two, SPEF's integrative theoretical triad - Technology Determinism (TD), Social Shaping of Technology (SST), and Critical Political Economy (CPE) - provided an interpretive scaffold for understanding how ePapers evolved through both external imperatives and internal cultural negotiations. Therefore, anchored in critical realism, this section lays emphasis on causality as a multi-stranded and emergent, rather than linear or isolated process of ePaper evolution, adoption and contribution in the Ugandan press. The Hegelian dialecticism will enable a deeper reading of tensions between legacy media structures and digital futures within the contemporary Ugandan mediascape.

The evolution of ePapers in Uganda's press landscape is best conceptualized not as a linear technological adoption, but as a historically contingent, dialectically mediated transformation. It is thus, shaped by structural reforms, infrastructural shifts, and institutional negotiations.

Empirical findings from Chapter Four, consistently traced the genesis of ePapers to Uganda's neoliberal restructuring under Structural Adjustment Programmes (SAPs) in the early 1990s. The Economic Recovery Program (ERP), driven by the withdrawal of state control and the liberalization of key sectors, created a policy environment conducive to private media ownership and digital experimentation in Uganda.

This finding aligns strongly with the CPE strand of SPEF, which posits that media innovation is embedded within broader capitalist and state imperatives (McChesney, 2007; Herman & Chomsky, 1988). In Uganda's case, the shift from state media monopoly to a pluralistic press ecosystem enabled the emergence of ePaper two decades later as both market responses and ideological artefacts.

However, this finding also challenges dominant perspectives in Western digital media scholarship, which often frame innovation as an organizational strategy or audience-driven necessity (Boczkowski, 2005; Pavlik, 2001). By contrast, Ugandan media actors emphasized macroeconomic realignments, not internal preferences, as the primary drivers of digital migration over a spectrum of two decades. But this supplements existing literature by foregrounding the role of political economy in shaping technological trajectories, particularly in Global South contexts where media systems are deeply intertwined with postcolonial governance and development

agendas (Mabweazara, 2015; Mbaine, 2019; Nyamnjoh, 2005). It further aligns with what Shirley, Xu and Zuluaga (2002) flagged in World Bank paper at the time as the utility of liberalisation. Shirley and colleagues argued that privatization and regulatory reform, driven by SAPs, created conditions for market-driven innovation, which later facilitated digital infrastructure development.

The second major driver identified through SPEF pertains to infrastructural liberalization, particularly in the telecommunications sector. From the findings, the entry of mobile operators such as Celtel (1995) and MTN Uganda (1998) expanded internet access and reshaped media consumption habits. These infrastructural shifts, documented by the International Telecommunication Union (ITU, 2001), exemplify TD's assertion that technological availability can catalyze systemic change (Shinyekwa, 2012). However, the findings also reveal that access alone did not guarantee adoption. And this is how the SST strand becomes critical here, as newsroom uptake of digital formats, such as news websites and eventually ePapers, was mediated by professional roles, generational divides, and epistemic cultures.

Senior editors, for instance, often resisted digital migration, citing concerns over editorial standards and institutional identity. Empirical data in Chapter Four reveals younger journalists and digital strategists, conversely, advocated for mobile-friendly formats and real-time publishing. These tensions reflect Hegelian dialectics: the thesis of legacy media norms confronted by the antithesis of digital imperatives, producing a synthesis in the form of hybrid editorial models such as we see now as ePapers in the Ugandan press. In the evolution of ePapers in the Ugandan press, the newsroom somewhat emerges as a contested space- a sort of semiotic arena in Peircean terms - where technologies (signs), institutional logics (objects), and actor interpretations (interpretants) interact to produce meaning and transformation in form of a hybridization of print and electronic mediums.

Comparative literature from other Global South contexts reinforces these findings. Kalombe and Phiri (2019), in their study of Zambian media, found that telecom liberalization facilitated digitization but did not automatically lead to editorial innovation. This parallels the Ugandan experience, where infrastructural gains created potential but not inevitability for digital transition. The SST emphasis on agency within structure provides a necessary corrective to TD's linear optimism and affirms the empirical validity of SPEF's integrative approach. Further literatures

such as Tusubira (2002) indicates an alignment with SPEF's integrative approach. In his study on the Ugandan telecommunications sector reform, Tusubira observed that policy and legal milestones, such as the 1996 Telecommunications Policy, the Telecommunications Act 1997, and the 1998 establishment of Uganda Communications Commission, had a direct bearing to media liberalisation and increased competition, and the rise of digital platforms.

Therefore, the trajectory of ePaper evolution in Uganda can thus be mapped across three interlinked dimensions: historical process, driving factors, and actor-technology interplay as independent variables driving the evolution and adoption of ePapers in the Ugandan press. Historically, the process was initiated by neoliberal reforms and sustained through infrastructural liberalization. The driving factors included macroeconomic restructuring, policy shifts, and technological availability in form of the internet broadband and tele density of the CELTEL and MTN Uganda. The interplay of actors and technology was shaped by institutional cultures germane to the legacy media at the time, generational epistemics, and professional negotiations. Each dimension reflects a strand of SPEF, and their convergence illustrates the framework's explanatory power.

Theoretically, the findings affirm and extend SPEF's expectations. CPE is validated through the identification of structural adjustment as a foundational driver. TD is partially affirmed through the role of telecom liberalization and the internet, though its limitations are exposed by the uneven adoption patterns. SST is strongly supported, as the study reveals how newsroom actors actively shaped the form and function of ePapers. This triangulation of evidence not only confirms SPEF's utility but also demonstrates its adaptability to non-Western media contexts to contribute to the broader terrain of communication theory with Global South perspectives.

In its own right, the SPEF offers a robust analytical lens through which this complexity can be interpreted. Anchored in critical realism, SPEF has enabled a multi-stranded reading of causality, while Hegelian dialectics and Peircean semiotics providing a philosophical scaffolding for understanding how contradictions, signs, and interpretants coalesce into emergent media forms of the nature of ePapers in the Ugandan press.

In terms of contribution to digital media and communication studies, the integrated findings on evolution of ePapers in the Ugandan press offer several novel insights. First, they historicize digital transformation within Uganda's political economy, challenging ahistorical and voluntarist narratives, especially from the Global North. Second, it reconceptualizes ePapers as socio-political artefacts rather than mere technological products. Third, it foregrounds actor agency and institutional negotiation, enriching our understanding of media evolution as a dialectical and semiotic process within the Ugandan press. This aligns with scholarship on technological adoption by newspapers as a measure of transformation. Globally, newspapers are engaging in digitisation processes as a strategic priority to embrace the opportunities presented by emerging digital technologies (Horlacher & Hess, 2016; Smolinski et al., 2017; Zavolokina et al., 2016).

These contributions ultimately extend the frontiers of knowledge in press studies and digital media scholarship. They introduce a context-specific, historically grounded account of media transformation in a transitional democracy, particularly constrained settings such as Uganda's. They also offer a methodological template for integrating SPEF with dialectical and Peircean semiotic reasoning, thereby enhancing the analytical depth of media research. Without this study findings on evolution of ePapers, the nuanced interplay of structural, technological, and cultural factors in Uganda's digital press evolution would have remained obscured, leaving a critical gap in both theory and empirical understanding. This speaks to BarikuiNnaane (2022) who explores the influence of digital technologies on journalism practice in Gambia. The research reveals critical dynamics within the press industry: digital technologies and the transformative impact of the internet, social media, and smartphones, lead to the convergence and multi-media journalism in The Gambian journalism landscape.

Finally, the findings in the sub section directly address the first research objective: *to identify the factors behind the ePaper evolution in the Ugandan press*. The study findings reveal that these factors are not isolated variables but interdependent forces - economic, infrastructural, and institutional - that interact dialectically to produce emergent media forms. This answers the objective not merely descriptively but analytically, offering a layered account that bridges theory and praxis.

8.1.1 Social Media as a Disruptive Catalyst in Print-to-Digital Transition

I concur with the findings of this study that the evolution of ePapers in Uganda cannot be fully understood without interrogating the catalytic role of social media within the broader sociotechnical political economy framework (SPEF). Within the SPEF matrix, the emergence of platforms such as Facebook and X (formerly Twitter) initially mirrored global techno-capitalist trajectories, consistent with the expectations of technological determinism (TD). As the findings show, these platforms entered Uganda in the mid-2000s as infrastructural imports, embedded within broader neoliberal logics of connectivity and digital expansion (Couldry & Mejias, 2019). However, the empirical data in Chapter Four, particularly interviews with early adopters like Timothy Kalyegira, suggest a departure from TD's linear assumptions. Social media was not merely adopted; it was reinterpreted, repurposed, and recontextualized by Ugandan journalists, advertisers, and audiences. This aligns with the Social Shaping of Technology (SST) perspective, which posits that technologies acquire meaning through local negotiation and cultural embedding (Lievrouw & Livingstone, 2006). It also aligns with Namasinga (2018), Kakooza (2017) and Tayeebwa (2016)'s conclusions about the potential of social media for communication of social services, news sourcing and survival of tradition media.

In the context of this study, the process social media adoption was neither smooth nor uniform. It unfolded through a Peircean logic of abduction, where actors inferred new communicative possibilities from the affordances of social media, followed by deductive experimentation and inductive consolidation. For instance, the shift from institutional gatekeeping to participatory visibility marked a semiotic rupture in the logic of news dissemination setting the stage for future reconfiguration into ePaper platforms. Social media's immediacy and interactivity redefined journalistic temporality and audience engagement, challenging the press's traditional rhythms and hierarchies to go back to the drawing board to save the legacy newspaper, hence the print and ePaper hybridity.

Therefore, the findings substantiate SPEF's emphasis on political economy as a driver of media transformation. The bypassing of print media by advertisers—who opted for direct engagement via social platforms—illustrates a classic case of market reorientation (Rocque & Sisodia, 2023). This shift was not merely economic; it was symbolic of bad days ahead for the print. It signaled a

redistribution of communicative power from centralized institutions of legacy media to decentralized networks, echoing Castells' (2012) notion of networked publics but with distinctly Ugandan inflections.

This reorientation created a dialectical contradiction: the print press lost its monopolistic grip over audiences and advertisers (thesis), was disrupted by the participatory and viral logic of social media (antithesis), and responded through strategic digital adaptation, which manifested in the rise of ePapers (synthesis). The synthesis, however, was not a resolution but a transformation. It entailed reconfiguring editorial workflows, redefining audience metrics, and renegotiating journalistic norms. These dynamics reflect Hegelian dialectics not as abstract philosophy but as lived media praxis.

Moreover, the role of social media as a disruptive force was amplified by Uganda's youthful demographic and mobile-first internet culture, as reported in Chapter Four. The convergence of demographic energy and technological accessibility created fertile ground for digital experimentation, further accelerating the decline of print-centric paradigms. This reinforces SPEF's assertion that media evolution is shaped by the interplay of social, technical, and economic forces, not by technology alone.

The Ugandan case challenges dominant Western narratives that often romanticize social media as inherently democratizing (Shirky, 2008). While access was indeed amplified, the findings reveal a more ambivalent reality. Social media also facilitated misinformation, weakened editorial standards, and triggered institutional disorientation. Tayeebwa (2016) captures this normative erosion, arguing that digital platforms destabilized the epistemic authority of traditional media without necessarily replacing it with robust alternatives, calling for legacy media to rethink their digital strategies for survival.

In the context of this study, SPEF accommodates this contradiction by treating digital transformation as contingent and contested. Findings in chapter four show, that journalists, for instance, did not passively adopt social media; they negotiated its use, resisted its excesses, and innovated within its constraints. Some redefined their professional identities as "digital curators," while others lamented the loss of editorial depth. This actor-technology interplay underpinned the

need to move beyond deterministic models and embrace frameworks that foreground agency, context, and contradiction, hence the adoption of ePaper platforms to augment the print.

The findings from a social media catalytic angle align with scholars like Khan and Shnaider (2021) who foreground the potential of digital transformations opening borderless opportunities for media to curate stories, distribute them across multiple platforms and even assess their efficacy better. Others like Mpoza and Maqsood (2021), Puijick (2021) and Tamara and others (2021) contend platforms like ePapers have been jolted by social media to become new digital business models where the old newspaper archives are now being replaced by new mediums. More so, the social media catalyst aligns with Bosch (2021) whose study on social media and digital journalism in Africa explores how the mobile-first and social media platforms are reshaping journalism across the continent

These findings, thus, also extend Peircean logic by illustrating how abductive reasoning shaped editorial innovation. Journalists inferred new storytelling formats from social media trends (e.g., threads, memes, live updates), tested them deductively within newsroom routines, and refined them inductively based on audience feedback. This iterative logic was central to the emergence of ePapers as hybrid platforms; neither fully print nor fully digital, but adaptive responses to a shifting communicative landscape.

Therefore, this study contributes to digital media scholarship by offering a context-specific analysis of social media's disruptive role in press evolution. It supplements SST and CPE literature with empirical evidence from Uganda, challenging universalist assumptions and foregrounding local agency. It also advances SPEF as a robust analytical tool capable of capturing the multidimensionality of media transformation in postcolonial contexts of the Global South.

Theoretically, I argue that the findings in the section extend the frontiers of media evolution by integrating Hegelian dialectics and Peircean logic into empirical analysis. This synthesis enables a richer understanding of contradiction, process, and innovation, both elements often underexplored in digital media studies. Without this study, the nuanced interplay between social media, institutional adaptation, and epistemic renegotiation in Uganda's press would have remained under-theorized to understand the true factors behind the evolution of ePapers.

Finally, the findings directly address the first research objective: identifying the factors behind ePaper evolution in Uganda. Social media emerges not as a singular cause but as a catalytic force interacting with economic pressures, technological affordances, and socio-cultural dynamics to reshape the Ugandan press. This places a catalytic social media as a moderating variable in the driving to ePaper adoption and evolution. This multidimensional understanding is essential for designing future media policies, training programs, and innovation strategies that are contextually grounded and epistemically inclusive.

8.1.2 COVID-19 Pandemic as Unintended Accelerant of ePaper evolution in Uganda

The COVID-19 pandemic marked a pivotal inflection point in the trajectory of ePaper evolution within Uganda's press ecosystem (Walulya & Moges, 2022). Conceptualized through the Socialtechnical Political Economy Framework (SPEF), this stage reveals a layered causality that is neither linear nor deterministic, but dialectically emergent. The pandemic did not merely accelerate digital adoption across industries and processes. It completely reconfigured the ontological status of the newspaper itself, shifting it from a static print artifact to a dynamic, digitally mediated communicative form. This transformation, while catalyzed by crisis, unfolded through a complex interplay of technological affordances, socio-cultural negotiations, and political-economic constraints.

First, the pandemic's disruption of physical circulation networks, as reported in Chapter Four, constituted a rupture in the habitual logic of newspaper distribution. Within the SPEF schema, this rupture activated the Technology Determinism (TD) strand, as digital infrastructure became not just an alternative but a necessity (Khisa & Rwengabo, 2022). The New Vision's decision to offer a free year of ePaper subscription exemplifies this strategic pivot - an act of technological improvisation that simultaneously addressed audience access constraints and tested new monetization models. This aligns with Peirce's abductive logic: the newsroom inferred a plausible solution from an anomalous situation, thereby initiating a new semiotic regime of news delivery.

Yet, the process was not unidirectional. The New Vision newsroom's adaptation also reflected Social Shaping of Technology (SST) dynamics, wherein editorial norms, audience expectations, and infrastructural limitations mediated the uptake of digital formats. Participants in this study

consistently emphasized that while ePapers gained prominence during COVID-19, their integration into newsroom routines remained partial and contested, after the lockdowns in 2021. The persistence of print-style writing, limited interactivity, and uneven digital literacy among readers undergird the socio-cultural frictions that temper technological enthusiasm. Thus, the evolution of ePapers must be understood as a dialectical movement where innovation coexists with exogenous disruptors like COVID-19, newsroom inertia, and transformation emerging through contradiction.

The pandemic's role as an exogenous shock aligns with global patterns observed in media transitions during health and economic crises (McAdams, 1995). However, Uganda's experience is uniquely shaped by its political economy. The state's imposition of movement restrictions and militarized enforcement (Khisu & Rwengabo, 2022) foregrounds the Critical Political Economy (CPE) strand of SPEF. Here, the state functioned both as a constraint and a designer limiting physical mobility while inadvertently incentivizing digital experimentation. This duality reflects Hegelian dialectics: the negation of physical circulation birthed the affirmation of digital presence, not as a mere substitute but as a reimagined communicative form.

Therefore, the newsroom's response was not merely reactive but creatively strategic. The pandemic enabled experimentation with pricing models, audience analytics, and editorial agility. These dimensions were all previously considered unsustainable. This resonates with Nyejeye's (2025) findings, which document how digitisation expanded the newspaper product portfolio and altered circulation metrics. His observation that ePapers are not replicas but emergent media forms reinforce this thesis's argument that digital transformation is not a technical upgrade but a paradigmatic shift in journalistic identity.

The evolution of ePapers during the pandemic illustrates a dynamic interplay between institutional actors, technological systems, and socio-political structures, placing COVID-19 at the centre of an intervening variable to jolt the ePaper evolution and adoption within *New Vision*. Newsrooms, as institutional actors, navigated the crisis through a blend of improvisation and strategic foresight. Their ability to revise stories post-publication, such as the hypothetical example of the Pope's death, demonstrates the temporal agility afforded by digital formats. This supports the TD strand of SPEF, which emphasizes how digital infrastructure reconfigures journalistic workflows and

content delivery. However, this agility is unevenly distributed. As Nyejeje's participants reveal, infrastructural challenges such as internet access, app usability, and digital literacy continue to hinder full integration.

Infrastructural challenges in the Ugandan context specifically encompass the 'digital divide' characterized by the high cost of mobile data relative to average income of the population, inconsistent 3G/4G network penetration in rural areas, and frequent power outages that impede the charging of mobile devices, collectively creating a connectivity barrier that makes the seamless consumption of high-resolution ePaper PDFs a logistical challenge for the average citizen.

Thus, these findings stress the SST strand, highlighting how technological uptake is mediated by socio-cultural and infrastructural conditions. The newsroom's struggle to recalibrate editorial norms and the audience's uneven engagement reflect a contingent evolution that is shaped by both enabling and constraining forces.

When looked at critically, these findings on the pandemic's disruption substantively engage with and extend the theoretical expectations of SPEF. The TD strand is affirmed through evidence of infrastructural reconfiguration and workflow adaptation. The SST strand is validated by the socio-cultural negotiations that mediate technological uptake due to the lockdown and the so-called standard Operating Procedures issued by the Ugandan president to combat the pandemic. The CPE strand is illuminated by the role of state policy and enforcement to combat COVID-19 in shaping media trajectories. Collectively, these strands reveal a dialectical process wherein crisis catalyzes innovation, but transformation remains a dependent and contested logic.

In relation to dominant perspectives in digital media studies, this finding supplement and localizes global narratives. While McAdams (1995) and others have documented crisis-induced media innovation in Western contexts, this thesis situates Uganda's experience within its specific socio-political and infrastructural realities. The contribution lies not in replicating global models but in theorizing a localized trajectory of digital evolution, one that foregrounds the interplay of actors, technology, and political economy.

The finding and subsequent analysis speaks to literatures in localized media scholarship. Kemp (2022) and Nyanduko (2016) observe that the African digital landscape has since COVID times

negotiated its own growth, driven by increasing internet users and the recognition of digital media technologies as essential. The report that that in South Africa alone, a significant increase of 1.7 million internet users were registered between 2016 and January 2021, totaling 38.19 million users. This highlights the importance of digital media technologies such as ePapers in a region opening up to immense opportunities and greatly influencing consumption patterns especially in the news segments (Kulkarni & Srivastava, 2020; MoICT, 2021; World Bank, 2020).

These findings extend the frontiers of knowledge in digital press studies by conceptualizing ePapers as emergent media forms rather than digital replicas. This study argues, by defining the ePaper as an 'emergent media form' rather than a 'digital replica,' that the medium has evolved beyond a replication of the print layout to become a dynamic, hybrid platform that leverages digital affordances, such as instant social media sharing, interactive archival hyperlinking, and direct WhatsApp-based feedback loops, which fundamentally alter how the audience interacts with and co-creates the news experience. They have introduced the notion of “journalistic identity transformation” as a critical dimension of digital evolution. Without this study, the nuanced understanding of how crisis, creativity, and constraint co-produce media transformation in Uganda would remain under-theorized. The findings, thus, answer the first objective of this thesis by identifying the pandemic as a key causal factor of ePaper evolution, while also revealing the encrusted dynamics that mediate this transformation.

From a Critical Political Economy perspective, the ePaper’s development is inextricably linked to *New Vision*’s unique status as a state-linked corporation, where the control of capital is influenced by government shareholding and a regulatory environment characterized by strategic interventions, such as the 2026 social media and internet shutdowns (UCC, 2026), which demonstrate how political power can dictate the technological boundaries and commercial viability of digital media innovations.

In sum, the take-off stage of ePaper evolution in Uganda exemplifies a dialectical process shaped by technological affordances, socio-cultural negotiations, and political-economic constraints. Through the lens of SPEF, this stage in the ePaper evolution in the Ugandan press reveals not just a shift in format but a reconstitution of the newspaper’s communicative ontology. It is in this

emergent space, one shaping out between crisis and creativity, inertia and innovation, that the future of Uganda's digital press continues to unfold.

8.1.3 The 2014 inflection point and the loss of legacy media's agenda-setting power

The trajectory of ePaper evolution in Uganda's press landscape reveals a dialectical unfolding of sociotechnical tensions, institutional recalibrations, and epistemic shifts. Anchored in the Socialtechnical Political Economy Framework (SPEF) and related empirical findings in Chapter Four, this study identifies 2014 as a critical inflection point, where newsroom anxieties over social media virality, audience fragmentation, and diminishing agenda-setting power of legacy media, catalyzed a reconfiguration of digital publishing strategies. This moment, as evidenced by the strategic rollout of New Vision's ePaper on April 2020, marks the synthesis of competing pressures: the thesis of legacy editorial control confronted by the antithesis of participatory digital publics.

From a sociotechnical standpoint, the adoption of platforms such as Page Suite and Flutter Wave exemplifies Technological Determinism (TD) in response to infrastructural exigencies, particularly those exacerbated by a proliferation of social media platforms, Google news aggregator and online –only news websites. Yet, the selective integration of MailChimp at New Vision for subscription analytics and feedback loops underpins Social Shaping of Technology (SST), where design choices were not merely reactive but negotiated within cultures of editorial practice and audience behavior (Williams & Edge, 1996).

It also reflects Moll and Yigitbasioglu (2019)'s key argument that technological systems do not just evolve in a vacuum. Technologies continuously shaped by feedback loops such as editorial norms, exigent factors like instantaneous viral digital platforms, platform algorithms, and audience interaction patterns. They therefore emphasize digital platform choices are negotiated within cultural and institutional contexts not simply reactive to technical possibilities. Thus, as SST avers, media transformation contexts are co-constructed through editorial cultures, decisions, contestations and user behaviour. This eclecticism affirms SPEF's theoretical expectation that technological evolution in media is neither linear nor autonomous, but embedded in socio-political and economic matrices.

The findings resonate with and extend dominant perspectives in digital media studies. Kulkarni and Srivastava (2020) argue that the pressure to transform digitally has not only altered media consumption patterns but has also occasioned a paradigm shift in media habits, audience and market response. This proffers these market conditions as an independent variable in driving the transformation, accessibility, consumer readiness, and strategic investment in ePapers across Uganda's media system. That's why McAdams (1995) long argued that those digital transitions necessitate a reimagining of form and function, rather than replication of print aesthetics. Ugandan media leaders, as this study shows, grappled with precisely this dilemma - balancing legacy design with mobile-first imperatives, monetization challenges, and the epistemological shift from static to dynamic publishing. Recent scholarship (Couldry & Mejias, 2019; Napoli, 2022) further emphasizes the role of datafication and platform logics in reshaping journalistic authority. This study supplements such views by foregrounding the localized interplay of actors such as editors, technologists, and audience in shaping ePaper trajectories under SPEF pressures.

The contribution of this finding to digital media and press studies is threefold. First, it empirically demonstrates how sociotechnical pressures, especially those linked to political economy and audience agency, drive design shifts in non-Western media contexts to respond to western-instigated social media logics. Second, it introduces a nuanced understanding of editorial adaptation as a Peircean abductive process: media actors interpreted signs of disruption (e.g., declining print circulation, social media virality) and hypothesized new publishing logics, leading to iterative design choices. Third, it extends the frontier of knowledge by theorizing ePaper evolution not as a technological inevitability but as a contested, negotiated process shaped by institutional reflexivity and civic imaginaries.

Absent this study, the granular dynamics of Uganda's ePaper evolution, particularly the eclectic moments of redesign, resistance, and recalibration to respond to alternative media virality, would remain obscured. The SPEF lens thus reveals that the drivers of change were not solely technological but entangled with editorial ideologies, economic constraints, and sociopolitical aspirations. This directly answers the first research objective by identifying the constellation of forces - virality anxiety, infrastructural shifts, and audience feedback - that propelled the transformation of digital publishing.

In sum, the Ugandan ePaper trajectory exemplifies a Hegelian dialectic of media evolution: from the thesis of print orthodoxy, through the antithesis of digital disruption, toward a synthesis of hybrid publishing logics. SPEF on the other hand provides the scaffolding to interpret this process, while Peircean logic favours the abductive reasoning that guided editorial choices. Together, they offer a robust framework for understanding the sociotechnical becoming of the Ugandan press in contemporary times.

8.2 Drivers of adoption of ePapers in the Ugandan press

The second objective set out to examine the drivers of adoption of ePapers in the Ugandan press. Specifically, it sets out to interrogate engagement with the ePaper platform, socio-technical drivers influencing the adoption of the platform and in the privileging of netnography, how all this plays out in a case like that of New Vision newspaper. In this sub-section, I interrogate the findings from Chapter Five through the lens of the Socialtechnical Political Economy Framework (SPEF), situating them within broader digital media scholarship and epistemological dialectics, responding to the demands of the second objective as follows:

8.2.1 New Vision's unique aspects of ePaper adoption

The adoption of New Vision's ePaper platform, as evidenced through netnographic data from its WhatsApp Messenger interface, reveals a nuanced convergence of sociotechnical rhythms, institutional responsiveness, and user agency.

From a SPEF standpoint, the observed temporal engagement patterns i.e. morning subscriptions, midday inquiries, evening troubleshooting, and nocturnal archive access, demonstrate a partial but meaningful alignment with theoretical expectations of the ePaper adoption process at New Vision. SPEF posits that media adoption is shaped by the interplay of technological infrastructure, socio-economic context, institutional arrangements, and political economy (Mansell, 2012; Fuchs, 2020). The New Vision case affirms this: mobile-first access, flexible scheduling, and off-peak data usage reflect infrastructural and economic constraints, while the platform's responsiveness and co-designed improvements signal institutional adaptability. However, the persistence of usability challenges and uneven digital literacy, as evidenced in the onboarding process of New

Vision ePaper users, suggests that SPEF’s ideal of seamless sociotechnical integration remains aspirational, not fully realized.

In relation to dominant perspectives and literatures in digital media studies, these findings both supplement and complicate existing narratives. While scholarship has emphasized the rise of mobile journalism and platform convergence in Africa (Bosch, 2021; Mutsvairo&Ragnedda, 2019), the granular rhythms of user engagement observed here extend this discourse by foregrounding the temporality of adoption. The notion that users engage with digital news platforms outside conventional cycles—at midnight, during work breaks, or in response to specific civic queries—challenges linear models of media consumption and affirms the need for more temporally sensitive frameworks (Couldry& Hepp, 2017). Moreover, the prominence of developmental content inquiries (e.g., job opportunities, educational updates) aligns with arguments that digital media in the Global South serve aspirational and informational functions beyond entertainment (Nyamnjoh, 2017).

Theoretically, the findings contribute to digital press studies by introducing a dialectical synthesis of structure and agency. In Hegelian terms, the thesis of institutional design (e.g., platform architecture, editorial responsiveness) encounters the antithesis of user constraints (e.g., digital literacy, economic precarity), producing a synthesis in the form of negotiated adoption practices. This dialectic is not merely abstract but materially instantiated in the WhatsApp interactions—where users articulate needs, receive guidance, and co-shape platform evolution. Peircean logic further enriches this analysis: the abductive reasoning users employ (“I can’t access archives, therefore I must ask”) and the platform’s inferential responses (“Here’s how to subscribe”) reflect a semiotic interplay of signs, habits, and interpretants that constitute the communicative infrastructure of adoption (Peirce, 1931–58; Santaella, 2020).

Empirically, this study extends the frontiers of knowledge by documenting the micro-temporalities and dialogic textures of ePaper engagement—dimensions often overlooked in macro-level analyses. Without this study, the lived realities of Ugandan digital news consumers—their midnight archive hunts, their afternoon civic inquiries, their evening subscription dilemmas—would remain invisible. The data reveals not just adoption, but adaptation: users bend the platform to fit their rhythms, while the institution recalibrates in response. This mutual shaping process

underscores the value of interpretive critical realism in media research, where mechanisms are understood through lived experience (Archer, 2003).

In answering the first objective—identifying factors influencing ePaper evolution—the findings illuminate a constellation of interdependent factors: infrastructural flexibility, institutional responsiveness, socio-economic aspirations, and peer observability. The prominence of WhatsApp as a conduit for engagement reflects the strategic repurposing of everyday platforms for formal media access, a phenomenon increasingly noted in African digital ecosystems (Tully, 2022). Moreover, the role of social proof—users seeing peers engage and follow suit—emerges as a potent moderating variable, reinforcing Rogers’ (2003) diffusion theory in a digitally networked context.

In summary, New Vision’s ePaper adoption is not merely a technological shift but a sociotechnical negotiation. It is a site where institutional logics, user agency, and infrastructural constraints collide and coalesce. Through SPEF, dialectical reasoning, and semiotic analysis, this study surfaces new knowledge on how digital press platforms evolve in contextually rich, temporally diverse, and politically embedded environments. It affirms that adoption is not an endpoint but a process—dynamic, dialogic, and deeply human.

8.2.2 The unique role of customer support in ePaper adoption

The adoption of New Vision’s ePaper service via WhatsApp Messenger reveals a critical, yet under-theorized, dimension of digital media engagement: the centrality of customer support as both enabler and constraint. Far from being a peripheral feature, customer support emerges as a foundational infrastructure mediating user access, satisfaction, and retention. Netnographic data from September 2024 underscores this duality—support staff such as Janat consistently facilitated successful onboarding, archive retrieval, and troubleshooting, often within minutes. These interventions were not merely technical fixes; they constituted a sociotechnical negotiation between user intent and institutional capacity.

Through the lens of the Sociotechnical Political Economy Framework (SPEF), customer support exemplifies negotiated adaptation. Socio-technical systems theory (SST) interprets these interactions as dynamic recalibrations, where user behaviors and expectations actively shape the

platform's service orientation (Bijker, 1995; Orlikowski, 2007). The WhatsApp-based support model reflects this: users articulate needs, receive tailored guidance, and co-produce usability norms. For example, on September 23 at 09:27am, a user seeking subscription help was guided to successful access. On September 25 at 09:17am, a user reporting "Failing to access Bukedde" was promptly informed once the error was resolved. These moments of resolution are not passive transactions—they are iterative trust-building exercises that reinforce platform credibility. This reflects the nature of customer support as intervening variable in the ePaper adoption at New Vision. We see the explanatory mechanisms that enable or constrain adoption, showing how user capabilities mediate effects of core infrastructural and social variables.

However, critical political economy (CPE) problematizes the sustainability of this model. While human mediation bridges immediate gaps, it risks institutional strain if usability barriers persist. The recurrence of similar inquiries—especially around subscription and access—suggests that the platform's design lacks intuitive self-navigation. As Peirce's semiotic logic would frame it, the interpretants (user actions) repeatedly fail to resolve the signs (interface cues), necessitating external intervention (Peirce, 1931–58; Santaella, 2020). This dependency on human labor, while effective in the short term, may become untenable as user volumes grow and support resources remain finite.

Technological determinism (TD), conversely, views customer support as compensatory infrastructure—a temporary scaffold that bridges design deficits until the technology itself evolves. In this view, the support team's responsiveness reflects institutional agility but also signals unresolved systemic gaps. On September 6 at 12:08pm, a user who had "Failed to access after payments" was able to proceed only after receiving help. Similarly, on September 18 at 11:27am, a user noted "Failed to access," followed by "Guidance given." These examples reinforce the notion that successful adoption is contingent not on interface design alone, but on mediated scaffolding that compensates for it.

This mediated adoption process challenges dominant narratives in digital media literature that assume seamless, user-driven engagement. While much scholarship emphasizes the rise of mobile-first journalism and platform convergence (Bosch, 2021; Mutsvairo&Ragnedda, 2019), the New Vision case foregrounds the human infrastructure underpinning digital access. It affirms that in

contexts marked by uneven digital literacy and infrastructural constraints, human mediation remains indispensable. The presence of ‘Janat’ who is frequently mentioned in the netnographical dataset of the New Vision WhatsApp messenger, and other support personnel in resolution logs reflects a high-touch model of engagement that is both relational and procedural. Bosch (2021)’s study on social media and digital journalism in Africa aligns with the human agency at New Vision. She argues that the convergence of traditional, human elements with digital media process shows how journalists are increasingly producing content optimized for mobile devices and platform-specific engagement.

Strategically, therefore, these findings contribute new knowledge to digital press studies by surfacing the operational textures of adoption. Without this study, the gritty realities of Ugandan users, who navigate ePaper subscription hurdles, archive requests, and access errors through WhatsApp conversations, would remain obscured. The study thus, answers the first objective by identifying customer support as a key driver of ePaper evolution. It reveals that adoption is not merely a function of technological availability but of institutional responsiveness and user empowerment.

In Hegelian terms, the thesis of platform design encounters the antithesis of user constraint, producing a synthesis in the form of mediated support as well as useful feedback for the thesis. This dialectic is not static; it evolves through each interaction, each resolution, each moment of guidance, a process that indicates constant ePaper platform improvement at New Vision. The platform’s future viability will therefore depend on transcending this synthesis: by investing in intuitive design, automated support tools, and clearer onboarding pathways, New Vision can reduce its reliance on human mediation while preserving the relational trust it has cultivated and the immediacy of digital logics.

8.2.3 Monetization, awareness and evolving user sophistication in ePaper adoption at New Vision

The September 2024 netnographic analysis of New Vision’s WhatsApp-based ePaper platform reveals a compelling behavioral inflection point: users are transitioning from basic access inquiries to more nuanced explorations of subscription packages, magazine access, and pricing structures.

This shift signals a growing sophistication in how audiences engage with digital media offerings and marks a critical juncture in the platform's adoption trajectory. It also foregrounds the latent potential for monetization and the strategic imperative of value communication.

From the perspective of the Socialtechnical Political Economy Framework (SPEF), this evolution reflects a maturing sociotechnical system wherein user agency, institutional responsiveness, and infrastructural design coalesce to shape adoption outcomes (Mansell, 2012; Fuchs, 2020). The emergence of inquiries such as "How to subscribe for a monthly package" (September 23, 09:55am) and "How to subscribe for the magazine" (September 23, 08:06am) suggests that users are no longer passive recipients of digital content. It suggests that ePaper users at New Vision are evolving steadily because they are active negotiators of access models. This behavioral shift aligns with SST's view of technology as socially constructed and continuously redefined through user interaction.

The Peircean logic perhaps illuminates this transition better. The user's inquiry acts as a sign, the support team's response as an interpretant, and the successful subscription as the habit-forming outcome. These semiotic chains which are repeated across multiple interactions, reveal a pattern of abductive reasoning: users hypothesize that differentiated packages exist, seek clarification, and adjust their behavior based on institutional feedback. This iterative process reflects a deeper epistemological engagement with the platform, where users are beginning to perceive the ePaper not as a static news source but as a customizable media ecosystem.

However, the data also exposes a critical gap in pricing communication. While users were informed that "rates [were] shared" (September 27, 01:58pm), the reactive nature of these responses implies that pricing structures are not prominently displayed or proactively communicated. This opacity risks undermining user trust - a key moderating variable in SPEF - and delaying adoption of the ePaper platform at New Vision. Extant literatures aver that in a digital environment where immediacy and transparency are paramount, the absence of clear value articulation can erode confidence and stall monetization efforts (Couldry & Hepp, 2017).

This tension therefore, invites a Hegelian reading. The thesis of user curiosity (e.g., inquiries into packages and rates) encounters the antithesis of institutional opacity (e.g., reactive pricing

responses), producing a synthesis in the form of strategic communication. Yet, this synthesis remains incomplete. Without proactive messaging, intuitive pricing displays, and clear benefit articulation, the platform risks alienating users who are ready to pay but uncertain about what they are paying for. The dialectic must therefore evolve toward a more transparent and user-centered monetization strategy which is proposed in the next chapter that tackles an ePaper Business Viability Model (eBVM).

The findings also contribute to digital media studies by extending the discourse on audience segmentation and value perception. While much scholarship has focused on access and infrastructure in African digital ecosystems (Bosch, 2021; Mutsvairo&Ragnedda, 2019), this study surfaces a new layer: the emergence of differentiated content demand. Users are not merely seeking news—they are seeking lifestyle-aligned packages, premium offerings, and specialized content. This aligns with global trends and scholarship in digital journalism, where personalization and tiered access models are increasingly central to sustainability (Napoli, 2011; Tandoc et al., 2020).

Strategically, these insights offer actionable pathways for media innovation. The behavioral shift toward subscription exploration suggests a market segment primed for monetization—provided the value proposition is clear. New Vision and similar platforms must therefore invest in transparent pricing communication, differentiated content packaging, and user education. This includes integrating visual cues, guided walkthroughs, and comparative package displays to convert curiosity into commitment. Moreover, bundling educational content, job listings, and lifestyle magazines could deepen engagement and support audience segmentation.

Yet, the study also reveals structural limitations in user experience design. The absence of a standalone app and the reliance on WhatsApp for delivery constrain interactivity and community-building. As one user noted, “I find the New Vision hard to experience. Their user experience is terrible.” This sentiment reflects a broader issue: the platform is designed for delivery, not dialogue. In SPEF terms, the institutional arrangement privileges content dissemination over participatory engagement, limiting the platform’s capacity to evolve into a full-fledged digital media ecosystem.

In sum, the September 2024 netnographic data reveals a pivotal insight: user inquiries about subscription packages and pricing are early indicators of a monetization-ready audience. These behaviors reflect a maturing digital literacy and a desire for customized media experiences. This reflects the nature of digital literacy an intervening variable in the ePaper adoption at New Vision. We see the digital literacy levels and awareness of the ePaper product as an enabler or constrainer of adoption, showing how user capabilities mediate effects of core infrastructural and social variables.

For New Vision, this represents both a challenge and an opportunity. If these issue are addressed, particularly the pricing opacity, enhancing user experience, and investing in strategic communication, the platform can unlock new revenue streams while deepening civic engagement. Without this study, the nuanced contours of user sophistication and monetization potential would remain obscured, underscoring the value of interpretive critical realism in capturing the lived realities of digital media adoption.

8.2.4 Levels of adoption at New Vision: Archives, Job Listings, and Education

The adoption of ePapers within Uganda’s press ecosystem, as evidenced through user engagement with New Vision’s WhatsApp-based ePaper service, reveals a layered and dynamic process of digital integration. The recurrent user inquiries into archival content, job listings, and educational material throughout September 2024 signal a paradigmatic shift in the perception of digital newspapers—not merely as ephemeral news carriers but as multifunctional infrastructures of opportunity, memory, and civic relevance. This thematic pattern directly engages the Socialtechnical Political Economy Framework (SPEF), which offers a multidimensional lens to interpret the interplay between technological affordances, social agency, institutional mediation, and economic structuring.

From a sociotechnical standpoint (SST), the findings affirm the centrality of user agency in shaping editorial priorities and platform functionalities. The consistent demand for archives—evident in timestamped interactions such as those on September 3, 7, 20, and 26—demonstrates that readers are not passive recipients of content but active navigators of informational landscapes. Their engagement reflects contextual information needs that transcend daily reportage, encompassing

academic research, professional referencing, and personal documentation. This aligns with recent scholarship emphasizing participatory media cultures and the co-production of value in digital journalism (Carlson & Lewis, 2022; Boczkowski et al., 2021). The ePaper, in this sense, becomes a site of negotiated meaning, where technological provision meets social comprehension—a dialectical tension that Hegel might describe as the unfolding of spirit through contradiction and synthesis.

Technologically, the ePaper's affordance of persistent storage and asynchronous access—recognized within the Technological Determinism (TD) strand of SPEF—marks a departure from the temporal constraints of print media. Users' expectation of durable access to past editions, even beyond subscription windows (e.g., September 24 inquiry), underpins a redefinition of media temporality. The ePaper is not merely a conduit of immediacy but a reservoir of continuity. This resonates with Peircean logic, wherein the archive functions as a “*thirdness*”—a mediating sign that connects past events (*firstness*) and present inquiry (*secondness*) into a coherent interpretive framework. The archive thus becomes a symbolic anchor in the digital press's epistemic architecture.

However, the Political Economy (PE) dimension of SPEF introduces a cautionary note. The reliance on manual facilitation for archive retrieval (e.g., “Accessed after activation,” “Archives link shared”) and the segmentation risks associated with content categorization raise concerns about equitable access. Users with lower digital competence or limited subscription capacity may struggle to leverage the full utility of the platform. This echoes critical media studies' concerns about digital divides and the commodification of information access (Fuchs, 2020; Couldry & Mejias, 2019). The ePaper's evolution, while promising, remains contested and subject to infrastructural asymmetries and institutional gatekeeping.

Thematically, the prominence of job listings and educational material further expands the ePaper's functional repertoire. Requests on September 8 and 27 for employment-related content, alongside consistent engagement with educational resources, suggest that users perceive the platform as a gateway to socio-economic mobility. This aligns with Deuze's (2021) conception of journalism's public-service function and supplements contemporary discourse on media's role in civic empowerment and knowledge democratization (Napoli, 2019; Mutsvairo & Ragnedda, 2022). In

the Ugandan context, where formal employment channels and academic resources remain unevenly distributed, the ePaper emerges as a strategic node in the information ecosystem, bridging job gaps and fostering inclusion.

The findings thus contribute substantively to current knowledge in digital media and communication studies. First, they extend the conceptualization of ePapers beyond their traditional remit, positioning them as hybrid platforms that integrate archival, economic, and educational functions. Second, they foreground user-driven adoption patterns, challenging deterministic models of media diffusion and emphasizing the role of contextual agency. Third, they lay ground for the infrastructural and institutional dynamics that mediate digital engagement, offering empirical grounding to SPEF's theoretical propositions.

Importantly, this study advances the frontiers of knowledge within press studies and digital communication subfields by introducing a netnographic lens to ePaper adoption—an approach that captures granular user interactions and temporal rhythms of engagement. Without this study, the nuanced understanding of how Ugandan users interact with digital press platforms—particularly through informal channels like WhatsApp—would remain obscured. The archival demand, for instance, would be reduced to a backend metric rather than a lived communicative practice. The dialectical synthesis of user needs and platform responses, as documented here, reveals the ePaper as a site of ongoing negotiation rather than static delivery.

In answering the second objective - to assess the drivers of the adoption of ePapers in the Ugandan press - the findings shed light on thematic relevance, technological affordance, and institutional responsiveness as key catalysts. Users' pursuit of archives, job listings, and educational content reflects a convergence of personal aspiration and systemic gaps, which the ePaper partially addresses. This evolution is not linear but dialectical, shaped by contradictions between access and exclusion, immediacy and durability, commodification and public utility. The SPEF framework, when applied to this context, reveals adoption as a layered process - where social needs, technical possibilities, and political-economic structures intersect and co-evolve.

When it comes to the integration of Hegelian dialectics and Peircean logic, the study offers a philosophical scaffolding to interpret these dynamics. The thesis (ePaper as news source),

antithesis (user demand for archives and opportunity), and synthesis (ePaper as multifunctional infrastructure) reflect the unfolding of digital media's role in Uganda. Peirce's triadic model—icon, index, and symbol—helps decode the semiotic richness of user interactions, where each request signifies not just a need but a broader communicative intent.

In sum, the adoption of ePapers in Uganda, as exemplified by *New Vision's* WhatsApp platform, reveals a complex interplay of user agency, technological design, and institutional mediation as independent variables in the growth of the ePaper platform. The SPEF framework provides a robust analytical lens to unpack this evolution, while the dialectical and semiotic logics enrich its interpretive depth. These findings not only foreground the drivers of digital press transformation but also contribute new knowledge to the fields of media studies, communication theory, and digital journalism. They affirm that in Uganda's media ecosystem, adoption is not a destination but a dynamic process that is negotiated, contested, and continually redefined.

8.2.5 Factors Driving Non-Adoption: Usability, Mediation, and Structural Friction

While the adoption of ePapers in Uganda reflects promising trajectories of digital engagement, educational and employment pathways, the findings also indicate persistent barriers that complicate this evolution. A recurring theme in the September 2024 netnographic dataset from *New Vision's* WhatsApp Messenger platform is the usability challenge, particularly around subscription guidance, archive access, and content retrieval.

These frictions reveal that adoption is not merely a function of technological availability but a negotiated process shaped by infrastructural design, user literacy, and institutional mediation. The Socialtechnical Political Economy Framework (SPEF) offers a robust lens to interrogate these dynamics, revealing how social agency, technological affordance, and political-economic structures coalesce to either enable or inhibit digital uptake.

From the standpoint of Technological Determinism (TD), the findings expose infrastructural gaps that undermine intuitive interaction. Although the ePaper platform is technically operational, its backend systems and user-facing design lack the refinement necessary for seamless onboarding. The repeated user inquiries—such as those on September 2, 21, and 27—regarding how to subscribe, access archives, or retrieve job listings suggest that the interface does not adequately

accommodate diverse digital literacy levels. This contradicts dominant assumptions in Western digital media literature, which often presumes rising user autonomy and platform intuitiveness (cf. Boczkowski et al., 2021; Westlund & Krumsvik, 2019). In the Ugandan context, the expectation of self-service or do-it-yourself functionality, is not universally tenable, making mediated support a structural necessity rather than a transitional feature.

The Social Shaping of Technology (SST) strand of SPEF deepens this analysis by foregrounding the interpretive agency of users. Adoption, in this view, is contingent upon users' ability to negotiate technological structures. However, the data reveal that such negotiation remains constrained. The frequent appearance of the phrase "accessed after guidance" indicates that successful engagement often depends on real-time support from platform administrators. This dependency, while operationally effective, introduces risks of fatigue, inconsistency, and exclusion - particularly for users accessing the platform outside peak support hours, placing these variables as moderating the adoption process of ePaper formats at *New Vision*. The dialectical tension here is clear: the thesis of digital innovation meets the antithesis of usability friction, producing a synthesis that is partial, mediated, and uneven and therefore posing risks to the ePaper adoption process.

Critical Political Economy (CPE) adds a further layer of insight by highlighting how these usability challenges may reinforce digital inequalities. Users unable to navigate the platform independently become disproportionately reliant on institutional scaffolding, which is not always equitably distributed. This departs from normative models of digital journalism that emphasize frictionless access and media use empowerment (Mbaine, 2019, Tusiime, 2021; Mutsvairo & Ragnedda, 2022). Instead, the Ugandan case illustrates a counter-hegemonic reality: where digital transformation coexists with infrastructural precarity and uneven literacy. The assumption on September 5 that Mpesa was a viable payment method - despite its absence from the platform - reveals a disconnect between user expectations and institutional readiness, shaped by regional variations in digital finance ecosystems.

From a Peircean semiotic perspective, these interactions can be interpreted as signs of structural mediation. The recurring subscription inquiries function as indices of deeper systemic opacity, while the reliance on administrator guidance serves as a symbolic representation of institutional

gatekeeping. The ePaper, in this context, is not merely a technological artifact but a communicative interface whose meaning is co-constructed through user-platform interaction. The triadic logic—icon (the platform), index (user queries), and symbol (mediated access)—reveals the epistemic architecture of adoption as contingent, negotiated, and semiotically rich.

Theoretically, these findings partially fulfill the expectations of SPEF. While the framework anticipates the interplay of social, technical, and economic factors, the Ugandan case reveals a disproportionate weight on institutional mediation and infrastructural design. The social agency of users is evident but constrained; the technological affordance is present but under-optimized; and the economic structuring—particularly around payment systems and subscription models—remains misaligned with user expectations. This imbalance underscores the need for localized adaptations of global digital media theories, attuned to the socio-cultural and infrastructural realities of Global South contexts.

Empirically, the study contributes new knowledge to digital media and communication studies by documenting the lived experience of non-adoption. It challenges dominant narratives of seamless digital transition and introduces a nuanced understanding of friction, mediation, and exclusion. Without this study, the granular dynamics of onboarding failure—such as the timing, frequency, and content of subscription-related queries—would remain obscured, reducing adoption to a binary metric rather than a processual reality.

In answering the second objective—to *assess the drivers of the adoption of ePapers in the Ugandan press*—the findings reveal that non-adoption is driven not by resistance but by structural friction. Usability challenges, opaque onboarding procedures, and mismatched infrastructural expectations act as inhibitors, even among users who demonstrate clear interest and intent. These drivers are not merely technical but socio-political, shaped by institutional design choices and broader digital inequalities.

Therefore, the theme of non-adoption reframes the discourse on digital transformation in Uganda's press ecosystem. It reveals that adoption is not a linear trajectory but a dialectical process—where innovation meets limitation, and where user engagement is mediated by structural design. This is central to Nyenje (2013)'s findings at *New Vision* where his study reveals a disengaged

interaction and adoption of the ePaper terrain among staff. Thus, the SPEF framework, enriched by Hegelian dialectics and Peircean logic, provides a powerful interpretive scaffold to understand this complexity. As Uganda's media institutions continue to digitize, investing in inclusive, intuitive, and context-sensitive design will be essential to ensure that adoption is not only possible but sustainable.

8.2.6 Subscription as a site of friction: Onboarding, Payment Systems, and the Limits of Autonomy

Building on the broader theme of usability and structural mediation, subscription emerges as a particularly salient site of friction in the adoption of ePapers in Uganda. The September 2024 netnographic data from *New Vision's* WhatsApp Messenger platform reveals a persistent and widespread demand for subscription guidance, cutting across time blocks, user profiles, and content types. This pattern underscores that the act of subscribing—often presumed to be a straightforward gateway to digital access—is, in this context, a complex and contested process. The Socialtechnical Political Economy Framework (SPEF) offers a multidimensional scaffold to interpret this friction, revealing how technological design, social literacy, and economic structuring converge to shape adoption outcomes.

From a Technological Determinism (TD) perspective, the recurring subscription inquiries—such as those on September 2, 21, and 27—highlight infrastructural shortcomings in the platform's onboarding design. Users repeatedly asked “how to subscribe,” and even when responses were provided (“procedure shared”), confusion persisted. The phrase “accessed after guidance” became a recurring motif, signaling that successful onboarding was not self-directed but institutionally mediated. This contradicts dominant assumptions in digital media scholarship, which often posit subscription as a low-barrier, user-driven process (cf. Sehl et al., 2020; Westlund & Krumsvik, 2019). In Uganda's case, the absence of intuitive design and automated onboarding tools renders subscription a high-friction task, dependent on human intervention and vulnerable to inconsistency.

The Social Shaping of Technology (SST) strand of SPEF deepens this analysis by foregrounding the interpretive labor required of users. Subscription is not merely a technical transaction but a

semiotic negotiation—users must decode instructions, align expectations, and navigate payment systems. The September 5 interaction, where a user assumed Mpesa was a viable payment method, illustrates this interpretive gap. The platform’s failure to clearly communicate its payment options reflects a misalignment between institutional design and user context. In Peircean terms, the subscription interface fails to function as a coherent symbol; instead, it generates ambiguous indices that require external mediation to resolve.

Critical Political Economy (CPE) introduces a structural critique. The reliance on administrator support for subscription—while operationally necessary—risks entrenching digital inequalities. Users with limited digital literacy or access to real-time support are disproportionately disadvantaged, reinforcing existing hierarchies of access. This departs from normative models of digital journalism that emphasize user empowerment and frictionless engagement (Napoli, 2019; Mutsvairo&Ragnedda, 2022). In Uganda, the subscription process becomes a gatekeeping mechanism, where institutional scaffolding substitutes for inclusive design. The dialectical tension is stark: the thesis of digital democratization meets the antithesis of infrastructural opacity, producing a synthesis that is uneven and exclusionary.

Theoretically, these findings partially fulfill SPEF’s expectations. While the framework anticipates the interplay of social agency, technological affordance, and economic structuring, the Ugandan case reveals a skewed distribution of agency—where institutional mediation dominates and user autonomy is constrained. The platform’s reliance on WhatsApp as a distribution channel offers immediacy but limits interface customization, onboarding automation, and payment integration. This hybrid infrastructure—part social media, part news delivery—requires a reconceptualization of what “subscription” means in digitally transitional contexts.

Empirically, the study contributes new knowledge to digital media and press studies by documenting the lived experience of subscription as a site of friction. It challenges the binary framing of adoption versus non-adoption and introduces a processual understanding of engagement—where users oscillate between intent, confusion, and resolution. Without this study, the granular dynamics of subscription failure—its timing, frequency, and semantic texture—would remain obscured, reducing adoption to a backend metric rather than a communicative practice.

In answering the second objective—to assess the drivers of the adoption of ePapers in the Ugandan press—this subsection reveals that subscription is not merely a technical entry point but a socio-political threshold. As moderating variable, it strengthens or weakens the relationships between core drivers and outcomes—shaping adoption and sustainability through contextual effects. Its success depends on interface clarity, payment compatibility, and institutional responsiveness. The drivers of adoption, in this case, are not only infrastructural but epistemic—users must be able to interpret, trust, and act upon the platform’s signals. The failure to streamline this process risks alienating users who are otherwise willing to engage.

From a Hegelian dialectical standpoint, subscription represents a synthesis-in-progress. The thesis (user intent to access digital news) collides with the antithesis (platform opacity and payment mismatch), producing a mediated synthesis (access after guidance). This synthesis, however, remains unstable—dependent on institutional labor and vulnerable to breakdown. Peirce’s triadic logic further illuminates this instability: the icon (subscription interface) fails to clearly index the action required, and the symbol (successful onboarding) is only realized through external intervention.

In conclusion, subscription emerges as a critical node in the adoption matrix of Uganda’s ePaper ecosystem. It reveals how infrastructural design, payment systems, and user literacy intersect to shape digital engagement. The SPEF framework, enriched by dialectical and semiotic reasoning, provides a powerful lens to understand this complexity. As Uganda’s media institutions continue to digitize, reimagining subscription as a user-centered, context-sensitive process will be essential—not only for expanding access but for sustaining trust in digital journalism.

8.2.7 Challenges facing ePaper adoption at New Vision

The adoption of ePapers within Uganda’s press ecosystem, particularly at *New Vision*, reveals a complex interplay of sociotechnical and political-economic forces that both affirm and challenge the theoretical expectations of the Socialtechnical Political Economy Framework (SPEF). This section interrogates the dialectical tensions embedded in user experiences—especially around pricing clarity and post-payment access—and situates these findings within broader digital media scholarship, while contributing novel insights to the subdiscipline of digital press studies.

At the heart of the SPEF lies the assumption that digital media adoption is shaped by the interdependence of technological infrastructure (TD), socio-cultural assimilation (SST), and political-economic rationalities (CPE). The empirical findings from New Vision's ePaper interface—particularly user frustrations documented on September 11, 23, and 27—demonstrate a partial fulfillment of these theoretical expectations. While the technological layer appears functionally adequate (e.g., simplified subscription flows and localized payment channels), the socio-cultural and economic dimensions reveal persistent frictions. These frictions manifest not merely as usability challenges but as structural contradictions between the promise of digital efficiency and the lived reality of procedural opacity.

From a CPE standpoint, the recurring confusion around pricing and access reflects a commodification paradox. Users engage with ePapers as transactional goods, expecting immediate value upon payment. Any delay or ambiguity in access undermines the perceived legitimacy of the platform, threatening its symbolic and economic capital. This aligns with Mosco's (2009) critique of digital commodification, where the monetization of information is contingent not only on content but on the seamlessness of its delivery. The Ugandan case diverges from dominant Western narratives that prioritize institutional sustainability and profitability (Franklin, 2014; Picard, 2015). Instead, it foregrounds user-side economic rationality—where immediacy, clarity, and trust become the primary currencies of engagement.

Technological Determinism (TD), as a subcomponent of SPEF, anticipates that robust infrastructure should facilitate adoption. However, the findings challenge this determinism. Despite operational smoothness, as confirmed by the top manager, users repeatedly struggled with basic subscription steps (September 2, 3), suggesting that infrastructure alone is insufficient. This supports the SST proposition that adoption is choreographed through strategic communication and cultural assimilation. The paradox of “visible yet misunderstood” processes—where subscription protocols are present but not cognitively accessible—underscores the importance of digital literacy and user-centric design. It echoes Jenkins et al. (2016), who argue that participatory cultures require not just access but meaningful integration.

The dialectical method, drawn from Hegelian logic, offers a deeper lens into these contradictions. The thesis—digital migration promises seamless access—is negated by the antithesis—procedural

opacity and user confusion. The synthesis emerges through adaptive mechanisms such as WhatsApp-based support and expanded FAQs, which attempt to reconcile these tensions. These synthetic solutions are not merely technical fixes but epistemological bridges, enabling users to navigate the digital terrain with greater confidence. They represent what Peirce might term “abductive reasoning”—where users, faced with unexpected outcomes (e.g., failed access post-payment), infer new pathways of engagement through trial, inquiry, and communal support.

Moreover, the backend failures documented on September 6, 16, 19, and 25 reveal infrastructural inequalities as independent variables that SPEF theorists caution against. While adoption is nominally available, it is not equally enabled. Users with higher digital fluency or institutional proximity are more likely to resolve access issues, creating stratified zones of engagement. This finding extends the work of Couldry and Mejias (2019), who warn of data colonialism and the uneven distribution of digital agency. In the Ugandan context, such stratification is not merely technical but socio-political, reflecting broader patterns of exclusion and responsiveness within media institutions.

The contribution of these findings to digital media and communication studies is multifold. First, they challenge the assumption that digital adoption is a linear progression from infrastructure to engagement. Instead, they reveal a recursive loop where user feedback, institutional adaptation, and socio-cultural negotiation co-construct the adoption process. Second, they supplement existing literature by foregrounding the African user as an active epistemic agent—whose inquiries, frustrations, and adaptations shape the contours of digital media evolution. This aligns with Mutsvairo and Ragnedda’s (2019) call for decolonizing digital media studies and recognizing indigenous logics of engagement.

Third, the study introduces the concept of “adoption choreography”—a term that encapsulates the coordinated interplay between technological design, user support, and cultural assimilation. This concept offers a new heuristic for analyzing digital media uptake, especially in contexts where infrastructural adequacy coexists with cognitive and procedural gaps. Without this study, such choreography would remain under-theorized, and the granular dynamics of Ugandan ePaper adoption would be obscured by macro-level generalizations.

In answering the first objective—identifying factors behind ePaper evolution—the findings underscore that adoption is driven not solely by technological availability but by the credibility of transactional processes, the clarity of communication, and the responsiveness of institutional support. These factors are not static but evolve through dialectical engagement between users and platforms. The WhatsApp-based interactions, for instance, serve as both diagnostic tools and remedial channels, enabling institutions to iteratively refine their offerings. This iterative logic resonates with Peirce’s semiotic triad, where signs (e.g., subscription prompts), interpretants (user understanding), and objects (actual access) are constantly negotiated.

In conclusion, the challenges facing ePaper adoption at New Vision are emblematic of broader tensions within digital media transitions in the Global South. They affirm the SPEF’s multidimensional approach while extending its analytical reach through dialectical and abductive reasoning. The study contributes new knowledge by theorizing user-side economic rationality, infrastructural stratification, and adoption choreography—concepts that enrich the sub discipline of digital press studies and offer practical insights for media strategists and policymakers. By centering the Ugandan experience, the research not only fills a critical gap in the literature but also reorients the epistemic gaze toward localized logics of digital engagement.

8.3. Socialtechnical contributions of ePapers in the digital transitions in the Ugandan Press

The third objective of this study was to evaluate the contribution of ePapers in the Ugandan press. The study therefore, set out to interrogate the contribution of ePapers in broadening readerships, revenue generation for the Ugandan press and establish how they have enhanced the traditional roles of newspapers and press freedoms. To address this analytic to this specific objective I categorise the following analytic into sociotechnical, economic and political contributions of ePapers in a SPEF theoretical perspective as follows:

8.3.1 Social Vividness and Aesthetic Engagement in Digital News

The findings affirm that ePapers in Uganda are not merely digital replicas of print—they actively enhance, augment, and deepen traditional journalistic roles. By integrating high-resolution visuals, interactive layouts, and real-time updates, ePapers expand the communicative repertoire of the press, enabling immediacy, aesthetic engagement, and archival permanence. This places these effects at the centre of the independent variable description- driving the transformation,

accessibility, consumer readiness, and strategic investment in ePapers across Uganda's media system. This aligns with TD's assumption under SPEF that digital platforms inherently extend media functionality. However, SST nuances this by showing that such extensions are socially mediated—dependent on generational preferences, device cultures, and symbolic interpretations of digital vividness (cf. De Vries et al., 2012; Chua & Banerjee, 2015).

This aligns well with observation made by scholars such as Suci, Vulpe, Fratu and Todoran (2016) about the utility of the ePaper technology and its impact on digital publishing. They conclude that the ePaper displays replicate the appearance of traditional paper, offering comfortable readability, wide viewing angles, and optimal performance under ambient light conditions, making them ideal for digital publishing and mobile news consumption. This aesthetic appeal that breeds satisfaction in the mind of the reader was reflected across multiple interviewees who revealed they find ePapers appealing to the eye and therefore attractive.

Beyond these traditional reading roles, ePapers contribute to post-modern imperatives of knowledge management. Their capacity for digital storage, searchable archives, and metadata tagging positions them as tools of epistemic continuity. This supports emerging scholarship on digital memory infrastructures (Hoskins, 2017; Garde-Hansen, 2021), where media serve as repositories of civic history and institutional accountability.

In terms of digital governance, ePapers offer democratizing potential—transcending authoritarian constraints through decentralized access and mobile dissemination. Yet, CPE reveals contradictions: while ePapers promise openness, backend frictions and subscription opacity reproduce gatekeeping logics. This dialectical tension—between emancipatory promise and infrastructural limitation—echoes Hegel's synthesis model and Peirce's abductive reasoning, where users infer new engagement strategies amidst systemic ambiguity. It also echoes the idea of the role of media in carrying out its traditional roles of information, education and entertainment—a function empirically reflected in the contribution of ePapers to the Ugandan press.

This sub theme directly addresses Objective 3 by illustrating how ePapers contribute to the transformation of the Ugandan press through the aesthetic and experiential transformation of news consumption and thereby broadening readerships beyond the print. The integration of high-

resolution visuals, dynamic layouts, and multimedia elements marks a departure from the limitations of ink-based print formats, offering a more immersive and emotionally resonant reader experience. As noted by Timothy Kalyegira, this vividness is not merely cosmetic—it reconfigures how credibility, engagement, and loyalty are cultivated in digital journalism, hence more readers, new revenues and democratization of content.

The study thus extends the frontier of digital press scholarship by theorizing “aesthetic credibility” and “adoption choreography” as critical constructs. Without this inquiry, the nuanced interplay between design, perception, and governance in Uganda’s digital press would remain underexplored. It directly answers the third objective by evidencing how ePapers contribute to media evolution—not just technologically, but epistemologically and politically—while revealing SPEF’s partial fulfillment and its empirical contradictions.

8.3.2 Climate Resilience and Customization Through ePaper Formats

The findings reveal that ePapers in Uganda contribute meaningfully to both traditional and post-modern roles of the press, particularly in the domain of environmental sustainability and user-centered customization. By reducing reliance on print production, ePapers mitigate deforestation, lower carbon emissions, and align journalism with global climate imperatives—an extension of the press’s civic responsibility into ecological stewardship. From a Technological Determinism (TD) perspective within SPEF, this shift exemplifies the functional superiority of digital formats, where efficiency and environmental consciousness converge (Statista, 2024).

Yet, Sociotechnical Systems Theory (SST) complicates this narrative. The transition is not merely infrastructural—it is socially constructed through user preferences for convenience, personalization, and interactivity. Features such as comment threads, dashboard customization, and headline-driven reading reflect a co-creative model of news consumption, where audiences shape their own epistemic environments (cf. Napoli, 2019; Tandoc et al., 2021). This deepens the communicative role of the press, transforming it from a monologic institution into a dialogic platform.

However, the Political Economy (CPE) lens introduces a dialectical contradiction. While ePapers reduce paper waste, they simultaneously generate new dependencies—energy-intensive servers,

digital device turnover, and uneven access to power and recycling infrastructure. These hidden costs challenge the sustainability narrative and expose infrastructural inequalities, particularly in low-resource settings. The contradiction between ecological promise and technological burden mirrors Hegel’s dialectic: the thesis of green innovation meets the antithesis of digital dependency, producing a synthesis that redefines media’s ecological footprint.

This section directly addresses Objective 3 by evidencing how ePapers contribute to the evolving identity and function of the Ugandan press across ecological, epistemic, and participatory dimensions. The environmental sustainability afforded by reduced reliance on print production—manifested through lower carbon emissions and deforestation mitigation—extends the traditional civic role of journalism into the realm of climate stewardship as espoused in the national, regional and global framework such as the NDP IV, the Africa Agenda 63 and the SDGs. This is not merely a peripheral benefit but a core transformation, positioning the press as an actor in planetary resilience. Such a contribution would have remained obscured without this study, particularly in African contexts where environmental discourse is often decoupled from media innovation.

The Peircean logic further illuminates this tension. Users, encountering access limitations or customization glitches, engage in abductive reasoning—inferring new modes of interaction and adaptation. Without this study, such nuanced environmental and epistemic contributions would remain under-theorized. The findings directly address the third objective, showing how ePapers reconfigure the press as both a democratic and ecological actor in Uganda’s digital transition.

8.3.3 Enhancing Content Space and User Experience Through ePapers

The empirical findings underscore a pivotal contribution of ePapers to the Ugandan press: the transformation of user experience and editorial space into dynamic, participatory, and structurally expansive domains. Unlike traditional print formats, which rely on delayed and formalized feedback mechanisms such as “Letters to the Editor,” digital platforms—exemplified by New Vision’s WhatsApp-based support—enable near-instantaneous reader engagement. This immediacy fosters trust, responsiveness, and a sense of co-ownership, marking a paradigmatic shift in press-user relations.

From a Technology Determinism (TD) standpoint within SPEF, this evolution is attributed to infrastructural enhancements and the integration of agile communication architectures. However, SST complicates this reading by foregrounding the newsroom's cultural recalibration—where editorial roles are redefined to accommodate real-time interaction, and platform adaptation becomes a strategic imperative. The speed of response is not merely a technical achievement but a socially constructed outcome, shaped by institutional values and audience expectations (cf. Boczkowski et al., 2018; Tandoc & Maitra, 2022).

Critical Political Economy (CPE) situates these shifts within broader market logics. Rapid feedback loops enhance user retention and platform loyalty, reinforcing the commodification of engagement in a media economy increasingly governed by analytics and personalization. Simultaneously, the expansion of content space—enabled by digital formats—permits more inclusive editorial judgment, deeper narrative layering, and richer visual storytelling. This is especially salient for youth-oriented publications, where aesthetic fluency and interactive depth are key to relevance and resonance.

Hegelian dialectics illuminate the historical contradiction between print's static communicative loop and digital media's fluid feedback circuitry. The synthesis is a reimagined press—no longer a one-way conduit but a dialogic interface of continuous exchange. Peircean logic further reveals how users, encountering glitches or ambiguities, engage in abductive reasoning to navigate and personalize their media experience.

This is supported by existing literature especially in terms of how ePapers have expanded opportunities for user engagement and business. With the proliferation of the internet, newspapers globally continue to prioritize digitisation as a strategic response to the opportunities presented by emerging digital technology, leading to changes in media consumption patterns, habits, perceptions, audience response, and business models (Horlacher & Hess, 2016; Smolinski et al., 2017; Zvolokina et al., 2016). In Africa, with its young and digitally connected population, internet penetration has accelerated the adoption of digital platforms such as ePapers (Statista, 2023; Kemp, 2021).

This directly answers Objective 3 by demonstrating how ePapers contribute to the evolution of the Ugandan press—not only by enhancing editorial capacity and user engagement, but by redefining the press as a participatory, adaptive, and structurally enriched institution. Without this study, the nuanced interplay between infrastructural evolution, editorial agency, and user co-creation in Uganda’s press would remain under-theorized, leaving a critical gap in both regional and global digital media scholarship.

8.3.4 Universal Compatibility and Interoperability of ePapers

One of the most transformative contributions of ePapers in Uganda lies in their universal compatibility and cross-platform interoperability. The PDF format, widely accessible across desktops, tablets, and smartphones, has effectively dismantled device-specific restrictions, enabling seamless access to news content without the need for proprietary software or centralized distribution points. This technological affordance has catalyzed a circulatory effect, extending the reach of newspapers beyond urban centers into remote regions where print distribution remains logistically constrained. Moreover, it has empowered the Ugandan diaspora to maintain informational proximity to national developments, reinforcing a transnational media identity.

From a Technology Determinism (TD) perspective within SPEF, this compatibility reflects the determinist logic that technological design drives adoption. The PDF’s cross-platform resilience exemplifies how infrastructural simplicity can facilitate mass uptake. However, Sociotechnical Systems Theory (SST) tempers this view by emphasizing that such accessibility is socially mediated. Ugandan society’s increasing digital literacy, mobile penetration, and adaptive media habits have co-constructed the success of ePapers. The format’s popularity is not merely a function of technical design but of its alignment with evolving user expectations and socio-cultural rhythms (cf. Napoli, 2019; Tandoc et al., 2021).

Critical Political Economy (CPE) introduces structural nuance: while compatibility enhances access, it also embeds users within broader digital ecosystems governed by platform capitalism and datafication. The convenience of PDFs may obscure deeper dependencies on device manufacturers, operating systems, and bandwidth providers—raising questions about infrastructural sovereignty and media autonomy (Couldry & Mejias, 2019; Zuboff, 2019). This contradiction—between democratized access and embedded dependency—mirrors Hegelian

dialectics, where the thesis of technological liberation meets the antithesis of systemic entanglement. The synthesis lies in strategic localization, where Ugandan media institutions leverage global formats while retaining editorial and distributive agency.

Peircean logic further illuminates how users engage with ePapers through abductive reasoning—interpreting compatibility as a signal of reliability and legitimacy. This interpretive process reinforces trust and habitual engagement, deepening the press’s societal role.

This directly answers Objective 3 by demonstrating how ePapers contribute to the Ugandan press’s evolution in terms of reach, inclusivity, and epistemic continuity. The universal compatibility of ePapers enhances the traditional media functions of surveillance, correlation, and cultural transmission (Lasswell, 1948; Mendelsohn, 1966), while also fulfilling post-modern imperatives of digital archiving and transnational engagement (Abbey, 2019; Angelucci & Cagé, 2019; Mbozi, 2021). It enables the press to serve as a platform for marginalized voices, aligning with McQuail’s (2007) mobilizational role and Tusiime’s (2021) call for media to amplify the concerns of the “wretched of the earth.” Without this inquiry, the nuanced role of format interoperability in shaping Uganda’s digital press landscape would remain under-theorized, leaving a critical gap in both regional and global media studies.

8.3.5 Continuity, Media Freedom, and Institutional Transformation Through ePapers

Contrary to canonical Western narratives that frame digital platforms as harbingers of print journalism’s demise (Franklin, 2014; Boczkowski, 2005), empirical findings from Uganda offer a counter-narrative: ePapers have emerged not as disruptors but as vehicles of continuity. Interviews with media practitioners reveal that ePapers preserve the ethos of print journalism while adapting it to digital terrains. As James Tumusiime aptly notes, ePapers represent a bridge—not a rupture—between legacy traditions and emergent technological demands.

This aligns partially with Technology Determinism (TD) within SPEF, which posits that crisis events such as COVID-19 catalyze digital adoption. Yet, Sociotechnical Systems Theory (SST) reframes this transition as a negotiated process, where newsrooms actively reinterpret their roles through hybrid formats. The preservation of editorial standards, layout conventions, and institutional memory within ePapers reflects intentional design, not passive migration.

Critical Political Economy (CPE) adds structural depth, interpreting ePaper preservation as a strategic recalibration amid state influence, market volatility, and global digital pressures. The notion that ePapers “keep newspapers alive” is less a triumph of innovation than a survival strategy embedded in Uganda’s media economy. This dialectical tension—between narratives of obsolescence and evidence of preservation—challenges deterministic literature and situates Uganda within a more nuanced global media discourse.

The enhancement of traditional media roles—informing publics, educating citizens, and defending press freedom—is another cardinal contribution. As Namasinga (2018) and Choi et al. (2019) observe, ePapers transcend physical boundaries and are harder to censor. SST reveals how journalists leverage digital autonomy to challenge dominant narratives, especially under illiberal regimes. CPE, however, cautions that digital platforms remain vulnerable to surveillance and regulatory ambiguity (Fuchs, 2010; Couldry & Mejias, 2019). Rwengabo and Kalyegira alluded to this

Nyejeye’s findings affirm the democratizing potential of ePapers: reaching half a million readers with a single story, integrating analytics into editorial decisions, and fostering interdepartmental collaboration. These shifts support SST’s emphasis on user agency and CPE’s recognition of data as both resource and site of contestation. Yet, challenges persist—monetization gaps, competition from micro-media, and cybersecurity threats complicate the narrative of progress.

This directly answers Objective 3 by demonstrating how ePapers contribute to the Ugandan press’s evolution—not by replacing print, but by extending its legacy, enhancing media freedom, and reconfiguring institutional practice. Without this inquiry, the dialectical interplay between continuity and transformation in Uganda’s digital press would remain under-theorized, leaving a critical gap in African media scholarship.

8.3.6 Traditional Archival Journalism and Long-Term Media Preservation

One of the most compelling findings of this study is the transformative contribution of ePaper platforms to archival journalism and long-term media preservation in Uganda. Historically, print newspapers were constrained by logistical burdens—physical storage, manual cataloguing, and institutional fragility—making archival continuity both costly and inconsistent. The emergence of

ePapers, particularly New Vision's digitized archive dating back to 1986, marks a paradigmatic shift from static storage to dynamic media memory. This evolution not only enhances traditional press roles but also redefines journalism's temporal and civic functions.

The findings regarding the archival functionality of the ePaper further suggest a shift toward archival journalism, where the newspaper ceases to be a perishable commodity and instead becomes a high-value, searchable digital asset. In a way, this transition offers a potent pathway for media economies to diversify revenue streams through 'long-tail' content monetization, historical data-mining, and premium subscription models that leverage the publication's legacy as a source of long-term commercial and civic value. This finding also helps future research to dovetail into the opportunities that come with the archival materiality of ePaper publishing.

Through the lens of the Socio-Political, Economic, and Functional (SPEF) framework, this transformation can be understood as a multidimensional contribution. Socio-politically, digitized archives strengthen institutional memory, public accountability, and historical continuity. Journalists, researchers, and citizens can now revisit past narratives, verify claims, and trace the evolution of public discourse with unprecedented ease. This aligns with Technological Determinism (TD), which views digital formats as compressing space and time, thereby democratizing access to historical knowledge. Yet, Social Shaping of Technology (SST) offers a more grounded interpretation: Ugandan media houses have responded to civic demands for transparency, cultural preservation, and historical reference by strategically adopting ePaper platforms. This editorial agency reflects a deliberate recalibration of technological tools to meet indigenous needs.

The findings resonate with contemporary scholarship. Buschow and Wellbrock (2023) argue that digital archives serve as instruments of civic empowerment, enabling fact-checking and fostering media literacy. Tamara et al. (2021) similarly emphasize the role of ePapers in sustaining democratic engagement by preserving journalistic records that inform public debate. In Uganda's context, digitized archives support longitudinal journalism, allowing for continuity in public discourse and reinforcing the press's role as a civic institution. This directly addresses the third research objective: evaluating the contributions of ePapers to the Ugandan press. By preserving

historical content and enabling retrospective analysis, ePapers extend the press's traditional role as a public record and watchdog.

Economically, digitized archives unlock new monetization pathways for legacy content. As revealed by the top manager at the New Vision's ePaper division, the organization has successfully archived all back copies since 1986, generating revenue through subscriptions, institutional licensing, and research access. This aligns with the Critical Political Economy (CPE) perspective, which views media digitization as a strategic move to commodify historical content and sustain profitability in a competitive digital environment. Namasinga (2018) underscores that Ugandan media corporations operate as commercial entities trading in communication commodities. The ePaper, as a digital commodity, not only preserves content but repackages it for economic utility. Importantly, this economic logic does not erode editorial integrity; rather, it coexists with public interest imperatives, suggesting a hybrid model of commercial viability and civic responsibility.

This duality challenges critiques such as those by Golding and Murdock (2005), who warn against the distortion of public discourse through media commodification. In the Ugandan case, digitization appears to enhance both editorial depth and institutional sustainability. The monetization of archives does not merely serve profit motives—it sustains journalistic infrastructure, funds investigative reporting, and supports newsroom innovation. Thus, the SPEF assumption that digital platforms should balance economic sustainability with civic function is largely validated, though mediated by contextual adaptations.

Functionally, ePapers revolutionize content retrievability, user experience, and platform innovation. The transition from bulky print archives to fluid digital repositories has made historical journalism accessible within seconds, supporting longitudinal research and editorial continuity. This supports the literature by Puijk (2021) and Mpoza and Maqsood (2021), who describe ePapers as interactive, subscription-driven platforms that blend immediacy with legacy preservation. This study extends these insights by framing digitized archives as living media memory—where past narratives actively shape present understanding.

This challenges older conceptions of journalism as ephemeral and event-driven, proposing instead a model of temporal expansion. In dialectical terms, the ephemeral logic of print meets the

enduring logic of digital preservation, producing a synthesis that redefines journalism's temporal scope. The result is a shift from journalism as a daily record to journalism as a historical resource—capable of influencing current debates, shaping institutional narratives, and informing policy discourse.

While the findings broadly agree with dominant literature on digital media preservation, certain tensions emerge. Western-centric studies often emphasize platform innovation and user engagement, whereas this research foregrounds local agency. Ugandan media actors have strategically adapted global technologies to meet indigenous needs, particularly in preserving linguistic diversity and cultural heritage. This contextual specificity challenges SPEF's implicit assumption of uniform digital transformation, suggesting instead that media digitization must be locally negotiated.

Moreover, while Golding and Murdock (2005) caution against over-commercialization, this study demonstrates that in Uganda's context, digitization has enhanced—not diluted—editorial depth and civic engagement. The ePaper model thus emerges as a strategic convergence of socio-political relevance, economic utility, and functional innovation. It is not merely a technological upgrade but a redefinition of journalism's role in society.

In sum, the contribution of ePapers to archival journalism in Uganda reflects a multidimensional transformation. Through the SPEF framework, digitized archives are revealed not merely as storage solutions but as civic tools, economic assets, and editorial platforms. They preserve Uganda's journalistic history, empower public discourse, and sustain media institutions in a rapidly evolving digital ecosystem. This synthesis positions ePapers as central to the future of journalism—not as a replacement for print, but as an evolutionary extension that redefines how societies remember, engage, and monetize their media past. Without this study, the nuanced interplay between archival preservation, economic sustainability, and civic empowerment in Uganda's press landscape would remain underexplored.

8.4 Economic contributions and financial sustainability of ePapers to the Ugandan press

The findings of this study reveal that ePapers in Uganda have catalyzed a reconfiguration of press economics, aligning partially with the theoretical expectations of the SPEF framework. SPEF

posits that digital migration should optimize infrastructural costs, diversify revenue streams, and preserve editorial autonomy. Empirical evidence confirms that ePapers have indeed reduced production overheads and enabled monetization through paywalls, subscriptions, and analytics-driven advertising. This reflects TD's interpretation of infrastructural optimization, where digital platforms serve as embedded systems for economic resilience.

However, SST nuances this optimism by foregrounding contextual frictions. Ugandan audiences, habituated to free content, resist paywall models, while mobile money emerges as a culturally resonant alternative for micro-payments and flexible access. This contradiction between SPEF's monetization assumptions and local consumption patterns underscores the need for adaptive revenue strategies that reflect indigenous financial behaviors (Muyimba, 2024).

CPE introduces a deeper critique, interrogating the implications of market-driven content production. As advertising becomes increasingly data-centric, editorial priorities risk being subordinated to engagement metrics. This tension challenges SPEF's normative claim that digital platforms can sustain journalistic integrity while pursuing financial viability. The dialectical synthesis, in Hegelian terms, lies in strategic equilibrium: monetization must coexist with mission preservation, and customization must not compromise civic function.

From a Peircean perspective, the semiotic transformation of media economics is evident in the shift from static print symbols to dynamic, data-responsive sign systems. Meaning is now co-constructed through user interaction, algorithmic feedback, and monetization logic—a postmodern redefinition of press value.

This study contributes new knowledge by empirically mapping the economic contours of Uganda's digital press transition. It supplements dominant literature by contextualizing global revenue models within a localized socio-political economy, thereby extending disciplinary frontiers in digital media studies. Absent this inquiry, the granular tensions between theory and practice—particularly around sustainability, autonomy, and audience behavior—would remain obscured.

Critically, the findings directly answer the third research objective: to evaluate the contributions of ePapers to the Ugandan press. They demonstrate that ePapers have not only introduced new financial models but have also challenged and redefined the economic logic underpinning press

sustainability. This evaluation reveals both the transformative potential and the structural constraints that mediate their impact, offering a grounded assessment of their role in shaping Uganda's media future.

8.4.1 Advertising Diversification and Strategic Visibility

The findings of this study reveal that ePapers in Uganda have significantly transformed advertising strategies, marking a departure from static print formats toward dynamic, data-driven engagement. This transformation directly addresses the third research objective: to evaluate the contributions of ePapers to the Ugandan press. Specifically, it demonstrates how digital platforms have expanded commercial viability while simultaneously reshaping the press's relationship with its audience, advertisers, and civic mission.

From a Technological Determinism (TD) perspective, this shift is interpreted as a natural consequence of platform capabilities. Real-time engagement, demographic analytics, and modular design have enabled targeted advertising campaigns that respond to user behavior and preferences. Programmatic advertising and native integrations—once peripheral—now constitute central revenue streams, allowing media houses to monetize content with greater precision and flexibility. This aligns with SPEF's assumption that digital migration should enhance financial sustainability through diversified monetization models.

However, Social Shaping of Technology (SST) complicates this narrative by emphasizing the role of institutional learning and local market dynamics. Advertising diversification did not emerge solely from technological affordances; it was shaped by experimentation, strategic partnerships, and evolving content strategies. Media houses adapted to Uganda's unique digital ecosystem, where mobile money, social media virality, and localized branding influenced how ads were designed and deployed. This empirical nuance challenges SPEF's universalist assumptions, suggesting that digital transformation is not monolithic but contextually contingent.

Critical Political Economy (CPE) introduces a deeper interrogation: who benefits from these advertising algorithms? While ePapers offer visibility to local enterprises, they also risk reinforcing transnational branding and privileging corporate interests. The commodification of editorial space—where content is tailored to maximize engagement—raises concerns about

journalistic autonomy and public interest. This tension reflects a Hegelian dialectic: the thesis of strategic visibility is met with the antithesis of editorial compromise, and the synthesis lies in calibrating advertising logic with democratic accountability.

In terms of accessibility and circulatory efficiency, ePapers have demonstrably bypassed infrastructural constraints. Participants consistently cited their ability to reach geographically marginalized and diasporic communities, facilitated by mobile proliferation and internet expansion (UCC, 2024). TD interprets this as an infrastructural win—digital platforms overcome logistical barriers that once limited print distribution. Yet SST reframes this as a question of reader agency: access is not merely technological but symbolic and ritualistic. Users engage with ePapers through culturally embedded practices, shaped by literacy, device culture, and social context.

CPE further interrogates the political economy of circulation. While ePapers democratize access by removing vendor monopolies, they also operate within economies of platform capitalism, where visibility is algorithmically mediated and data is monetized. This contradiction between expanded reach and structural dependency illustrates a dialectical synthesis: ePapers overcome geographic exclusion but introduce new concerns around digital divides and surveillance capitalism.

The study also affirms that ePapers have broadened readership and democratized information flows. Unlike print media, which often catered to urban elites, ePapers reach youth, rural populations, and diaspora communities. This reflects both a quantitative expansion—measured in thousands of daily readers—and a qualitative transformation in how news is consumed. SST highlights this as a reconfiguration of audience relationships, where engagement is dynamic and shaped by analytics and feedback loops.

TD and CPE converge in tension here. While technology enables real-time delivery and content personalization, CPE warns that such customization risks fragmenting public discourse and privileging marketable content over editorial diversity. The Hegelian contradiction is clear: ePapers democratize access, yet embed commercial logics that may dilute civic function. The synthesis lies in recognizing ePapers as both tools of inclusion and sites of negotiation, requiring ethical vigilance and strategic editorial stewardship.

In sum, this study contributes new knowledge by empirically mapping the advertising, accessibility, and readership transformations catalyzed by ePapers. It supplements existing literature by contextualizing global digital media trends within Uganda's socio-political economy. Critically, it fulfills the third objective by evaluating ePapers' contributions across financial, circulatory, and democratic dimensions—revealing both their transformative potential and the structural tensions that mediate their impact. Without this inquiry, the nuanced interplay between platform logic, editorial mission, and civic engagement in Uganda's digital press evolution would remain underexplored.

8.5 Political contribution of ePapers as a Digital Shield against State Censorship

This study reveals that ePapers in Uganda have emerged as strategic instruments of resistance against state censorship, thereby contributing to the press's traditional role as a watchdog and public sentinel. Historically, the Ugandan press has operated under conditions of political constraint, where physical newspapers were vulnerable to confiscation, disruption, and editorial interference. The digital migration to ePaper formats—particularly PDF-based dissemination—has reconfigured this vulnerability, enabling media content to circulate widely while retaining editorial integrity. This transformation aligns with the Socio-Technical Political Economy Framework (SPEF), which posits that digital technologies should enhance press autonomy, deepen civic engagement, and democratize information flows.

From a Technological Determinism (TD) standpoint, the affordances of digital platforms—non-materiality, replicability, and translocality—disintermediate traditional gatekeeping mechanisms. ePapers bypass physical suppression and offer unfiltered access to content, even in politically volatile contexts. However, TD's optimism risks overstating technological autonomy. Social Shaping of Technology (SST) offers a corrective lens, emphasizing that digital resistance is not merely a function of infrastructure but a product of collective agency. Journalists, coders, and readers co-create resilient information ecosystems.

Critical Political Economy (CPE) introduces further complexity. As Dr. Rwengabo notes, the information landscape is contested not only by state actors but also by private and ideological interests. While ePapers circumvent physical censorship, they remain entangled in algorithmic curation, platform ownership biases, and transnational content monopolies. This pluralization of

control challenges SPEF's assumption that digital migration inherently democratizes media. Instead, it reveals a dialectical tension: the thesis of technological liberation is met with the antithesis of new digital dependencies. The synthesis lies in tactical adaptability—ePapers function not as emancipatory tools per se, but as negotiated instruments within a politicized media ecology.

This finding resonates with Mare's (2019) study on digital authoritarianism in Zimbabwe, where state-ordered internet shutdowns were deployed to suppress dissent. Mare's use of lawfare and regulatory coercion to explain private sector compliance underscores the fragility of digital infrastructures under authoritarian regimes. In Uganda, while ePapers offer a buffer against direct suppression, their sustainability and reach remain vulnerable to broader political and economic pressures, including licensing constraints, surveillance, and infrastructural bottlenecks.

Theoretically, the findings partially validate SPEF's expectations. ePapers do enhance traditional press roles by extending reach, preserving editorial autonomy, and deepening civic discourse. They also contribute to postmodern imperatives of communication and knowledge management, particularly through digital archiving and searchable repositories. However, contradictions emerge. SPEF assumes that digital platforms will democratize access and empower users, yet empirical observations reveal persistent digital divides, algorithmic gatekeeping, and infrastructural precarity. These tensions suggest that SPEF must be contextually recalibrated to account for localized socio-political dynamics and technological constraints.

In relation to existing literature, this study supplements dominant perspectives in digital media and communication studies by foregrounding the Global South's experience of digital resistance. While Western scholarship often emphasizes platform innovation and user engagement (Couldry & Hepp, 2023), this research highlights the strategic use of ePapers as shields against censorship, shaped by indigenous agency and political contingency. It also extends Peircean logic by reframing ePapers as semiotic instruments—signs that retain meaning across temporal and political contexts, enabling continuity in public discourse despite state suppression.

Relatedly, the finding connects well more extant literatures whose scholarship protects media in constrained media environments like Uganda's where ePapers increasingly function as *digital shields*—technological platforms that resist suppression and expand avenues for expression.

Kellner (1997) reminds us that media systems are embedded within political economies shaped by power and ideology, and thus any shift in media format—such as the move to digital—must be read as both a technological and political act. Tusiime (2021)’s observation that media are platforms for the voiceless and wretched of the earth who need a space to hold the powerful to account, underscores the importance of preserving journalism’s watchdog function, even as traditional outlets face regulatory and financial pressures.

In this context, ePapers offer a strategic pivot: they bypass some infrastructural and editorial constraints by leveraging mobile-first access and decentralized distribution. This resonates with Orgeret (2020) who situates this within Uganda’s evolving social media legislation, arguing that digital platforms (such as ePapers)—despite their vulnerabilities—create new spaces for civic discourse in semi-democratic settings. Together, these literatures underpin how ePapers not only adapt to technological change but actively negotiate freedom within contested terrains, reinforcing their role as instruments of resistance and democratic participation.

A major contribution of this study therefore, lies in its empirical mapping of ePapers as tools of negotiated resistance, economic sustainability, and civic empowerment. It adds new knowledge to the sub discipline of digital press studies by theorizing ePapers not merely as technological upgrades but as socio-political artifacts embedded in contested media ecologies. Thus, beyond serving as a vehicle for news consumption, the ePaper functions as a digital platform for civic deliberation by integrating interactive affordances, such as WhatsApp-linked commentary, social media sharing, and instant feedback loops, that transform passive readers into active participants who can critique, debate, and circulate public interest information in real-time, thereby fostering a more participatory democratic discourse within the Ugandan media ecosystem. Without this inquiry, the nuanced interplay between digital governance, editorial autonomy, and political resistance in Uganda’s press landscape would remain underexplored.

Critically, the findings answer the third research objective: to evaluate the contributions of ePapers to the Ugandan press. They demonstrate that ePapers have redefined the press’s political function—not only by preserving content but by enabling strategic visibility, resisting censorship, and sustaining public discourse under duress. This contribution is not absolute but contingent, requiring ongoing vigilance, infrastructural investment, and normative recalibration. In Hegelian

terms, the contradiction between suppression and expression finds resolution in the adaptive synthesis of digital media practice—where ePapers become both shield and signal in the struggle for communicative freedom.

8.6 Limitations and Constraints of ePapers within Uganda’s Digitization Process

Although ePapers in Uganda represent a notable advancement in the country’s media digitization trajectory, their transformative potential remains circumscribed by enduring structural, economic, and socio-cultural constraints. These limitations are not merely operational but are symptomatic of deeper systemic contradictions that characterize digital media transitions in postcolonial contexts. This section critically examines these constraints, drawing on empirical observations and situating them within established theoretical frameworks—namely Technological Determinism (TD), the Social Shaping of Technology (SST), and Critical Political Economy (CPE).

A primary empirical concern is the limited agenda-setting capacity of ePapers, particularly when they operate independently of their print counterparts. As Atuhaire (2023) observes, digital editions in Uganda often lack the symbolic authority to frame dominant public narratives, a phenomenon that underscores the continued reliance on legacy media formats for epistemic legitimacy. This reflects a dialectical contradiction: while digital platforms are often heralded for their potential to decentralize information flows and democratize public discourse (cf. McLuhan, 1964; Negroponte, 1995), their actual influence remains tethered to historically entrenched systems of media production and consumption. SST theorists have long argued that technological adoption is mediated by social norms, institutional memory, and audience expectations (MacKenzie&Wajcman, 1999), and in Uganda, print media continues to serve as the symbolic anchor for credibility and authority.

Equally constraining is the persistence of print-centric revenue models within the digital ecosystem. Despite the shift to online formats, ePapers in Uganda remain economically dependent on traditional streams such as circulation subscriptions and static display advertising. This inertia inhibits innovation and undermines the strategic transition toward digital-first business models. The top manager’s characterization of the New Vision ePaper as a “replica of the print version” exemplifies the lack of editorial and commercial reconfiguration necessary for digital transformation. From a CPE perspective, this reflects the reproduction of legacy vulnerabilities

within ostensibly modern platforms (Murdock & Golding, 2005). Without monetization strategies tailored to digital environments—such as programmatic advertising, tiered content access, or audience analytics—ePapers risk stagnation and diminished relevance in an increasingly competitive media landscape.

The infrastructural and regulatory conditions further complicate the potential for innovation. While scholars such as (Horlacher & Hess, 2016) advocate for the integration of algorithmic advertising technologies and data-driven personalization, such interventions presuppose a level of infrastructural robustness, technical expertise, and policy coherence that remains unevenly distributed across Uganda's media landscape. This aligns with van Dijck et al.'s (2018) critique of platformization asymmetries and Couldry & Mejias's (2019) analysis of data colonialism, both of which highlight the unequal capacities of media systems to absorb and operationalize digital technologies. In Uganda, the absence of enabling conditions renders ePapers technologically sophisticated yet operationally constrained, limiting their capacity to evolve beyond digital replication.

Perhaps the most entrenched limitation is the persistence of the digital divide. While ePapers enhance accessibility for digitally connected audiences, significant portions of Uganda's population remain excluded due to economic precarity, device scarcity, and literacy barriers. TD frameworks inadequately account for this asymmetry, often assuming that technological diffusion will naturally yield inclusion. In contrast, SST and CPE perspectives offer more nuanced analyses, revealing how socio-cultural filters and infrastructural inequities mediate access and participation. Gurumurthy & Chami (2014) argue that digital inclusion must be actively constructed through deliberate policy and investment—not presumed as a byproduct of technological availability. In this context, ePapers risk becoming islands of connectivity in a sea of disconnection, reinforcing rather than redressing existing inequalities.

In sum, the Ugandan ePaper experience exemplifies the dialectic between digital form and analog function. Without deliberate efforts to reconfigure editorial strategies, revenue models, and access infrastructures, ePapers may plateau—offering surface-level modernization without substantive transformation. This study therefore cautions that the democratizing promise of digital media will remain unrealized unless accompanied by inclusive, context-sensitive strategies that address the

structural exclusions embedded within Uganda’s media ecosystem. The findings contribute to broader debates in digital media scholarship, affirming that technological innovation alone is insufficient to catalyze systemic change in environments marked by historical inequities and institutional inertia.

8.7 Toward a New Conceptualisation of ePapers in Uganda’s Media Landscape

While empirical data affirms notable contributions of ePapers to user experience, content expansion, and archival access, Section 6.13 of the study introduces a critical reflexive turn—one that challenges normative assumptions about digital replication and pushes toward a grounded redefinition of ePapers in the Ugandan context. Multiple participants expressed dissatisfaction with the lack of distinctive value in ePapers, describing them as mere PDF replicas of their print counterparts, devoid of added utility, interactivity, or unique content curation.

From a Critical Political Economy (CPE) standpoint, this perception reveals the risk of digital stagnation, whereby innovation is restrained by market conservatism and editorial reluctance to transform legacy structures. This mirrors global concerns that media digitization often defaults to form mimicry rather than function reinvention (Buschow & Wellbrock, 2023). Yet, the study finds that some thought leaders, including key participant James Tumusiime, attempt to reconceptualize ePapers as context-sensitive innovations, foregrounding their socio-cultural adaptability rather than their structural replication. His framing of ePapers as localized digital platforms—delivering Ugandan-centric content, community narratives, and mobile-first accessibility—suggests a model where media relevance is not just technological, but anthropological and geographic.

Using Hegelian dialectics, this segment surfaces a new contradiction: between replication and reinvention. On one hand, ePapers replicate the print layout to retain legacy familiarity; on the other, participants push for a digital-native evolution that introduces novel interactivity, multimedia integration, and content personalization. The synthesis, therefore, lies in reimagining ePapers not as static mirrors, but as dynamic vessels, adapting traditional journalism for Uganda’s shifting digital terrains. This contribution aligns with SPEF’s integrative ethos. ePapers are reconceptualized as technological adaptations facilitating public engagement with socio-political debates, especially as legacy print struggles with cost, reach, and timeliness. This positions ePapers as bridges—linking traditional journalism to digital public spheres (Rugyendo et al., 2025).

Grounded theory coding reflects this view, showing an emergent theme around journalistic hybridization: digital forms retaining traditional credibility while acquiring platform-native flexibility.

From a technologist's lens, ePapers proffer a multimedia conceptualization, in which they are envisioned as interactive, profitable digital products embedded within mobile-first ecosystems. The emphasis on profitability and user engagement signals a pivot from form to function, suggesting ePapers should evolve beyond static PDFs into immersive, data-responsive platforms integrated with audio, video, and analytics. Together, these conceptualizations challenge reductionist definitions and invite a pluralistic reframing. Instead of anchoring ePapers strictly within the print paradigm, the study proposes a more expansive view: ePapers as media hybrids, shaped by Uganda's infrastructural realities, cultural nuances, and emergent digital habits. This synthesis is supported by grounded theory findings that show diverse user expectations and institutional interpretations of platform value.

This chapter, grounded in the SPEF, has established the foundational building blocks, namely the cultural, professional, and institutional shifts that dictate the current state of ePaper publishing in Uganda. However, to move from a descriptive analysis of what is to a normative proposal for what ought to be, these findings must be synthesized into a functional architecture. This has necessitated the transition to Chapter Eight, where the ePaper Business Viability Model (e-BVM) is introduced in order to answer the fourth objective of this study. The e-BVM is not an abstract construct; rather, it is the logical culmination of the SPEF analysis, operationalizing the identified evolutionary pressures into a strategic roadmap for ePaper sustainability. While the model is informed by the lived experiences of media practitioners, editors, and scholars, their contributions were not treated as technical blueprints but as empirical indicators of market friction and opportunity. Methodologically, the informants provided the raw material regarding operational bottlenecks and audience expectations of ePapers, which were then abstracted through the researcher's theoretical lens to form the model's core pillars. To ensure the model transcends the inherent pro-innovation bias of industry insiders or the institutional parochialism of stakeholders, Chapter Eight subjects these empirical insights to a critical synthesis, balancing the 'insider' aspirations of the informants with the structural constraints of the Critical Political Economy (CPE) discussed earlier. This has

ensured that the e-BVM remains a robust, evidence-based framework for assessing media viability in an increasingly volatile digital landscape.

CHAPTER NINE

TOWARDS AN ePAPER BUSINESS VIABILITY MODEL (eBVM)

Chapters 5, 6, 7 and 8 have provided empirical and analytic ground for thinking about the possible viability of ePapers. The structural challenges encountered, specifically in the adoption and contribution of ePapers call for a practical intervention to their sustainability. That possibility comes in the form of an ePaper Business Viability Model, which I herein refer to as “eBVM”.

The model stems from objective number 4 which seeks a business model that can enhance the evolution, adoption and meaningful contribution of ePapers in the Ugandan press.

The objective has set out three sub-questions and to suggest this model as follows:

- a) *What tactics can be employed to enhance user adoption and engagement with ePapers, ensuring consistent growth in readership and market share?*
- b) *What ways can ePapers adopt to attract revenues such as adverts and mass subscriptions?*
- c) *What viability model can be proposed for ePapers to stay relevant and competitive in the digital media market?*

As demonstrated in chapters one, two and three, scholars such as Mare (2019) and Obonyo (2024) rally for Africans’ voices and contributions to communication scholarship recognizing the challenges contributing to the limited influence of the African voice in global communication scholarship and contribute to the theorizing of the African media. This is due to the fact that the extant normative media theories fail to consider the realities of African condition and effort and communication theory from the Global South perspective ought to lead to a media framework more reflective of the realities of Africa (Obonyo, 2024). It is against this background that in this chapter, I propose an ePaper Business Viability Model for the Ugandan press.

Given Uganda’s mobile-first digital culture—where smartphones are the primary access point for internet users—the lack of mobile-friendly interfaces severely restricts usability and engagement. The reliance on PDF formats, which are often slow to load and difficult to navigate on mobile

devices, creates a poor user experience. This limitation disproportionately affects younger audiences, who expect seamless, responsive, and interactive platforms. As revealed in the findings, intermittent internet access and high data costs further compound the issue, rendering ePapers inaccessible to large segments of the population. From a Socio-Political Economy (SPE) perspective, this reflects a misalignment between technological design and user realities, necessitating a shift toward mobile-first strategies and adaptive content delivery.

9.1 The challenges associated with the current ePaper business model

As reported in the findings in Chapter six, the monetization model for ePapers remains underdeveloped and poorly aligned with digital consumption patterns. Subscription packages are neither clearly advertised nor strategically bundled, resulting in low uptake and limited revenue generation. As noted in the data, the absence of tiered paywalls, freemium models, or loyalty incentives undermines the commercial viability of ePapers. Moreover, the cost of internet access and subscription often exceeds the perceived value of the product, especially when the ePaper merely replicates print content. CPE theory underscores the need for media institutions to innovate in their revenue strategies, yet Ugandan newspapers remain cautious, fearing cannibalization of print income. This economic conservatism stifles experimentation and prevents the development of sustainable digital business models.

Secondly, the current model fails to leverage data analytics for content personalization and audience segmentation. In an era where digital platforms thrive on tailored experiences, the absence of user tracking, behavioral analysis, and adaptive content delivery represents a profound missed opportunity. As Nyanjeye (2023) notes, *New Vision* has limited use of analytics and platform-specific storytelling, resulting in generic content that fails to resonate with individual users. Data-driven personalization could enable newspapers to curate content based on reader preferences, location, and engagement history, thereby enhancing relevance and loyalty. From a technological affordance perspective, this capability exists but remains underutilized due to institutional inertia and limited digital capacity. Embracing data analytics is essential not only for editorial innovation but also for strategic decision-making and long-term sustainability.

Thirdly, the current ePaper business model is tainted with inadequate marketing, a narrow distribution, narrow readership and limited multimedia interactivity. This means that the legacy

press such as New Vision, have experienced missed opportunities such as advertising revenue, broad readerships, embracing emerging technologies that would enhance its viability and mobile optimization. As noted in the findings, this is justification for building on the data to suggest an ePaper business viability model for newspapers in Uganda.

9.2 The ePaper Business Viability Model (eBVM)

I have proffered the limitations of the current business model in the ePaper ecosystem in Uganda, using evidence from the New Vision which is the study's case choice. The shortcomings give impetus to the proposed model designed to enhance their viability and operational efficiency: the ePaper Business Viability Model (eBVM). This model borrows from conceptual resources from planetary science and comprises three interdependent components—*Content Innovation* (Sun), *Emerging Technologies* (Moon), and the *Marketing Communication Mix* (Syzygy) - each with sub-components that collectively form a dynamic and resilient business ecosystem. The eBVM is metaphorically grounded in the architecture of the solar system. It is drawn from both the symbiotic interplay among celestial bodies and data from key informant interviewees who were asked to propose a model for making ePapers more viable. The aim is to illustrate the systemic interdependencies required for sustainable digital publishing in the Ugandan press.

The model invokes the Earth–Moon–Sun triad, emphasizing their gravitational collaboration that gives rise to phenomena such as tides, eclipses, seasonal cycles, and diurnal rhythms. In this analogy, the Sun symbolizes the source of energy and innovation, driving climate and orbital stability. The Moon, meanwhile, represents the force of tidal and axial equilibrium, offering nocturnal illumination and stabilizing the Earth's rotation. Together, these bodies form a cosmic engineering triad (Syzygy) that sustains life on Earth. The question then arises: how might we engineer a similarly resilient and life-sustaining system for ePapers?

In the eBVM, the Sun represents the innovation process—generating content, formats, and user experiences that energize the platform. The Moon corresponds to the Marketing Communication Mix, which stabilizes and amplifies the system through strategic messaging and audience engagement. These two forces interact to influence the Earth, which in this metaphor represents the ePaper itself. While other planetary bodies contribute to the solar system's complexity, it is the Sun and Moon that exert the most visible and consistent influence from the Earth's vantage point.

Likewise, in the ePaper ecosystem, innovation and communication are the primary drivers of viability.

The concept of Syzygy—borrowed from astronomy—further enriches this metaphor. Syzygy refers to the perfect alignment of three celestial bodies, typically the Sun, Moon, and Earth, during events such as solar and lunar eclipses. This alignment, derived from the Greek term *syzygia* meaning “yoked together,” signifies harmony, timing, and gravitational resonance (1). In the context of the eBVM, Syzygy captures the strategic alignment of messaging channels—advertising, public relations, and direct marketing—working in concert to generate maximum impact. It is not merely coordination; it is cosmic choreography.

To elucidate this metaphor, I liken the activity within the solar system to the dynamics of the proposed ePaper business ecosystem. Just as the Sun and Moon sustain the Earth’s viability, innovation and communication must continuously energize and stabilize the ePaper platform. I first diagrammatize the eBVM outside a circular model to highlight the consanguinity of its sub-components. This approach demonstrates that each element contributes to a holistic solution, and that the main components must remain constant to influence and repurpose the sub-components effectively.

Central to this framework is the concept of “*Circular Momentum*,” a term I coin to describe the gravitational collaboration among the model’s components. This iterative process is informed by Charles S. Peirce’s philosophical logic, as elaborated in the methodology chapter (Kapitan, 1992; Niiniluoto, 2024). Peircean logic—abductive, inductive, and deductive—provides a methodological scaffold for understanding complex phenomena such as ePapers. Circular Momentum thus refers to a continuous energy flow within a chain-like circuit, where influence rotates through interconnected nodes and returns to its origin. This cyclical dynamic is observable in natural systems such as food chains and mechanical rotations.

In the eBVM, Circular Momentum represents the interlinked processes through which each component supports and reinforces the others, creating a self-sustaining cycle. Sub-components are not isolated; rather, they interact synergistically. For instance, ‘Content Innovation’ enhances ‘User Engagement,’ which increases ‘Access’ and drives ‘Revenue Generation’ through new

subscriptions and advertising models. These revenues, in turn, fund further ‘Emerging Technological Adoption,’ enabling ‘Market Expansion’ and reinforcing ‘Business Viability’ and ‘Long-Term Sustainability.’ As the market grows, data-driven insights fuel additional content innovation, perpetuating the cycle.

This dynamic adaptability ensures that the eBVM remains responsive to evolving market conditions and technological advancements, positioning ePapers for sustained growth in Uganda and beyond. Bruce Byaruhanga’s futurist perspective underscores this potential, suggesting that with strategic resourcing and innovation, ePapers may surpass current expectations in viability and vibrancy. His insights affirm that the ePaper, when aligned with the principles of the eBVM, could become a cornerstone of Uganda’s digital media future.

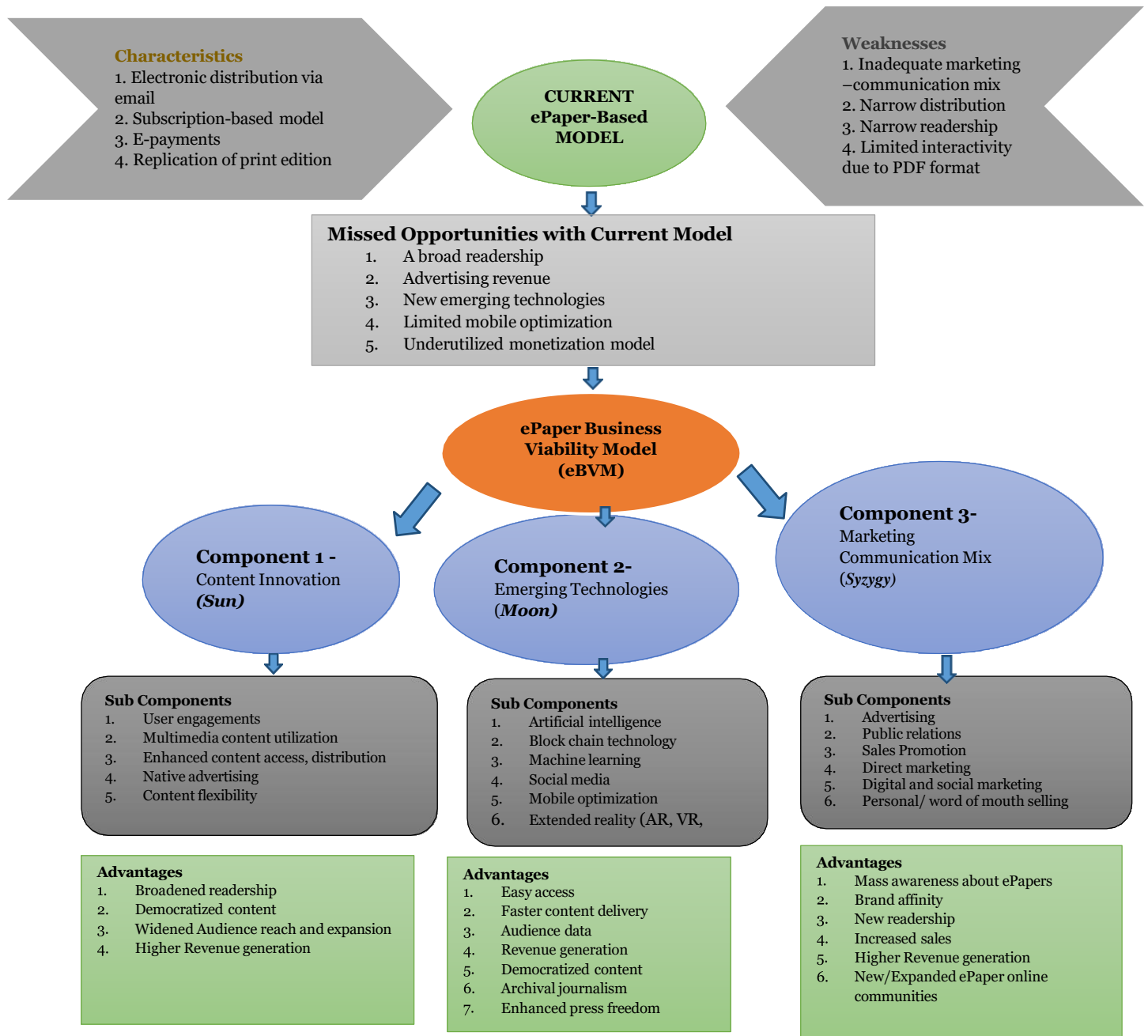


Fig 13: Author’s visualization of the proposed ePaper Business Viability Model (eBVM)

9.2.1 Content Innovation (Sun)

Under this component, it is assumed that Content Innovation, while operating for the outer space of the eBVM, is the primer for the success of the model, constantly guaranteeing its overall continuous evolution and adoption of ePapers in the Ugandan press. It is likened to what the sun does to earth in the solar system. In the solar system, the sun is essential for earth because it

provides light and heat. These two are responsible for existence and continuous life on earth. Thus, the sun drives the climate and weather, supports photosynthesis in plants and helps regulate the earth's temperature, making the planet habitable (viable).

Without content innovation, it is not likely that an ePaper will become a viable option for the sector. Instead, limited innovation denies the newspaper sufficient life-sustaining resources (heat and light) in the form of: new content, finer and better content, relevant content, and adaptable content. The first three are obvious but the last one needs some clarification: newspaper content needs to be adaptable, just like solar energy can be adapted to heat, photosynthetic processes, electricity, and more.

Adaptable content is that which can be used by various stakeholders – State, market, civil society, sociocultural groups, individuals and networks – for their multifaceted and diverse needs and interests. While a print newspaper may have cartoons, crossword puzzles, number puzzles and such like, an online one, an ePaper, needs online-adaptable content and interactivity that enables the reader to use interactive technologies to navigate and utilize such content. To address the identified challenges in the extant ePaper model, content innovation makes a solarized contribution for the habitability (viability) of the ePaper through the following sub-components:

The first contributory sub-component of content innovation is *User Engagement*. Content innovation requires that ePaper managers and curators implement interactive features such as comments, forums, and social sharing options, to significantly increase user engagement. Gamification and personalized and exclusive content offerings and recommendations can further encourage regular and increased readership of ePapers.

The second contributory sub-component is *Multimedia Content Utilization*. Multimedia content, including videos, podcasts, and interactive infographics, come in handy to differentiate ePapers from their print counterparts and attract a wider audience. Additionally, offering exclusive digital content, such as behind-the-scenes stories or live updates, can drive continuous adoption.

The third contributory sub-component is Enhancing content access and distribution. To enhance ePaper distribution, my model focuses on several key strategies. First, it emphasizes making content easily accessible and user-friendly across various platforms, ensuring that readers can engage with ePapers effortlessly. Tailoring content to specific audience segments is crucial for resonating with diverse reader groups, fostering a deeper connection and loyalty. For example,

establishing ePaper online communities can further promote reader engagement and facilitate interactions among users.

Fourth, content innovation leads to *ePaper media market expansion*. This sub-component would target underserved segments, such as rural populations and youth, through localized content and partnerships with telecom companies, to provide affordable access. This can help to grow the ePaper market. The study reveals that initially, *New Vision* ePaper entered a partnership with MTN Uganda for content drive but did not register success because the phenomenon had not been fully understood. There's hope as the Ugandan government has made significant interventions seen in extension of network coverage to remote areas, promotion of digital literacy programs, reduction of taxation on communication devices and services, creation of regulatory frameworks that encourage investment in underserved regions, setting up community tele-centers, promotion of digital literacy programs, promotion of affordability initiatives, and promotion of local content (Kituyi et al., 2024). The advantaged that comes with this component are Broadened readership, democratized content, widened audience reach and expansion and higher revenue generation

The final contributory sub component is Native Advertising. In this sub-component the proposed model advocates for innovative strategies to boost ePaper revenues through sponsored content. This is in line with objective four of this study which seeks a model to enhance their viability. As a sub – component, it emphasizes the use of targeted advertising, which leverages data analytics to deliver personalized ads and content thereby increasing their effectiveness and appeal to advertisers. This is supported by views from several participants:

James Tumusiime and Alex Atuhaire suggested various business models that could be more viable for Ugandan ePapers. Tumusiime emphasized the potential of paywalls, affiliate marketing, and native advertising (paid-content packaged as user-generated stories). In separate interviews, they both contend that *affiliate marketing model where an ePaper collaborates with online resellers like Amazon.com, rifaly.com and Jumia, as well as native advertising, are some of the many options ePapers can exploit to scale up and create more value and viability.*

Atuhaire, meanwhile, critiqued the overreliance on traditional models like advertising and subscription, advocating for media houses to explore newer avenues such as partnerships with

government and institutions. He wonders how ePapers *venture into new avenues by hanging onto old models yet they have the potential to create content for monetization.*

These insights reveal that there is potential to diversify revenue streams, but successful implementation requires strategic thinking and investment in leadership and innovation. Indeed, this sub-component supports pragmatic advertising, an approach that automates the real-time buying and selling of ads. This automation enhances efficiency and maximizes revenue, particularly for high-traffic ePapers, by streamlining ad placements and optimizing advertising strategic content.

9.2.2 Emerging Technologies (Moon)

The second principal component of the ePaper Business Viability Model (eBVM) is *Emerging Technologies*, metaphorically represented by the Moon. This celestial analogy is deliberate: just as the moon's illumination varies with seasonal rhythms, the utility of emerging technologies must be maximized during their peak phases of relevance and accessibility. In agrarian Ugandan contexts, for instance, the moon's brightness during the rainy season (October–November) often signals a forthcoming rich harvest. Conversely, illumination during the dry season (June–July) presents different dynamics, with implications for yield and timing. This metaphor underscores the imperative of strategic timing in technological adoption—emerging innovations must be harnessed “while still hot,” before their utility wanes or becomes obsolete.

In this component, I argue that sustained competitiveness and relevance within Uganda's evolving media ecosystem require continuous adaptation to technological advancements. The viability of the eBVM is increasingly contingent upon the strategic deployment of these innovations, which not only enhance operational efficiency but also deepen audience engagement, diversify revenue streams, and reinforce the civic and cultural mandate of digital media. Among the most transformative technologies are Mobile Optimization, Data Analytics, Blockchain, Social Media, Artificial Intelligence (AI), Machine Learning (ML), and Extended Reality (XR). Each plays a distinct role in fortifying the structural integrity and long-term sustainability of the ePaper ecosystem.

The first sub-component is *Mobile Optimization*. This emerged as a critical recommendation from multiple interviewees, who noted that existing ePaper platforms were not sufficiently mobile-friendly for Uganda’s diverse smartphone user base. Empirical findings reveal that many users struggle to navigate ePapers on their devices, particularly with zooming functions and subscription processing. These usability challenges suggest that emerging technologies have not yet been adequately integrated into ePaper interfaces. In a mobile-first digital landscape—especially across Africa—mobile optimization is indispensable. Responsive design, offline reading capabilities, and lightweight formats ensure accessibility across varied devices and bandwidth conditions. Furthermore, mobile platforms facilitate push notifications, mobile payments, and geotargeted content delivery, enhancing both usability and monetization in urban and rural settings. I therefore observe that newspapers should prioritize mobile-friendly design and app development to accelerate ePaper adoption, given the high mobile penetration in Uganda, regionally, and globally (ITU, 2024; UCC, 2023).

The second sub-component is *Data Analytics*. Here, I argue that leveraging data analytics to understand reader preferences and optimize content delivery significantly increases engagement and retention. During fieldwork, the Senior Circulation Manager at the New Vision ePaper acknowledged the company’s growing use of analytics to enhance audience interaction. However, he also noted the limited institutional capacity to scale these efforts. Another interviewee, Nada Andersen, expressed a desire for algorithmic analytics to support pop-up advertising and enable competition with dominant platforms such as Google and Facebook. These insights affirm the strategic value of data analytics in refining editorial decisions, personalizing content, and improving monetization.

The third sub-component is *Blockchain Technology*. I contend that exploring blockchain for secure transactions and micro-payments would facilitate the implementation of paywalls and subscription services. Blockchain is a distributed electronic ledger containing digital records, transactions, or events that are encrypted, tamper-resistant, and updateable through consensus algorithms across network nodes (Kombe et al., 2019). Within digital publishing, blockchain introduces transparency, security, and decentralization. It enables secure micropayments, immutable content verification, and decentralized rights management—mitigating risks of piracy and misinformation. In Uganda, blockchain offers a compelling framework for equitable content ownership and creator

compensation, aligning with broader goals of civic empowerment and institutional accountability. Prior studies affirm its relevance for developing economies, citing its capacity to enhance transparency, traceability, and real-time tracking of goods, thereby reducing fraud and inefficiencies (Ahishakiye et al., 2018; Aziona, 2024). Moreover, increased access to ICT services is critical for achieving Uganda’s National Development Plans, including the Parish Development Model, which aims to reach underserved communities through digital platforms (Abaho et al., 2024). Interviewee Robby Muhumuza further advocates for app-based access to ePapers, noting their immediacy and user-friendliness compared to traditional web URLs.

The fourth sub-component is *social media*. Platforms such as Facebook, X (formerly Twitter), WhatsApp, Instagram, and TikTok serve dual functions: as distribution mechanisms and participatory feedback loops. Embedding ePaper content within these platforms amplifies reach, fosters civic discourse, and drives traffic to core offerings. Social media also enables real-time sentiment analysis, allowing media strategists to craft resonant narratives and mobilize public engagement around key issues. In this way, social media becomes both a dissemination tool and a strategic intelligence asset within the eBVM.

The fifth sub-component is *Artificial Intelligence (AI)*. AI serves as a cornerstone for editorial automation and personalized content delivery. Through natural language processing and predictive analytics, AI enables ePaper platforms to curate articles tailored to individual reader preferences, optimize advertising placements, and streamline customer service via intelligent chatbots. These capabilities reduce operational overhead while enhancing user satisfaction—an essential metric for sustaining digital readership and subscription models.

The sixth sub-component is *Machine Learning (ML)*. ML complements AI by enabling dynamic audience segmentation and behavioral analytics. Algorithms learn from user interactions to refine content formats, subscription offers, and engagement strategies. This adaptive intelligence ensures that ePaper platforms remain responsive to shifting reader preferences, particularly among youth and multilingual audiences, while providing actionable insights for editorial and marketing teams.

The seventh sub-component is *Extended Reality (XR)*, encompassing Augmented Reality (AR), Virtual Reality (VR), and Mixed Reality (MR). XR redefines user experience by transforming

passive reading into immersive storytelling. AR can overlay interactive graphics onto digital replicas; VR can simulate historical events or newsroom environments; and MR can blend live civic activities with digital commentary. These innovations attract younger audiences and position ePapers as dynamic platforms for knowledge dissemination and cultural preservation.

Together, these seven technological pillars reinforce the eBVM's capacity to adapt, innovate, and thrive within Uganda's rapidly digitizing media landscape. Their integration not only enhances commercial viability but also advances the model's normative goals of civic engagement, cultural continuity, and equitable access to information. All these interventions can create advantages such as easy access, faster content delivery, more revenue, democratized content, archival journalism and enhanced press freedoms.

9.2.3 Marketing Communication Mix (Syzygy)

A final component central to the eBVM is the infusion of a Marketing Communication Mix. Also known as the Promotion Mix, it evolved through contributions of multiple scholars and practitioners in the field of marketing. However, its formal structure and widespread adoption are attributed to Philip Kotler and Keller in their seminal work on marketing management. They categorized the elements of the marketing communication mix into key components, namely Advertising, Public Relations, Sales Promotion, Direct Marketing, Digital & Social Media Marketing, and personal selling, as well as word of mouth (Kotler & Keller, 2016). Word of mouth in particular, is conceptualized as an emerging market phenomenon that is playing an increasingly important role in consumers' purchase decisions (Chen & Xie, 2008).

This strategy serves as the engine that must drive visibility, audience engagement, and revenue generation. A key finding from netnography was that the ePaper business model at New Vision lacked a robust marketing communication mix. Social media platforms, for example, were only being used to post the ePaper links without a clear marketing communication mix strategy. Yet, in the context of the Ugandan press ecosystem that is transitioning into digital forms, the mix is necessary to enable media houses to reposition their ePapers not just as digital replicas of print but as dynamic, distinct, user-centred media products. Therefore, the integration of marketing communication mix strategy into the eBVM enables the model to be not just operationally sound

but is also market-responsive and capable is shifting news consumption patterns, competitive pressures, and evolving digital norms.

The first sub-component under this is *Advertising*. To remain viable and efficacious, constant advertising of the ePaper plays a critical foundational role in enhancing awareness and positioning of the ePaper as a credible, distinct, and innovative news offering. This can be achieved through targeted campaigns for brand visibility and revenue generation. Advertising can particularly be effective in mobilizing mobile-first audiences, reinforcing the ePaper's value proposition and a crowded digital landscape.

The second sub-component is *Public Relations*. Public relations construct institutional trust and legitimacy. Through this, print media houses can amplify editorial milestones via the platform, innovation narratives, and strategic partnerships to strengthen their reputation and foster stakeholder confidence in the ever-evolving digital transition. Here, I proffer *continuous trends monitoring and collaborative marketing* as a sub-component. Herein, I argue that ensuring long-term sustainability for ePapers requires a dual approach of monitoring market trends and fostering collaborative marketing efforts. Regular analysis of market trends and consumer behaviour is not only a political economy theoretical expectation in terms of invoking decision making and power relations, it is essential for ePapers to adapt to shifting demands and preferences of their audiences. This serves to make them remain relevant in a dynamic media landscape.

Additionally, forming strategic partnerships with technology companies and other key stakeholders can supply the necessary resources and expertise to maintain a competitive edge. These collaborations can enhance technological capabilities and broaden reach, contributing significantly to the sustained success and growth of ePapers.

The third sub-component of this is the *Sales Promotion of ePapers*. A key finding from participants was the limited awareness of the ePaper platform and how it works. A deliberate sales promotion strategy delivers short-term uptake and habitual engagement by offering tactical incentives such as trial subscription, bundled packages, and strategic advantages in the form of brand loyalty. These strategic interventions are useful in converting digitally disengaged and hesitant users and expanding the subscriber base.

The fourth sub-component is *Direct Marketing*. Direct marketing entails personalized outreach, enabling mediums like email newsletters, SMS alerts, WhatsApp channel messaging, and push notifications. Print media houses can achieve this by leveraging the use of user data and reader behaviour. This form of marketing can enhance deeper user loyalty and reader retention.

The first component is *Digital and Social Media Marketing*. Digital platforms such as social media applications have the advantage of fostering community and driving traffic, facilitating a two-way interaction for the ePapers platform users. A constant presence on social media applications such as Facebook, X (formerly Twitter), TikTok, and WhatsApp can allow print media to cultivate a culture of real-time feedback loops and expand reach among younger, digitally fluent audiences.

Additionally, I propose a distributive model which explores eNewsstands. This constitutes electronic distribution platforms offering multiple ePaper publications—which can potentially attract a larger and diverse audience and provide attractive advertising opportunities. Bundling subscriptions across various ePapers can also boost subscription rates and create a steady revenue streams.

Finally, the other sub-component is *Personal Selling or Word of Mouth Selling*. Chen & Xie (2008) aver that word-of-mouth information in the form of online consumer reviews can be an effective tool for mobilizing brand affinity and better product sales. A type of product information created by users based on personal usage experience can serve as a new element in the marketing communications mix and work as free “sales assistants” to help consumers identify the products that best match their idiosyncratic usage conditions.

This form of personal selling creates a two-way interaction between an ePaper sales representative and a potential user through face-to-face, ePaper online consumer reviews, video clips, and customer persuasion. Centered on the strategic interplay between seller-created product information and buyer-generated reviews, this sub-component augments the ePaper Business Viability Model (eBVM) by enriching its Marketing Communication Mix with adaptive, data-informed tactics. Within the eBVM, this dynamic informs how media houses should calibrate their messaging strategies based on product cost, audience sophistication, and timing of user feedback. For instance, when ePaper subscription costs are low and the user base includes digitally literate or expert readers, seller-provided content (e.g., feature highlights, platform benefits) and user reviews act as complements. In such cases, the ePaper provider should amplify product attribute

information through advertising, direct marketing, and social media engagement once reviews are visible—leveraging both institutional voice and peer validation to boost uptake. Conversely, when costs are higher and the audience includes novice users, the two information types may function as substitutes, requiring a more restrained and targeted communication approach (Chen & Yie, 2008).

Advantages of this include, mass awareness about ePapers, brand affinity, new readerships, increased sales, higher revenues, new and expanded ePaper online communities, a good moment for netnographers hunting for evolving online communities to track more indicators like efficacy, impact, effectiveness, sentiments, evolution, adoption and efficacy of ePapers.

In sum, all sub-components are akin to life forms on Earth (ePaper) that are sustained by the Sun and the Moon within the solar system (ePaper ecosystem). The circular momentum of the model signifies the continuous and interconnected relationship between these sub-components (earthly ‘life forms’). All of these depend on the constancy and influence of the key components – content innovation and emerging technologies – to maintain a balanced and thriving ePaper media environment, much like the Earth relies on the Sun and Moon for its stability and viability.

89.3. Applicability of the Model

In this section, I explore the applicability of the eBVM in an evolving digital media ecosystem. By examining its operational logic, market responsiveness, applicability and sustainability, I situate its relevance in Uganda, the region and the globe.

9.3.1 Relevance of the eBVM to Uganda

First, in Uganda, like any other territory globally, many ePaper platforms face significant technological challenges. These might include outdated technology, poor mobile optimization, and slow loading times. These issues negatively impact user experience and engagement, hindering the growth and effectiveness of digital publications. To address these limitations, the proposed model emphasizes the integration of emerging technological advancements as a core component of the continual digitalization process. This would call for constant upgrades in mobile optimization, analytics, and the exploration of emerging technologies such as blockchain. Once such cutting-edge technologies are adopted, the likelihood that ePapers are enhanced in terms of

accessibility, user experience and increased readership rises, ensuring that the platform remains a formidable competitor in the volatile digital media landscape.

Second, traditional revenue models for ePapers, such as banner ads and single –copy sales, are increasingly unsustainable in the digital age particularly in Uganda where print media still holds significant circulatory infrastructural influence. To address this challenge, the model introduces innovative revenue generation strategies including eNewsstands or resellers, mass subscriptions, targeted advertising, and programmatic advertising. These strategies aim to create new revenue capabilities to create new revenue streams and enhance financial viability by leveraging digital capabilities to attract advertisers and subscribers. By diversifying revenue sources and capitalizing on digital opportunities, ePapers can achieve greater stability and growth.

Third, many Ugandan media houses are hesitant to fully embrace digital platforms due to concerns about losing print revenue and lack of digital literacy. To facilitate a smoother transition to digital media, the model underscores the importance of enhancing the evolution and adoption of ePapers. This involves promoting digital literacy, investing in digital infrastructure, and fostering a culture of innovation within media organizations. By addressing these barriers and encouraging media houses to invest in digital capabilities, the model helps mitigate fears and challenges associated with digital adoption, ensuring a more integration of ePapers into the media landscape.

Fourth, Ugandan ePapers often replicate print content without fully leveraging the potential a digitalized audience, resulting in limited differentiation and audience appeal. To overcome this, the model highlights the need for content innovation, a key component, through the integration of multimedia, interactive features, and real-time updates. These features are absent across the ePaper platforms in Uganda. I was able to establish this through netnographical research at *New Vision* during the month of September 2024 when I immersed myself in its online ePaper community data. The ePapers for *Red Pepper*, *Daily Monitor* and *Bukedde* all appeared to look like their counterpart, *New Vision*. By offering unique digital content that goes beyond tradition print offerings, ePapers can attract a broader and more diverse audience, including younger, tech-savvy readers. This approach only differentiates ePapers from print media but also enhances their overall market appeal and engagement.

Fifth, Uganda has recently metamorphosed into a rising data consumption giant. For example, the amount of data consumed by an average Ugandan per month rose from 1.6 gigabytes (GBs) in

December 2022 to 1.7 GBs in March 2023 (UCC, 2024). The UCC market survey report further reveals that this rise in data consumption was accompanied by a reduction in expenditure on data by 6% during the same period, implying that consumers are spending less but using more data. More so, according to the quarterly report, telecommunications networks posted a combined 138.5 million GBs in downloads during the period between January – March 2023. This is a 9.2 million GB growth in comparison with the 129.3 million GBs recorded at the end of December 2022. This spike in internet traffic is attributed to the continued adoption of internet usage by households and businesses of all sizes. The report further adds that as a result, internet subscription grew to a record 27 million Ugandans attributed to increased internet access through mobile devices. States the report:

This growth in internet subscriptions has resulted in an internet penetration rate of 58 per 100 Ugandans, representing a 2% rise from 57 persons per 100 Ugandans recorded in December 2022....This was an increase of 3.4 million active internet connections in the 12 months up to March 2023, representing a 14% rise in internet connections.

The above rise is also buttressed by the opportunity of the smartphone market in Uganda. For example, the smartphone market in Uganda is valued at about US\$ 0.9 billion. Between the year 2024 and 2029, this market is projected to grow at an annual rate of 7.4%, and its market volume projected to reach 5.5 million units by 2029, with a 5.2% volume growth predicted in 2025. On average, smartphone penetration stands at 0.1 units per person in 2024 (Statista, 2024). Despite challenges such limited internet access as I have observed before, the sector is experiencing robust growth driven by increasing affordability and a rising demand for mobile connectivity, a huge opportunity for potential ePaper growth in terms of new readerships and revenues.

Finally, the regulatory environment and industry norms in Uganda continue to favour traditional media structures and logic, which can slow the adoption and evolution of ePapers. To navigate these constraints, the model is relevant to Uganda because it is advocating for Collaborative Efforts with regulatory bodies, tech companies, and other stakeholders. By engaging with these entities and aligning with industry trends and regulatory changes, ePapers can create a more supportive environment for digital media. This collaboration helps address regulatory challenges and industry barriers, positioning ePapers for successful growth and adaptation in a rapidly evolving media landscape.

In separate interviews with Nada Andersen and Timothy Kalyegira, the potential and limitations of ePapers in Uganda were thoroughly discussed, revealing both opportunities for growth and challenges in the current landscape. Andersen highlighted several key strategies that could improve the viability of ePapers. She proposed that ePapers should focus on segmentation, tailoring content to specific audience groups, such as the elderly, who might be more interested in health and lifestyle topics. By creating niche ePapers, media houses could attract a more dedicated readership. Andersen also emphasized the importance of innovating the advertising model, using data analytics to track engagement and provide advertisers with real-time feedback. Additionally, she mentioned that ePapers should link advertisements directly to the websites of advertisers, thus enhancing accountability. However, she noted that Uganda's media houses face challenges due to a lack of innovation in their digital departments, where staff are often overwhelmed with routine tasks and lack the space to drive creative solutions. This results in a stagnation of growth for ePapers, limiting their potential to fully capitalize on the digital media boom.

Kalyegira, on the other hand, provided insights into the broader evolution of media and the role of ePapers in Uganda. He framed ePapers as a natural progression of the media industry, facilitated by the internet and mobile technology. Kalyegira pointed out that ePapers allow for greater reach, breaking free from geographical boundaries, which is particularly significant for a country like Uganda. He also discussed the appeal of ePapers in comparison to traditional print media, emphasizing their ability to offer higher-quality graphics and designs.

However, Kalyegira expressed concern over the current lack of public recognition for ePapers, noting that they are often confused with websites and are not sufficiently marketed. In vouching for a business model that could make ePapers more viable, he stressed the need for a stronger branding effort, suggesting that ePapers should position themselves as reliable sources of news, contrasting with the fast-paced and often unreliable nature of social media.

The eBVM is of critical relevance to Uganda when looked at through the lens of the Sociotechnical Political Economy Framework which integrates TD, SST and CPE theoretical resources. From the empirical findings of this study, ePapers in Uganda face technological challenges such as poor mobilize optimization, highlighting the TD perspective where technological advancements drive societal changes. Therefore, the need for constant upgrades and integration emerging technologies

like blockchain demonstrates how technology can enhance accessibility and user experience. When seen from the SST perspective, the traditional revenue models and hesitance to embrace digital platforms are heavily influenced by social and organizational factors. Such factors include the dominance of print media and lack of digital literacy.

This social resistance impacts the adoption of innovative digital strategies. The CPE theory sheds light on the economic and regulatory constraints, where industry norms and a lack of supportive policies for digital media favor traditional media structures, thus impacting content innovation and revenue generation for ePapers. By addressing these multifaceted issues through a comprehensive model, the eBVM aims to foster digital innovation, promote digital literacy, and create a supportive regulatory environment, ensuring the growth and sustainability of ePapers in Uganda's evolving media landscape.

9.3.2 Relevance of the eBVM to the Region

The eBVM is highly relevant to the East African region, and indeed, the continent of Africa, particularly in addressing the unique challenges and opportunities faced by digital media platforms. As alluded to in the literature, the ePaper phenomenon is a novel development in Africa's media landscape and has attracted limited scholarship.

However, much of the scholarship on these emerging platforms has been western-centric and dominated by epistemologies from the Global North. As a result, a dearth of attention to their potential contribution as emerging and distinct new media platforms in the Global South has been persistent. Therefore, the model's emphasis on core components such as content innovation, emerging technologies, affiliate marketing and so on, resonates with the growing demand for localized, culturally relevant and decolonized content and the need for technological adaptability in the African region. This is a region where digital literacy and access to technology vary widely.

But by focusing on these key components, the model provides a comprehensive framework that can be tailored to the diverse media landscape in the region, ensuring that ePapers can become the new media frontier and effectively meet the needs of different audiences.

Moreover, the circular momentum of the model, which ensures that sub-components such as Enhancing ePaper Distribution, Developing New Advertising Models, and Sustaining Business Viability are interconnected, reflects the dynamic and interdependent nature of media ecosystems in the region. This interconnected approach allows for a more sustainable and scalable implementation of ePapers, fostering growth and stability in the market that is rapidly shifting towards digital consumption. As East Africa and African media houses continue to transition from traditional print to digital platforms, the model serves as a strategic tool that aligns with regional trends, promotes innovation, and supports the sustainable development of ePapers across the region.

The relevance of the eBVM to the East African region, and by extension, the continent of Africa, can be understood through the SPE framework, because it integrates TD, SST), and CPE theories. The model's focus on content innovation and emerging technologies resonates with TD, as it underscores the transformative potential of technological advancements such as digital platforms to drive societal changes. Meanwhile, SST theory explains the emphasis on localized and culturally relevant content, as well as the varying digital literacy and access across the region, highlighting how social and cultural contexts shape the adoption and utilization of ePapers. From the CPE perspective, the interconnected sub-components like enhancing ePaper distribution, developing new advertising models, and sustaining business viability, reflect economic structures and power relations that influence media practices and content distribution. By addressing these multifaceted challenges and opportunities, the eBVM offers a comprehensive framework tailored to the diverse media landscape in East Africa, promoting innovation, sustainability, and growth in the rapidly evolving digital media ecosystem.

9.3.3 The eBVM Global Relevance

First, the challenges of technological adaptation, such as mobile optimization and data analytics, are not confined to Uganda but are common across many emerging media markets and even in more developed regions of the globe. What the eBVM offers to the world is its emphasis on continuous technological improvement and adaptation from an Africa-context epistemology. This is universally applicable, urging ePapers worldwide to stay competitive by consistently adopting the latest technological innovations. This approach helps digital publications meet the ever-

changing demands of global audiences that have morphed into a global online village community via the smartphone, ensuring they remain relevant in an increasingly digital – first world (Digital News Report, 2024)

Second, the struggle to find sustainable revenue models is a global issue within the ePaper industry. Many publications worldwide are grappling with declining print revenues and the search for viable digital alternatives buttressed by viability solutions is real. The model's proposed revenue strategies, such as targeted and programmatic advertising, offer a scalable framework that can be adapted to different markets. These strategies provide a blueprint for ePapers globally to enhance profitability, allowing them to leverage digital capabilities effectively and attract a broader base of advertisers and subscribers. Besides, the changes in advertising models, allowing for data-driven algorithm pop-up ads ensures that national and sub-national ePapers tap into international advertising terrain, the same way Google algorithms drive data-driven global business ads to a local smart phone.

Third, the need for content innovation to attract and retain readers is a challenge that transcends borders, affecting ePapers globally. What the model proffers to redress this is a shift to content differentiation through the integration of multimedia, interactivity, and exclusive digital offerings, is relevant to ePapers everywhere. By prioritizing these aspects, ePapers can distinguish themselves in an increasingly competitive media landscape, appealing to a wider range of readers and fostering long-term loyalty.

The global relevance of the eBVM can be elucidated through the Sociotechnical Political Economy framework, TD, SST and CPE theories. The eBVM's emphasis on continuous technological improvement and adaptation aligns with Technology Determinism by encouraging ePapers worldwide to adopt the latest innovations to remain competitive in a rapidly digitizing world. This focus on technological advancements ensures that digital publications meet the evolving demands of a global online audience. SST theory highlights the social and cultural contexts that shape technological adoption, explaining the importance of localized epistemologies in global markets. The model's strategies for sustainable revenue, such as targeted and programmatic advertising, reflect CPE's focus on economic structures and power relations, providing scalable solutions that enhance profitability and attract a broader base of advertisers and subscribers. By advocating for

content innovation through multimedia integration, interactivity, and exclusive digital offerings, the eBVM addresses universal challenges in the ePaper industry, fostering differentiation and long-term reader loyalty across diverse media landscapes.

The viability of ePapers has been felt more around the world than locally in Africa where there are a recent innovation (Huded et al., 2021; Bokesoy, 2008; Kalombe & Phiri, 2019). Globally, revenues from ePapers were projected to reach US\$7, 247m in 2021, with an annual growth rate of 6.43% (World Digital Report, 2021). This is estimated to result in a market volume of US\$9,297m by 2025 with most of this revenue generated in the United States alone (Statista, 2021). This is due to the fact that new media technology influences almost all aspects of traditional media, including subscriptions, readership, circulation, and advertising revenue (Hassan, 2021). The scope of the internet has also enabled news consumption by just a click because advanced new media technologies such as ePapers are improving newspaper market share (Mudgal et al., 2019).

These recommendations are starting to pay off in Uganda's digital media market. In a just released annual income statement, *New Vision* newspaper reports that the adoption of digitization, especially the ePaper and the Augmented Reality technology, resulted in a 2% revenue growth in 2021 (Twaha, 2021). Twaha observes that the ePaper in particular registered 24,000 readers with 1,280 of these becoming regular paying subscribers due to COVID-19 restrictions that drastically accelerated the paper's transition to digital. The latest hope is the fact that a number of Ugandans are adapting to the culture of e-payments and e-money transfers especially through mobile money which casts a brighter future for e-commerce (such as ePapers) roll out (MoICT, 2021).

9.4 Limitations for the eBVM and possible improvements

This study has envisaged inevitable limitations for the eBVM but highlights possible improvements in order to strengthen its utility. One such limitation is the technological barriers. Given the rapid pace of technological advancements and emerging technologies, staying up-t-date with technological trends and real-time analytics can be tiresome and frustrating. This might pose significant challenges to some media houses hence hindering seamless technological integration and adaptation of the eBVM model.

The second limitation is economic. As noted in Chapters 1 and 2, the traditional press in Uganda has faced challenges due to technological and economic imperatives during which, the number of newspapers have been whittled down to less than 10 (Mbaine, 2019). The Ugandan press face financial constraints which have the potential to restrict their investments in continuous content innovation and technological upgrades. To make matters worse, the tradition revenue models may not provide sufficient funding to support long-term sustainability and scalability of the ePapers through the eBVM model.

The third limitation is socio-cultural resistances. As note in the empirical chapters, resistance for digital adoption is still visible in where about 27% of the population accesses the internet (UCC, 2024). Resistance to digital adoption from both the media industry and the general public can impede the model's success coupled with cultural adherence to print media and lack of digital literacy that may slow down the acceptance of ePapers.

Lastly, the stiff competition in the digital media market is expected to impede the thrust of the model. The continuous rise of digital content platforms such as blogs, podcasts, social media, and news aggregators like Google are creating stiff competition for ePapers, making it challenging to capture and retain loyal readership.

Despite these limitations, there are possible improvements and strategies that media houses adopting this model can deploy to make it viable: continuous technological upgrading; adoption of innovative revenue models; conducting digital literacy campaigns; and enhanced marketing strategies. These possibilities can make it possible for the digitalizing press to make their business more viable in changing socio-techno-political contexts.

The possibility of continuous technological upgrading means that media houses which implement a strategy for regular updates of infrastructure and adapting emerging technologies can stay ahead of the curve. Partnering with technology firms such as telecom companies like MTN Uganda can help to leverage cutting-edge solutions and stay relevant. Adopting innovative revenue models can help to explore new revenue streams such as seamless subscription models, affiliate marketing, and sponsored content to diversify income and ensure financial viability. One good way to look at it is adopting exclusive digital content different from the print version to attract paying subscribers.

Media houses which adopt this model may look at conducting digital literacy campaigns especially educational workshops. This would enhance digital literacy among both media personnel and the general public to foster a smoother transition to digital platforms such as the ePaper, thereby scaling up the model. Moreover, early adopters of this model can utilize enhanced marketing strategies to make their ePapers viable, by utilizing data-driven marketing approaches to target potential readers and advertisers, increase visibility, and attract wider audiences. For example, they can highlight the unique features of ePapers, their offerings and capabilities such as multimedia content and interactivity which can differentiate them from competitors.

In sum, the findings highlight the eBVM's relevance from the SPE perspective encompassing TD, SST, and CPE theories. Andersen's emphasis on segmentation and tailored content aligns with SST, illustrating how social and cultural factors shape the adoption and success of ePapers. TD is evident in Kalyegira's observation that ePapers, as a natural progression of the media industry, leverage the transformative potential of the internet and mobile technology to increase reach and offer superior graphics and design. The CPE perspective is reflected in both interviews, where economic constraints, lack of innovation, and inadequate marketing efforts highlight the impact of economic structures and power dynamics on media practices. By addressing challenges such as public perception, segmentation, targeted advertising, and branding, the eBVM can provide a comprehensive framework, informed by these theories, to enhance the viability and success of ePapers in Uganda and beyond.

9.5. Synthesis: Toward the eBVM Interoperability

The synthesized dysfunctionality of the current ePaper model in the Ugandan press informs the proposed eBVM. By focusing on enhancing the adoption, innovating revenue strategies, and ensuring long-term sustainability, this model offers a comprehensive framework for the continued growth and relevance of ePapers in Uganda. The eBVM is not only a potential solution for the challenges faced by the Uganda ePaper industry; it provides a versatile framework applicable to ePapers in other markets. By addressing technological limitations, revenue model innovation, content differentiation, and regulatory constraints, the model delivers a comprehensive strategy for making ePapers more viable, both within Uganda and on a regional and global scale.

The eBVM model's strength lies in its interoperability, seamlessly integrating key components such as content innovation, revenue generation, and technological advancements into a cohesive framework. This integration allows each component to work harmoniously with the others, enabling ePapers to adapt to diverse digital platforms, local, national, regional and international market conditions. For instance, in fostering collaboration among these elements and the iterative interconnectedness, the model enhances the overall efficient and effectiveness of ePapers in a volatile media market such as Uganda's or even the region. This serves to ensure that they remain adaptable to evolving market dynamics and technological advancements.

I argue that the eBVM' offers a robust and adaptable framework for the ePaper industry; and by so doing, makes a critical contribution to scholarship. Its interoperability and comprehensive approach have the potential to ensure that ePapers can thrive in various media environments, making it a valuable tool not only for Uganda, but also for digital media enterprises globally. This model's ability to integrate and adapt to different conditions makes it a cornerstone for future growth and sustainability in the ever-evolving digital media landscape.

In sum, the three components of the ePaper Business Viability Model (eBVM) - Content Innovation, Emerging Technologies, and the Marketing Communication Mix - map directly onto the Sociotechnical Political Economy Framework (SPEF), offering a multidimensional lens for understanding digital media transformation. *Content Innovation* (Sun) aligns with Technology Determinism (TD) by emphasizing the generative power of creative formats and editorial evolution in shaping user behavior and media consumption patterns. *Emerging Technologies* (Moon) correspond to Sociotechnical Systems Theory (SST), highlighting the interplay between technological infrastructure (e.g., AI, blockchain, mobile optimization) and social contexts, including usability, access, and institutional capacity. Finally, the *Marketing Communication Mix* (Syzygy) reflects Critical Political Economy (CPE) by foregrounding strategic messaging, audience segmentation, and platform alignment as mechanisms of influence, power distribution, and market positioning within Uganda's media landscape. Together, these components operationalize SPEF by integrating innovation, infrastructure, and ideology into a coherent model for sustainable digital press development.

9.6 The Utility of eBVM in Progressing an African Epistemology

Having appreciated the eBVM in augmenting the media viability, it is important to show how the model advances an African epistemology. The study, through the model, has explicitly questioned the Western 'digital replica' legacy in favor of a framework that centers the African condition, specifically Uganda's mobile-first culture and the communal nature of information sharing. By grounding the model in the metaphorical architecture of the Solar System and the principle of 'Syzygy' (cosmic alignment), the eBVM moves away from linear, extractive Western business logic toward a Circular Momentum that mirrors Africa's indigenous cyclical understandings of sustainability and interconnectedness. For example, the Sun is a critical representation of African survivalability and photosynthesis.

Crucially, the model addresses the 'elite' bias by repositioning the audience not as a passive revenue target, but as a vital celestial force within the 'Earth-Moon-Sun' triad; here, viability is achieved only when institutional innovation (the Sun) aligns with the lived realities of the user, such as data poverty and the need for mobile-optimized, interactive 'WhatsApp-style' engagement, thereby transforming the ePaper into a participatory digital commons reflective of the relationality central to African communication scholarship and lived communal experiences of the African people.

Additionally, the e-BVM integrates a Participatory Feedback Loop that treats the audience not merely as consumers, but as active co-creators of knowledge, thereby aligning with an African epistemology of relationality where the viability of the medium is sustained through communal dialogue and the shared validation of truth in the framework of the *Ubuntu* philosophy.

CHAPTER TEN

CONCLUSION, CONTRIBUTIONS, AND RECOMMENDATIONS

In this concluding chapter, I synthesize the findings by drawing conclusions, contributions and recommendations of the study. While much of the discourse on digital media is informed by epistemologies from the Global North, this research fills a crucial gap in understanding the new phenomenon of ePapers within an African context. The Ugandan experience reflects unique challenges and opportunities, underlining the urgent need for context-specific theoretical approaches, interventions, conclusions, recommendations and business models that promote digital media adoption while also respecting the socio-economic landscape.

10.1 Conclusions

This study's central focus was an exploration of the evolution, adoption, and contribution of ePapers in the Ugandan press. The specific objectives were four: to explore the factors that have influenced the evolution of ePapers in the Ugandan press; to assess the drivers that have influenced the adoption of ePapers in the Ugandan press; and to evaluate the contribution of ePapers in the Ugandan press; to evaluate the contribution of ePapers in the Ugandan press; to propose a business model for the ePaper industry in Uganda. Based on qualitative analysis of KIIs and netnographical data, this study makes the following conclusions:

The evolution of ePapers in the Ugandan press is a process shaped by a conflation of historical, technological and socio-economic imperatives. I have observed from the findings that the liberalisation policies of the 1990s in Uganda were inspired by the Brettonwoods institutions of IMF, World Bank through their Structural Adjustment Policies. This new dynamic in the Ugandan economy created an enabling environment for private media ownership and technological adoption. It goes without saying that these policies created the foundation for the media landscape in Uganda to embrace digital transformation. The entry of telecommunications companies like CELTEL and MTN in the mid-1990s expanded internet access, establishing essential infrastructure for digital news formats. This transformation was supported by the Communications Act of 1997, which formalized the regulatory framework for digital connectivity. The integration of the internet in Ugandan newsrooms further accelerated the shift, enabling immediacy in news

access and reshaping traditional news cycles. These milestones marked significant phases in the evolution of ePapers as a viable medium for delivering news.

Added to these reforms was the proliferation of technological shifts coupled with new dynamics in the media market. For instance, the rise of news aggregators such as Google and social media in the 2000s created opportunities and challenges, pushing traditional newspapers to the edge and thereby establishing digital presences. This shift was also driven by changing audience expectations, with consumers prioritizing immediacy and convenience in news consumption.

Insights from interviews and netnographical data suggest that competition and market-driven innovations were key motivators for the adoption of ePapers, as media houses sought to remain relevant and engage readers in real time. Therefore, together, these factors underpinned the interplay between policy, technology and market forces in the evolution of ePapers in the Ugandan press.

It is this study's conclusion that the adoption of ePapers in the Ugandan press has been driven by a combination of internal and external factors, with newsroom dynamics playing a foundational role. For example, between 2014 and 2018, intense debates unfolded within Uganda's leading print media houses of *New Vision*, *Daily Monitor* and *Red Pepper* newsrooms. These debates characterized by Hegelian dialectics, featured a clash between traditionalists advocating for print dominance and progressive factions pushing for digital innovation and adoption. These internal contestations resulted in a synthesis- where both print and digital strategies coexisted enabling the adoption of the ePaper model which emerged as a complimentary platform.

Furthermore, generational preferences also influenced the adoption, as younger Ugandans gravitated toward digital news for its immediacy and accessibility, driving the press to meet these changing consumption habits. The COVID-19 pandemic was a good omen: it blessed the acceleration to digital formats in the Ugandan press, acting as a catalyst for widespread ePaper adoption. With physical distribution disrupted by lockdowns, media like *New Vision* saw a dramatic surge in ePaper subscriptions—from 2,300 to 25,000—privileging the necessity of digital platforms in times of crisis. Effective customer support has played a crucial role in in retaining

ePaper users, addressing technical challenges and ensuring seamless access, though technical stability and streamlined self-service options remain areas for improvement.

Finally, the integration of localized payment options and mobile-friendly subscription process further widened ePaper accessibility, particularly for price-sensitive and tech-oriented audiences. Collectively, these drivers reflect a combination of technological, economic and social cultural shifts that have positioned ePapers as viable and increasingly preferred medium within Uganda's evolving media ecosystem.

Coming to the contributions of ePapers in the Uganda press, their conflation is multifaceted in this study. This conflation reflects significant advancements in accessibility, audience reach, and sustainability that ePapers have brought upon the Ugandan press. Thus, one can argue that ePapers have not only redefined how news accessibility in Uganda, they have helped the Ugandan press to leverage affordability, convenience, and compatibility with mobile devices to reach new and expanded audiences. This shift has not just democratized news consumption in Uganda, it has enabled access to audiences previously excluded due to logistical challenges of print distribution.

The universal compatibility and PDF-based formats of ePapers has allowed Ugandans both locally and in the diaspora to remain connected with current events. For instance, *New Vision's* ePapers have cultivated active readership communities abroad, enhancing the Ugandan press's global relevance. Additionally, the accessibility of archived editions in digital formats has revolutionized historical journalism, preserving Uganda's print legacy for future research and public discourse.

Our ePapers have contributed significantly to press freedoms and environmental sustainability. Their digital nature provides a layer of resilience against state censorship, allowing for seamless sharing of uncensored content. By bypassing traditional printing and distribution processes, ePapers uphold journalistic integrity and expand editorial freedom. Environmentally, the reduced reliance on newsprint and transportation aligns with global sustainability goals, minimizing the carbon footprint of newspaper production.

While ePapers enhance the Ugandan press's viability in a digital era, challenges such as high data costs, limited rural infrastructure, and static, less interactive formats underscore areas requiring

innovation. Nonetheless, ePapers begot a critical bridge between the traditional, modern and the newsroom of the future which promises enduring relevance of Uganda's press in the digital age.

Findings from this study have revealed significant shortcomings in the current ePaper business model in Uganda, which hinder the viability of digital newspaper platforms. The concerns arising from the data include inadequate technological infrastructure, infective revenue generation strategies, and a failure to innovate unique content for digital formats. Evidently, Ugandan newspapers are transitioning to digital platforms, but many continue to rely on the print-based model and its infrastructures which limit their capacity to meet expectations of a tech-savvy audience. These challenges are exacerbated by low internet penetration, high data costs and limited digital literacy, which confluence to prevent a large portion of the population from accessing ePapers and are hence left out of the digital economy. Furthermore, user resistance, both from the internal workforce and readers, to fully embrace digital transition, was a key finding thereby slowing progress and contributing to the stagnation of the ePaper sector.

To address these challenges, the study proposes a comprehensive (eBVM) that focuses on two primary drivers: content innovation and emerging technologies. Content innovation, akin to solar energy in the ecosystem, is crucial for sustaining user engagement and attracting diverse audiences. This involves creating interactive, multimedia-rich content that is adaptable to the digital platform, offering exclusive digital content, and fostering localized outreach. Additionally, emerging technologies should be leveraged to improve distribution, enhance mobile access, and develop new advertising models that go beyond traditional methods. By embracing these technological advancements, ePapers can significantly increase their user base and revenue streams.

The proposed model also stresses the importance of evolving revenue strategies to support sustainable digital newspapers. The existing reliance on outdated print revenue models, such as single-copy sales and banner ads, is insufficient to sustain ePaper platforms. Therefore, a more dynamic approach involving targeted advertising, subscription models, and partnerships with mobile providers is essential. Further, improving the user experience through transparent pricing, seamless access, and reliable post-payment systems is necessary to build trust and increase subscriber retention. Ultimately, for ePapers in Uganda to thrive, the press must adopt a holistic,

adaptive business model that aligns with the digital age, prioritizing content innovation, technological infrastructure, and effective monetization strategies.

10.2 Contributions of the Study

This study offers a composite exploration of Uganda's digital media landscape. Rather than offering isolated outputs, the research engages in a holistic production of knowledge that bridges the gap between Western-centric media models and the specificities of the African experience. The contributions are categorized by their role in the research architecture, moving from the philosophical foundations to the practical synthesis of policy.

10.2.1 Philosophical and Epistemological Foundations

The study's primary contribution lies in its dual epistemology, which challenges the dominant Global North narratives of digital transformation. While Western discourse often frames digitalization as a linear progression of technological innovation, this research argues that in the Global South, digital knowledge is a product of economic necessity and structural constraints. By blending Peircean logic with Critical Realism, the study posits that understanding ePapers requires more than empirical observation; it demands a reconciliation of "meaning-making" by local actors (journalists and readers) with the "structural drivers" (infrastructure and economy) that dictate those meanings. This differentiates the study's epistemological role—which defines *what* constitutes valid knowledge in an African digital context—from its theoretical and methodological roles, which serve as the *instruments* for extracting that knowledge.

10.2.2 Theoretical and Methodological Innovation: The SPEF Lens

To operationalize this epistemology, the study introduces the Sociotechnical Political Economy Framework (SPEF). This represents a significant theoretical departure from single-lens approaches like Technological Determinism or Social Shaping of Technology. By layering these with Hegelian dialectics, the SPEF acts as a theoretical bridge, allowing for a nuanced analysis of how digital artifacts like ePapers acquire autonomous influence over journalistic culture while remaining tethered to local political-economic realities.

Methodologically, this is supported by a novel constellation of netnography and in-depth interviews. This toolkit does not merely collect data; it excavates the hidden institutional logics and tensions between print legacy and digital disruption. This synthesis demonstrates how

intersecting paradigms can generate reflexive insights that traditional, siloed methodologies often overlook.

10.2.3 Empirical Grounding and the Ontological Shift

The empirical value of this work extends beyond a case of *New Vision*. It uncovers the ontological reality of the ePaper as a sociotechnical apparatus. In a departure from viewing digital media as transient, this study holds that in constrained political environments, the ePaper occupies a unique state of existence which proffers media resilience and digital autonomy through decentralized platforms like the cloud and digital deliverer systems like personalized emails.

Empirically, the study reveals that ePapers have evolved into multi-functional tools which are serving as archives, educational resources, and shields against state censorship. This challenges the traditional definition of an ePaper as a passive replica, a mirror image of the print - redefining it as a dynamic, context-specific adaptation essential for societal transformation in the Global South.

10.2.4 Synthesis of Policy, Practice, and Sustainability

This study has illuminated the idea that policy and industry practice serve as the culminating synthesis of the ontological, ethical, and empirical findings. The eBVM for instance translates theoretical insights into strategic innovations for the ePaper landscape in the Global South. It foregrounds the importance of mobile optimization, and AI integration to ensure financial sustainability of a press currently facing a polycrisis as highlighted in Chapter One.

In terms of ethical and social- economic impact, the ePaper emerges as a move towards digital formats ultimately framed not just as a business shift, but as an ethical contribution toward environmental sustainability (SDGs 12-15) and digital inclusion for Uganda's growing youth demographic. This dovetails into policy as an integrated framework that foregrounds issues like broadband access, digital literacy, and press freedom as not isolated suggestions. They are the logical necessity arising from the study's ontological findings on media resilience and its epistemological focus on African-led digital narratives.

Ultimately, this study transcends disciplinary silos, integrating media studies, political economy, and philosophy to provide a layered, actionable understanding of how digital journalism can thrive in the Global South.

10.4. Recommendations from the Study

From this study, I make the following recommendations within the conceptual, theoretical, methodological, empirical lenses for academia, policy and industry.

10.4.1 Recommendations for Conceptual, Theoretical, Methodological and Empirical Analysis

First, from the findings, I observe that academic discourse in the Global South has largely been influenced by epistemologies and ontologies of the Global North. While at it, it has been crucial for this study to expand this research to include contexts such as the Ugandan experience of ePapers. The study has highlighted the unique socio-political, economic and infrastructural challenges faced by Ugandan print media. Therefore, I recommend that academics should focus on the digital divide, media accessibility, and the intersection of technology with local cultural experiences to provide a deeper insight into the adoption of ePapers and other digital media innovations in Sub-Saharan Africa. This should include the role of social media platforms in shaping the consumer behaviour and media consumption patterns.

Secondly, to fully appreciate the contribution [and potential impact] of ePapers, we need to integrate interdisciplinary frameworks, combining media studies, economics, technology and sociology. This would allow for a more holistic understanding of the forces that shape digital media landscapes in developing countries. I recommend that academia uses the findings to contribute to the practical development of ePapers by providing in-depth case studies, informed by the aforementioned sub-disciplinary perspectives, on successful ePaper implementation strategies. For example, comparative studies of ePaper adoption across African countries or within regions of Uganda can offer valuable lessons on best practices, technological tools, and business models that are particularly effective in the Global South.

This study was conducted amidst limited studies on ePapers in Uganda, and largely the Global South, which presented a significant challenge for the researcher as the area is not well interrogated in Ugandan media studies. Even at the regional and international level, studies on ePapers are still dominated by ontologies and epistemologies of the Global North. This dearth of adequate

knowledge made it difficult to understand the current landscape of ePaper usage, its effectiveness, and its potential impact and contribution to education, information and knowledge. Without a robust body of Global South context-specific literature to draw from, the research struggled to establish a theoretical and scholarly lens for identifying best practices, empirical findings that could inform the study, and foundational research that would help avoid reliance on anecdotal evidence, studies from other contexts, and primary empirical experiences of the participants. Thus, this study suggests that future research should focus on ePapers as emerging digital formats in the Ugandan mediascape and as platforms worth scholarly attention to build towards a body of scholarship about these adaptations of media.

As mobile devices become primary access points for digital content in Africa, including Uganda, understanding how ePapers are consumed on mobile devices compared to desktops is crucial. Future research could explore how different devices influence user experience, engagement, and content consumption patterns. Future studies could examine the technologies features and optimizations that would enhance mobile user experience such as mobile-first design, app-based solutions and responsive content formats.

Third, while ePaper adoption is growing, the transition from traditional print to digital formats remains a slow process. Future research should explore long-term trends in media consumption patterns, comparing digital and print media usage over time. Such research could consider factors like audience loyalty to print media, the perceived credibility of digital versus traditional outlets, and the shift in advertising revenues.

Fourth, one of the key experiences during this study was the digital divide issue which remains a major barrier to widespread adoption of ePapers. While urban centres such as Kampala have already good internet connectivity, rural and remote areas continue to struggle with limited access to reliable internet services. Future research should investigate the impact of these regional disparities in greater detail, exploring how media organizations can address these challenges through innovative solutions such as offline content delivery or mobile-optimized platforms that cater to users with limited data access. Thus, research that offers solutions to these barriers could lead to more inclusive media ecosystems that bridge the urban-rural divide.

Fifth, future research on ePapers in Uganda should focus on the economic sustainability of digital media organizations. As the transition to ePapers presents financial challenges, including infrastructure costs and monetization complexities, new studies could prioritize an investigation of the economic impact of ePaper adoption on media houses. The research process should focus on revenue generation, profitability, and operational costs, exploring alternative revenue models such as affiliate marketing native advertising, and subscription services. By understanding these financial dynamics, media organizations can develop sustainable business models that ensure the long-term viability of ePapers in the competitive digital landscape.

Sixth, critical area for future research is the assessment of user perceptions regarding digital versus traditional media. Despite the rise of digital platforms, many Ugandans still prefer print media, making it essential to understand the factors influencing their media consumption choices.

Seventh, this study used qualitative methods, but future studies could employ quantitative or mixed methods and use a mix of surveys, focus groups, and in-depth interviews to gather insights on trust, credibility, usability, perceptions, surveys, focus groups, in-depth interviews and impact on media organizations.

Eight, the study calls for further research into the utility of the eBVM, specifically how the components of the model speak more deeply with the variables of this study, namely; Evolution, Adoption and VContribution of ePapers in the press generally.

Finally, this study employed netnography to study an online community of the New Vision's ePaper platform. The study found out nascent online community that may not be sufficient scope to bring out a comprehensive picture of the ePaper adoption in the Ugandan press. *Future research should identify more digital platforms and social media sites where discussions about ePapers are insightfully going on.* This might include forums dedicated to media and technology in Uganda, social media groups discussing Ugandan news, and comment sections on ePaper platforms themselves.

10.4.2 Recommendations for Industry (Media owners, editors, journalists and content creators)

First, one of the critical challenges for ePapers in Uganda, is the relatively low subscription rates, compounded by difficulties in accessing paid content. From the study's findings, media houses must prioritize making ePaper platforms accessible to a broader audience by simplifying payment options, and ensuring mobile optimization, given Uganda's high mobile penetration (UCC, 2024). This way, the industry should clear pricing strategies and communicated to potential subscribers, ensuring transparency and ease of users unfamiliar with digital subscriptions.

Second, empirical findings show that the current ePaper offerings in Uganda largely replicate print editions in a static PDF format, which limits the digital potential of these platforms. The current ePaper offerings in Uganda largely replicate print editions in a static PDF format, which limits the digital potential of these platforms. I recommend that print media in Uganda should invest in innovative, dynamic formats that incorporate interactive features such as real-time updates, multimedia content, pop-up options to allow dynamic advertising, and user customization options. In adding these features, ePapers can increase user engagement. Double advertising and subscription revenue. And offer more than just a digital version of the traditional print newspapers. Moreover, these interactive elements would provide a competitive advantage over free social media news sources, which have become a major existential threat to traditional media.

Third, inspired by collaborative technologies in industries such as computing, aviation and automotive, Uganda's ePaper ecosystem could benefit from strategic collaborations between media houses and industries such as telecommunications companies, media houses, tech startups, and universities to form partnerships to create a shared ePaper platform or distribution infrastructure. This approach would enable the pooling of resources, reduce costs, and enhance the user experience through better technological solutions. A collaborative ecosystem such as an eNewstand would encourage collaborative visibility, choice for readers and a one stop sales point for ePapers. This would result into more innovation, and contribute to the scalability of ePaper models across Uganda and potentially the broader African continent.

Fourth, Ugandan newspapers can take advantage of the often-underutilized digital archive for traditional newspapers to serve a significant value proposition for ePapers. Ugandan media houses should therefore explore monetization of their archives, offering both standard and premium access to historical content. This too could appeal to researchers, educators, and historians, thus broadening the ePaper's appeal. Once the newspapers make their archived content easily accessible, this will help them to differentiate ePapers from other digital news sources and enhance their perceived value.

Fifth, as the traditional advertising-based revenue model faces challenges, ePapers in Uganda should explore alternative business models such as affiliate marketing, native advertising, and content sponsorship. Collaborations with e-commerce platforms could open new revenue streams, while reducing dependence on traditional ad revenue. Media houses should also invest in paywalls or freemium models, offering both free and premium content tailored to different audience segments.

Six, as noted in the finding's chapters, Uganda recently launched a strategy on adopting 4th Industrial Revolution technologies and the government has also adopted a digital governance agenda (MoICT, 2023). The report recommends the utilization of Artificial Intelligence and the emerging technologies in various industries. AI, therefore, presents numerous opportunities for improving news production processes and enhancing content delivery. Media houses in Uganda should consider integrating AI tools for tasks such as content curation, automated news reporting, and personalized news delivery. AI can also be utilized for improving journalistic training, enhancing the quality of content, and optimizing audience engagement. As AI becomes more embedded in newsrooms globally, Ugandan media organizations could use this technology to compete on a global scale and also improve advertising options.

Seven, despite the growing popularity of digital media, the willingness to pay for ePapers in Uganda remains low. Media houses need to invest in public education campaigns that inform the public about the value of ePapers in fostering high-quality, independent and archival journalism. More emphasis should be placed market research, perception surveys to understand user preferences, sentiment and appeal.

Finally, industry actors such as media owners, editors, journalists, sales representatives, marketers and content creators should study the eBVM and see whether it can do something about making their media houses viable in the era of stiff competition and digitisation.

10.4.3 Recommendations for Policy

First, most of the findings of the study pinned the success journey of the ePapers in Uganda as heavily dependent on the internet penetration and digital infrastructure. It is the position of this study that policymakers should prioritize strategic investments in broadband connectivity, especially in rural areas, to ensure that the population can fully participate in the digital media landscape. While it is understood that Uganda has only about 27% (13 million) of the population connected to the internet as of January 2024, there remains a significant opportunity to bridge the digital divide and bring the of the 73% of the population (MoICT, 2024). For example, there was an increase of 1.2 million internet users the year 2023 implying that there's a growing demand for internet connectivity, an essential ingredient for innovation and attracting digital products such as ePapers. From a policy perspective, there is need to leverage the newly-launched Digital Transformation Roadmap by the Ministry of ICT and National Guidance to align investments in ICT, not least ePapers, ultimately improving the country's global indices and creating a more competitive digital economy.

Furthermore, the policy landscape should enhance internet infrastructure to align with the regional integration to augment economic resilience, particularly for landlocked countries like Uganda. The moment regional connectivity is improved, this will facilitate cross-border trade in many items including communication products such as ePapers to respond to market dynamics as espoused in Critical Political Economy of the media theory. This will certainly reduce the cost of doing business, and enable free movement of good- such as ePapers and the spread of ideas. The Ugandan government recently committed to supporting the development of a comprehensive through the local company Infocom and its subsidiary Kenya Data Networks to launch an estimated 1500 kilometers of fiber network between Kampala and Mombasa. While this is a step in the right direction, to fully realize the benefits of digital infrastructure, policymakers must ensure that the underserved beyond Kampala city and unserved communities in the rural areas are prioritized in connectivity efforts. By doing so, media house sin Uganda can harness the potential of a robust

ICT sector to drive sustainable ePapers and ensure effective, information, education and entertainment of the citizens.

Coupled with the above, as Uganda embraces digitisation, it is essential for policymakers to promote digital literacy, particularly among the older generations and rural populations. Government and other actor in the policy environment should invest more in programs that teach basic digital skills, including how to access ePapers. By enhancing digital literacy, more Ugandans will benefit from the knowledge, education and information offered through ePapers such as government programmes like the Parish Development Model and the National Development Plan IV efforts.

In addition, the policymakers in government as are asked to support and put in place policies that promote media freedoms and fair competition in the digital space. With increasing internet penetration, the barriers to information are blurred and frontiers on democratic expression strengthened and expanded. This is critical for the development and thriving of ePapers. Therefore, this study recommends that the government introduces regulations that support the growth of digital media while safeguarding against censorship and over-regulation that could hinder innovation. Scholars such as Mbaine (2019) have advocated for and recommended a co-regulatory framework for Ugandan media where both journalists and government engage in a co-regulatory system to ensure the growth and sustainability of democracy.

Finally, the policy environment should encourage public-private partnerships between media houses, telecom providers, and government agencies which could help extend the reach of digital platforms and reduce the cost of data- something that remains a significant barrier to widespread ePaper adoption. Additionally, there's need for policy realignment of the legal and regulatory framework to be able to capture the differences between ePapers and other online news sources.

10.5 Limitations of the Study

This study has been shaped by a constellation of philosophical, theoretical, contextual, conceptual, methodological, and empirical limitations that have defined its scope and interpretive boundaries. A key limitation of this study was the availability of limited studies on ePapers in Uganda, and largely the Global South. The limited studies on ePapers in Uganda presented a significant

challenge for the researcher as the area is not well interrogated in Ugandan media studies. Even at the regional and international level, studies on ePapers are still dominated by ontologies and epistemologies of the Global North. The dearth of adequate knowledge about ePapers as distinct adaptations of media made it difficult to understand the current landscape of ePaper usage, its effectiveness, and its potential impact and contribution to education, information and knowledge.

Philosophically, the study has been anchored in a critical realism orientation. This orientation assumes that social phenomena, such as the evolution, adoption and contribution of ePapers in the Ugandan press, are shaped by underlying structures and mechanisms that may not be immediately observable. However, the absence of robust indigenous epistemologies on digital media in Uganda limited the study's ability to fully theorize the sociocultural and political-economic dimensions of ePaper adoption from a locally grounded standpoint. The dominance of Global North paradigms in media studies further constrained the philosophical breadth of the inquiry.

Theoretically, the study privileged a combination of the three theories, namely, TD, SST and CPE, advancing a hybrid theoretical constellation- the Sociotechnical Political Economy Framework. However, the lack of previous scholarship integrating these conceptual resources in the Ugandan media studies and emerging scholarly contexts, meant that the framework operated more an experimental than a rigorously tested model. Yet, the limited comparative studies on ePapers in the Global South constrained the theoretical gradation and validation of the framework, leaving certain constructs not fully developed and reliant on exploration from unrelated contexts.

Conceptually, this study relied on the established definition of ePapers as digital replicas of their mother print newspapers. This led the study to focus on major media platforms such as New Vision in Uganda. However, this definition was limited in terms of defining alternative formats such as institutional PDF news bulletins, community-based publications, and ePaper-only outlets like *Matooke Republic* in the Ugandan mediascape. Yet, these media entities may operate distinct production logics, audience dynamics, agency characteristics, and technological constraints which the study did not fully capture. Hence, the conceptual framing of ePapers as digital replicas of print newspapers may have inadvertently narrowed the scope of analysis and excluded emergent forms of digital journalism that challenge traditional media nomenclatures and classifications.

Methodologically, the study relied on qualitative methods such as in-depth interviews and netnography to explore the phenomenon of ePapers in the Ugandan press. The case choice of *New Vision* might have adequately provided a full picture of the ePaper landscape in Uganda which included other legacy print media such as *Red Pepper*, *Daily Monitor* and *Matooke Republic*.

10.6 Conclusion

The findings from this doctoral study spotlight the transformative potential of ePapers – as revenue extensions for the fledgling print media, as digital shields from state-sponsored censorship, and as repositories for archival journalism. They also expose the structural, sociotechnical and cultural complexities that continue to shape their evolution, adoption, efficacy, sustainability and impact.

Through the lens of the SPEF framework—encompassing socio-political economy, platform dynamics, editorial strategy, and feedback loops—this study has provided a granular analysis of how ePapers function within Uganda’s evolving media ecosystem. Netnographic insights from platforms like New Vision’s WhatsApp channel revealed both innovation and inertia: while ePapers have adapted to declining print circulation and shifting audience habits, their implementation often lacks strategic coherence. Users expressed clear preferences for timely, localized, and civic-minded content, yet encountered onboarding friction, limited interactivity, and editorial disconnects. These findings emphasize the need for intentional design and inclusive engagement strategies that reflect the lived realities of Ugandan audiences—particularly youth and vernacular-speaking communities.

Practically, the study calls for a balanced and strategic approach to media transformation. While ePapers offer clear advantages in reach, cost-efficiency, and environmental sustainability, their success depends on addressing the digital divide, cultivating public willingness to pay, and developing viable business models. The recommendations outlined—ranging from segmented content strategies to multilingual editorial design and interactive feedback loops—serve as a roadmap for media houses, policymakers, and civil society actors seeking to build an inclusive and resilient ePaper ecosystem.

Importantly, the research aligns with global development frameworks, illustrating how ePapers can contribute to educational empowerment, environmental protection, and socio-economic

progress. It affirms that digital media, when thoughtfully deployed, can foster an informed citizenry and support Uganda's broader development goals. The study expresses cautious optimism about the future of ePapers, advocating for cross-sector collaboration to overcome barriers to adoption and unlock their full potential.

Uganda's press stands not merely at a technological crossroads. It is at a moment of institutional and civic reckoning. The ePaper is more than a digital replica. It is a bridge between tradition and innovation. It stands between legacy and transformation. A digital newspaper sounds a clarion call to hybridization of media. If the Ugandan print media embraced eBVM with vision, integrity, and inclusivity, the ePaper can become a platform not just for news extension, but for revenue and journalistic preservation and nation-building. By investing in digital literacy, editorial excellence, and user-centered design, Uganda's media landscape can emerge as a model for other African nations navigating similar transitions. Ultimately, this study affirms that the future of journalism lies not in the technology itself. It also depends on the agency of investors, managers, and consumers. It absorbs and also influences political economy values, and strategies that guide its use. The ePaper has come to stay. Its viability and contribution demand continuous adaptation. Hopefully, like scholars and analysts alike, I hope the newspaper industry in Uganda and beyond finds these findings and lessons important and useable for research, practice, and policy.

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APPENDICES

Appendix I: Ethical Clearance

1

MAKERERE

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UNIVERSITY

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COLLEGE OF HUMANITIES AND SOCIAL SCIENCES (CHUSS)
SCHOOL OF LANGUAGES, LITERATURE AND COMMUNICATION
DEPARTMENT OF JOURNALISM AND COMMUNICATION

October 3, 2024

Mr. Don Wanyama,
Chief Executive Officer,
Vision Group,
Kampala- Uganda

Dear Sir,

RE: INTRODUCING MR. ARINAITWE DEO RUGYENDO

I write to introduce to you Mr. Arinaitwe Deo Rugyendo (Student Number: 1900729918) for assistance in his doctoral research. Mr. Rugyendo is a doctoral student under my supervision here in the Department of Journalism and Communication at Makerere University. He is researching the evolution, adoption and contribution of ePapers in the Ugandan press. The topic for his research is: **“From Print to Digital: An Exploration of the Evolution, Adoption and Contribution of ePapers in the Ugandan Press.”**

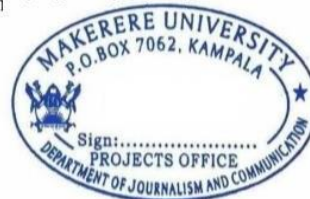
As part of his study, he is required to carry out interviews with key informants and stakeholders such as yourself and also conduct a netnographical study on the key Ugandan press such as *New Vision*, *Daily Monitor* and others that have adopted ePaper platforms. Part of the process requires him to access your online platforms, especially ePaper forums by your subscribers to obtain information for academic purposes.

He has already obtained approval of the Research Ethics Committee which guarantees that he adheres to ethical standards while studying the behavior, opinions and views of these online communities. Thank you for your assistance in his data collection work.

Do not hesitate to contact me should you need any further information.

Yours sincerely

William Tayebwa, Ph.D.



Principal Supervisor and Coordinator of Doctoral Program

Appendix II: Consent

RESEARCH STUDY

From Print to Digital: An Exploration of the Evolution, Adoption and Contribution of ePapers on the Ugandan Press

INVITATION

Dear Participant,

You are invited to participate in a PhD research study exploring the evolution, adoption, and impact of ePapers on the Ugandan press from 2015-2023. Your responses will remain confidential, and completing the questionnaire should take about 15-20 minutes. Your input is valuable in understanding the contribution of ePapers to newspaper readership, benefiting academia, digital media marketers, managers, and policymakers. Thank you for your help, and feel free to contact me directly if you have any questions or need further information about the project.

Arinaitwe D. Rugyendo

Tel: +256 752 466 778

Confidentiality

Only the researcher will have access to the raw data. The identity of all respondents will be kept confidential. No identifying information for participants or their companies will be presented in the results of the study.

Voluntary Participation

Please understand that your participation in this research is voluntary.

Contacts and Questions

If you have any questions about this research study, please feel free to contact **Arinaitwe D. Rugyendo, Tel: +256 752 466 778**

Consent

Your signature below indicates that you have read and understood the information provided above, have had an opportunity to ask questions, and agree to participate in this research study.

I can confirm that all the information provided is true, to the best of my knowledge.



Participants Signature

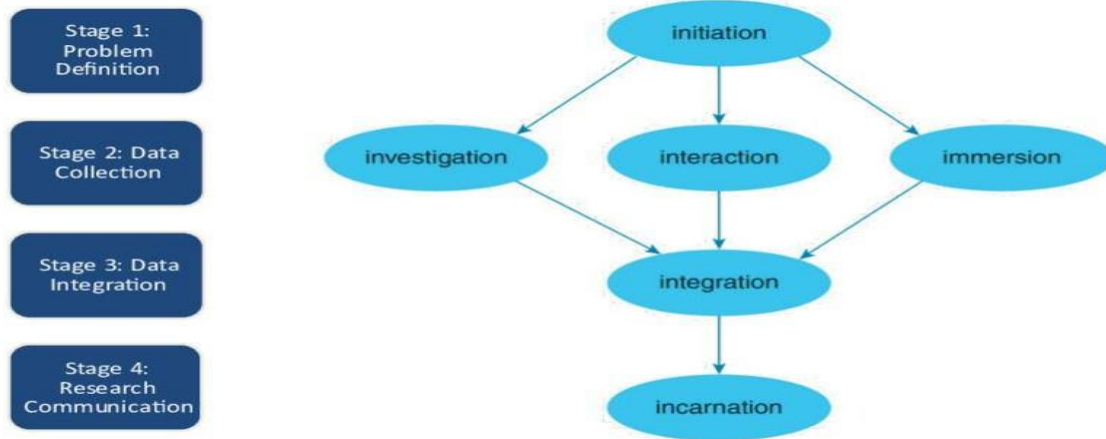
5 July 2024

Appendix III: Interview Guide

A) Evolution of ePapers in the Ugandan Print Media

1. What role did socio-economic factors play in shaping the evolution of ePaper technology in your press?
2. How have technological factors such as the internet influenced the transition to ePapers in Uganda?
3. What were the primary challenges you faced during the evolutionary process of you ePaper and generally in the Ugandan media landscape?
4. What cultural factors influenced the acceptance and adaptation of ePapers in Uganda?
5. Are there legislative or regulatory influences affecting the evolution of ePapers in Uganda? Explain these.
6. What technological infrastructure was and is still crucial for the successful evolution of ePapers in Uganda?
7. How do readers perceive and respond to the transition from traditional newspapers to ePapers in Uganda?
8. In what ways can ePapers address limitations and challenges faced by traditional newspapers in Uganda today?
9. What cultural, social, or economic factors might have hindered the quick evolution of ePapers in Uganda?
10. Are there specific contextual factors unique to Uganda that influenced the evolution of ePapers? Explain these.

Appendix IV: Netnographical Guide



The stages and operations of netnography at New Vision (adapted from Kozinets, 2020: 139).

Unit of Analysis: New Vision WhatsApp Messenger

Data Type	Collection Method
Textual Posts & Comments	Screenshot, copy-paste, or scraping of public posts (with ethical considerations)
Emojis & Reactions	Contextual interpretation of exclamation marks emojis, and engagement metrics
Multimedia Content	Analysis of shared videos, memes, infographics, and ePaper previews
Direct Messages	With consent, analyze WhatsApp or inbox feedback from readers
Observational Notes	Reflexive journaling of researcher's immersion and platform navigation
Interactive Threads	Mapping conversations around ePaper usability, pricing, access, and trust
Engagement & Interaction	Observe without disrupting natural flow, Engage selectively to elicit deeper insights (e.g., ask clarifying questions, thank users for


	feedback) and Maintain ethical boundaries and transparency
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Appendix V: List of publications from the thesis

1. *Digital Dawn: Toward a Framework for Assessing the Efficacy of ePapers in the Ugandan Press*

Status: Published at: DOI: <https://doi.org/10.37284/ijar.8.1.3290>

International Journal of Advanced Research, Volume 8, Issue 1, 2025
 Article DOI: <https://doi.org/10.37284/ijar.8.1.3290>

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Original Article

Digital Dawn: Toward a Framework for Assessing the Efficacy of ePapers in the Ugandan Press

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Article DOI: <https://doi.org/10.37284/ijar.8.1.3290>

Publication Date: ABSTRACT

08 July 2025 Are electronic newspapers (ePapers) efficacious? Does digitalisation enable

2. *From Print to Digital: A Historical-Political Economy Narrative of the Emergence and Adoption of ePapers in the Ugandan Press*

OFFICE OF THE EDITOR-IN-CHIEF

REF: EANSO/EIC/A/08/456650

DATE: 13TH AUGUST, 2025

Arinaitwe Deo Ruyendo
Makerere University
P. O. Box 7062, Kampala.



Dear A. D. Ruyendo,

**RE: ACCEPTANCE OF YOUR PAPER BY THE INTERNATIONAL JOURNAL OF
ADVANCED RESEARCH.**

Your paper titled '*From Print to Digital: A Historical-Political Economy Narrative of the Emergence and Adoption of ePapers in the Ugandan Press*', successfully underwent the review process and was accepted for publication in the International Journal of Advanced Research (IJAR). Please go through the attached reviewed manuscript and tell us if you agree with the reviewers. Also, **address the comments made by the reviewers** if any. The table below shows the metadata assigned to your paper.

Track ID: 8X3Y6

Main Author: *Arinaitwe Deo Ruyendo.*Co-Author(s): *William Tayeebwa, Adolf Mbaine & Gilbert Gumoshabe.*Title: *From Print to Digital: A Historical-Political Economy Narrative of the Emergence and Adoption of ePapers in the Ugandan Press.*Received: *Tuesday, 22nd July, 2025 at 02:48 PM, EAT.*Accepted: *Wednesday, 13th August, 2025 at 10:03 AM, EAT.*Publishing: *Scheduled for publication on Wednesday, 20th August 2025.*Volume Title: *International Journal of Advanced Research.*ISSN: *2707-7802 (Print) and 2707-7810 (Online).*Issue: *Volume 8, Issue 1, 2025.*Journal URL: <https://ijar.eanso.org>Journal DOI: <https://doi.org/10.37284/2707-7810>

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Yours Faithfully,

Prof. Jack Simons
EDITOR-IN-CHIEF, IJAR

