THE ROLE OF ARTIFICIAL INTELLIGENCE IN NEWS PRODUCTION AND REPORTING: A CASE STUDY OF UGANDA CHRISTIAN UNIVERSITY

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UGANDA CHRISTIAN UNIVERSITY

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DECLARATION

I, Alweny Catherine Magara, declare that this research report is my original work and has not been submitted to any other university or institution for the award of a degree or any academic qualification. All sources of information have been acknowledged through references.

Signature: ..... **Date:** 4th / June / 2026

APPROVAL

This research report entitled "The Role of Artificial Intelligence in News Production and Reporting" has been submitted for examination with the approval of my supervisor.

Signature: ..... Date: 04/06/2026

Supervisor

MADAM RACHEAL NASSUUNA

DEDICATION

This research work is dedicated to my parents and family members whose support, encouragement, and sacrifices have enabled me to pursue my academic journey.

ACKNOWLEDGEMENTS

I would like to express my sincere gratitude to my supervisor for the guidance and academic support provided throughout the research process. I am also grateful to my lecturers in the School of Journalism and Mass Communication at Uganda Christian University for the knowledge and skills they have imparted. Special thanks go to my friends and respondents who contributed valuable information to this study.

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ABSTRACT

The current study sought to investigate the use of AI tools and attitudes toward their usage in the journalism training context at Uganda Christian University. In order to gain insight into the problem, questionnaires completed by 95 students specializing in journalism were supplemented with face-to-face interviews conducted with 20 lecturers and 12 representatives of the media production team. The study focused on four important aspects: applications of artificial intelligence in newsrooms, the impact of AI technologies on journalists' efficiency and accuracy, ethical concerns raised by the use of AI software, and the influence of AI on audience involvement. The results indicate that artificial intelligence is increasingly employed in newsrooms, and 72.5% of tasks are performed with the help of AI technology. The most widespread applications include content editing/proofreading, speech-to-text transcription, and automated news writing (68.3%, 61.7%, and 42.5%). However, at present, AI technology is not fully integrated into people's daily work routine since most of the surveyed people use it infrequently or weekly. Nevertheless, the survey results show that AI has a positive effect on journalists' productivity since 69.2% of respondents' claim it saves their time, 63.3% of journalists' state that they have enhanced abilities to process information, and 81.7% affirm that AI assists them with managing information volumes. At the same time, ethical aspects of the application of AI in journalism raise some questions because, according to the respondents, this issue has extremely serious implications – 87.5% of respondents admit it. Specifically, they consider misinformation, algorithmic biases, and lack of transparency to be crucial problems related to ethical considerations, namely 65%, 52.5%, and 50.8% of respondents mentioned such issues. To counteract those issues, 90.8% of respondents suggest human control over AI systems to be essential and 85% claim regulation is also needed. Regarding the engagement of audiences, 70% of respondents consider the possibilities of AI usage in personalizing news content and interactive media to be the most appropriate means of achieving that goal. The study contributes immensely to the understanding of the need to equip the next generation of journalists to operate within AI-based media systems, and contributes to a body of literature that remains scant in terms of AI integration into journalism in developing countries. The research concludes that AI has great possibilities of improving journalism, but it becomes imperative to deal with ethical issues in a manner that ensures responsible and sustainable use of AI in journalism.

CHAPTER ONE

INTRODUCTION

1.0 Introduction

In this chapter the researcher will discuss the background of the study, statement of the problem, purpose of the study, objectives of the study, research questions, scope and importance of the study.

1.1 Background of the study

Definition of Artificial Intelligence (AI)

Artificial Intelligence can be defined as the application of computer programs to carry out activities that would normally require human intelligence, including learning, reasoning, decision making, natural language processing, and recognition (Russell & Norvig, 2021). Within the media sector, there have been increased efforts towards the adoption of AI in news collection, production, data analysis, verification, and engagement with audiences (Diakopoulos, 2019).

Impact of AI on Media Newsrooms Globally

The use of AI has revolutionized news production and distribution globally. The systems for automated journalism allow the production of news stories using structured information such as financial statements, games, and election results without much involvement by journalists (Graefe, 2016). Major global media companies like Associated Press and Reuters have adopted AI technology to increase the generation of data-based content in a fast and accurate way (Carlson, 2015).

As per the Reuters Institute Digital News Report, a majority of media organizations are using AI technologies to personalize news, identify fake news, and analyze user behavior (Newman et al., 2023). Apart from this, AI technologies have also become instrumental in conducting investigations through the analysis of vast amounts of data and detection of patterns, which may not have been easy for human investigators.

There have been concerns regarding the implementation of artificial intelligence into journalism. There have been suggestions that the implementation of machines to decide on things may threaten the independence of the editor and decrease accountability. With machines being used to generate information, there are issues about the accuracy of the information generated and its biases as well as the role of the human element in journalism. According to the United Nations Educational, Scientific and Cultural Organization (UNESCO), there is an urgent need to ensure responsible usage of AI in media to preserve freedom of the press and privacy of personal data. There is an absolute necessity for accuracy of information.

AI implementation in news reporting in developed nations results from technological progress and digital transformations as well as economic challenges faced by the media industry. In many cases, newsrooms apply AI in order to save resources and boost production and stay competitive in a highly dynamic environment (Thurman, Dörr, & Kunert, 2017). Another research has shown that AI allows increasing journalists' efficiency due to the automation of routine activities, thus making it possible to conduct investigations.

Although the implementation of AI in journalism remains relatively new in most regions of the world, such innovations have become increasingly common, especially in Africa. There are a number of reasons for the delay in the widespread introduction of AI in journalism – from outdated technologies to financial issues and a lack of skills (Mutsvairo & Bebawi, 2019). However, regardless of these problems, media outlets in Africa are increasingly turning to innovative digital solutions that would allow them to disseminate information and reach audiences. In conjunction with the ever-increasing number of internet users and active social media users in Africa, these solutions facilitate the adoption of artificial intelligence in the news-making process (UNESCO, 2022). This is a fascinating trend to observe, and it will be interesting to see what implications it will have in Africa. The implementation of new technological tools and solutions in media outlets can be crucial for increasing engagement, widening the target audience, and raising media literacy levels in the region.

In fact, the media scene in Uganda is undergoing a massive transformation due to the influence of digital technology. More and more citizens obtain information through digital platforms, social media channels, and multimedia reports, which becomes possible because of the rapid development of the Internet and mobile phone usage in the country. The fast growth is supported by statistics released by the Uganda Communications Commission in 2022. News outlets begin to utilize new technologies for content creation, engagement with their audiences, and the provision of real-time news. Nevertheless, there appears to be little research into the implementation of artificial intelligence technologies in Uganda media, which indicates the different adoption rates of modern technology in Ugandan media institutions, according to Mwesige's opinion published in 2018.

Higher education establishments providing courses in journalism and communication are also adapting to the technological changes occurring in the field of media practice. Higher learning establishments play a crucial role in equipping future journalists with knowledge and skills that are required to operate in the field of news in digital media environments which increasingly make use of data analytics and automation technologies (Deuze, 2019).

The rise in global interest in the application of artificial intelligence (AI) in news reporting across the world has seen an increase in scholarly literature regarding its implications for newsroom practices within large media institutions in developed nations. However, less attention has been paid towards the role that such technologies play within university media environments in developing countries. The focus on how large media corporations have been applying AI in producing and reporting news leaves little information regarding how universities within developing nations have incorporated emerging technologies such as artificial intelligence in teaching journalism to trainees. There is therefore an urgent need to explore how academic institutions in developing nations have been adopting emerging technologies in the teaching and practice of journalism in order to advance knowledge in that aspect. Hence, it is important to examine how universities in Uganda have incorporated artificial intelligence in training students journalism to identify the effects it may cause in their journalistic careers. In that regard, Uganda Christian University will be considered in this investigation.

1.2 Statement of the problem

There is an increasing emphasis on the importance of using AI responsibly and effectively for the benefit of journalism in the future. AI tools contribute to better news reporting through automation of the process of analyzing data, real-time reporting, personalized content, and verification. Thus, AI improves the efficacy of the dissemination of information, increasing its speed and precision (Diakopoulos, 2019). The proper usage of AI may benefit journalism and make it more evidence-based and capable of coping with the requirements of the information age. In addition, the implementation of AI technology within media is seen as an important part of their digital transformation (Newman et al., 2023).

Thus, despite the growing application of artificial intelligence to journalism in different parts of the world, its adoption remains quite low in certain developing nations, including Uganda. It might seem puzzling, taking into account that Uganda has witnessed the emergence of various digital media innovations, including internet penetration rates and multimedia journalism practices. However, there appears to be very little research on AI application to newsroom practices and its implications for journalists. Most studies conducted in this area analyze the utilization of AI by major commercial media organizations in affluent economies. Meanwhile, there is a need to examine the potential of AI adoption by university media centers, which train new journalists to engage in this process in the future. According to the Uganda Communications Commission, certain success has been achieved in improving the digital media infrastructure in the country; however, additional research should be done regarding AI implementation in newsrooms, particularly university media centers. In 2019, Mutsvairo and Bebawi highlighted that there was a lack of research on AI journalism in university training environments.

In Uganda Christian University, the journalism and mass communication courses include hands-on media instruction designed to enable students to operate effectively in the present age of digital journalism. Nevertheless, it appears that there are few studies on the integration of AI technologies in the production and reporting of news in an educational institution like this one, not to mention the impacts of such integration on journalism education and practice. The lack of such information will definitely hinder our knowledge about how new technologies are transforming journalism training and professional practices. Therefore, this study is aimed at exploring the role of artificial intelligence in news production and reporting.

1.3 Purpose of the study

This study examined the role of artificial intelligence in news production and reporting at Uganda Christian University.

1.4 Objectives of the study

1.4.1 General Objective

The general objective of the study was to examine the role of artificial intelligence in news production and reporting within Uganda Christian University

1.4.2 Specific objectives

To examine the key applications of artificial intelligence in news production and reporting workflows at Uganda Christian University.

To assess how artificial intelligence will influence the efficiency and accuracy of journalistic output at Uganda Christian University.

To analyze the major ethical issues and challenges that will be associated with the integration of artificial intelligence in journalism at Uganda Christian University.

To evaluate how artificial intelligence will shape audience engagement and interaction with news content at Uganda Christian University.

1.5 Research Questions

How will artificial intelligence be applied in news production and reporting processes at Uganda Christian University?

In what ways will artificial intelligence affect the efficiency and accuracy of journalistic practices at Uganda Christian University?

What ethical challenges will arise from the use of artificial intelligence in news production at Uganda Christian University?

How will artificial intelligence influence audience engagement with news content at Uganda Christian University?

1.6 Scope of the Study

1.6.1 Geographical Scope

The study was carried out at Uganda Christian University.

1.6.2 Content Scope

The research sought to investigate the use of artificial intelligence in news generation and reporting processes, evaluate the impact of artificial intelligence on the effectiveness and precision of news generated, look into the ethical issues associated with integrating artificial intelligence in news reporting, and assess the impact of artificial intelligence on news engagement among the audience at Uganda Christian University.

1.6.3 Time Scope

The research was undertaken from December 2025 to October 2026. This period will be adequate for conducting data collection, analysis, and reporting.

1.7 Justification of the Study

It is crucial because of the emergence of the application of AI in journalism, and its necessity not to cross any ethical boundary while innovating. The findings from the research were useful for different professionals and students regarding the uses of AI.

1.8 Significance of the Study

There will be many advantages from undertaking this research. Firstly, it will add to existing literature by studying how artificial intelligence is used in creating news stories in an academic setting, a subject which has been inadequately studied, especially in developing nations.

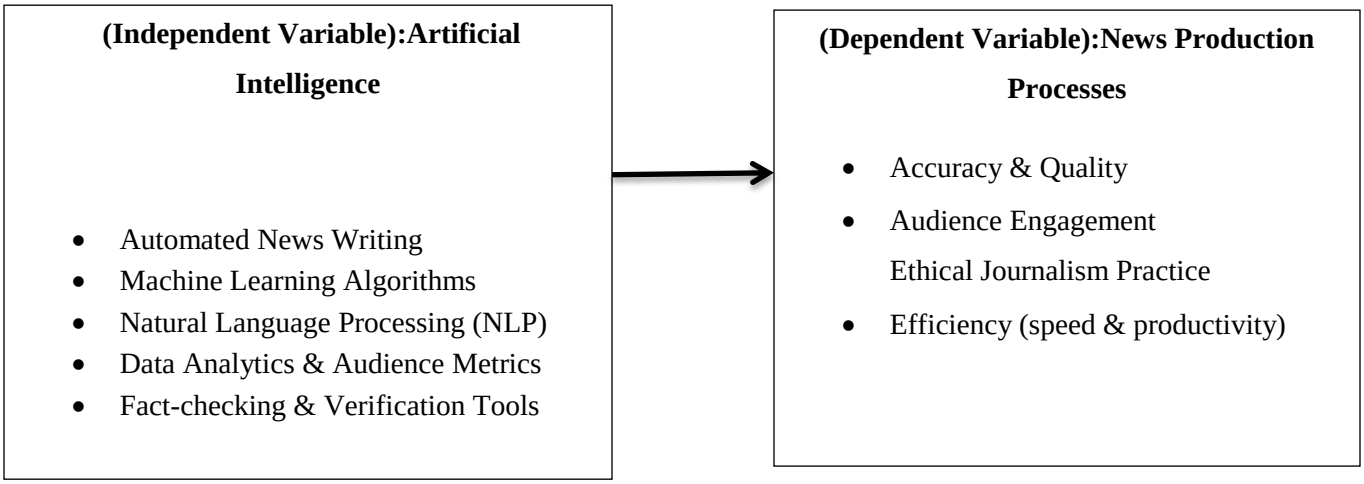
The results provided valuable information for journalism educators and university officials on the changing dynamics within the newsrooms because of the impact that the new technological

advancements have had. In turn, the information facilitated the design of appropriate curricula and digital skills training (Deuze, 2019).

In addition, the research provided insight for policy makers, practitioners in the field, and regulatory organizations concerning the possibilities and challenges of applying artificial intelligence within the journalism industry (UNESCO, 2021).

1.9 Conceptual framework

The following figure illustrates the conceptual framework showing the relationship between artificial intelligence and news production and reporting;



Source: Developed by the Researcher (Diakopoulos, N. (2019))

The conceptual framework illustrated the relationship between artificial intelligence adoption and news production and reporting outcomes within an academic media environment. Artificial intelligence served as the independent variable and was operationalized through automated content generation, data analytics, algorithmic verification, and personalized news distribution (Diakopoulos, 2019; Graefe, 2016). These technological capabilities influenced newsroom processes by enhancing speed, improving data processing, and supporting evidence-based reporting. Artificial intelligence also shaped journalistic performance through improved efficiency and accuracy of news production (Thurman, Dörr, & Kunert, 2017).

Moreover, factors such as transparency, accountability, and algorithmic bias related to ethics and professionalism determined the application of AI in journalism (UNESCO, 2021). The outcome variable considered in the study was news production and reporting in relation to efficiency, credibility, ethics, and audience interaction. Further influence on audience interaction was provided by personalization systems used for accessing and consuming news items (Newman et al., 2023).

The model was based on the premise that several aspects of using AI impacted the performance of news organizations in regard to news production and communication. The researcher used the model to analyze how AI affects news production and reporting at Uganda Christian University.

1.10 Limitations or delimitations of the study

1.10.1 Limitations of the study

Time constraints affected the data collection process, as the research required extensive engagement with respondents, review of literature and analysis of technological practices. These demands required careful time management to ensure completion of the study within the designated period.

Some respondents were reluctant to participate or may have limited availability due to academic and professional commitments. This affected access to certain perspectives regarding newsroom practices and technological use.

In addition, varying levels of technological understanding among respondents posed challenges in explaining and discussing artificial intelligence concepts, which required additional clarification during data collection.

1.10.1 Delimitations of the study

Time Management and Academic Schedule

An effective time management schedule was put in place for the systematic collection, analysis, and interpretation of data collected. Frequent consultations were made with the research supervisor to stick to the study schedule and ensure research quality.

Respondent Recruitment

Clear respondent inclusion criteria were set out, and only those who were engaged in journalism education or media production would be considered. The researcher established good relations with the respondents and explained to them why the study is important in encouraging their participation.

Handling Problematic Interactions

The researcher used professional communication skills when dealing with respondents. When need be, the interview was rescheduled or stopped altogether.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

Time Management and Study Schedule

A well-thought-out time management schedule has been developed in order to facilitate the orderly collection, analysis, and interpretation of collected information.

Respondents Recruiting

Respondent selection criteria have been clearly outlined, and only individuals involved in journalism education or media production will qualify for the study. Good relationship was developed between the researcher and respondents, explaining to them the significance of the study.

Handling Challenging Respondent Behavior

Communication skills were utilized by the researcher during interactions with the respondents. In cases where rescheduling or even cancelling of interviews become necessary, the same will be done.

This chapter presents an analysis of the existing scholarly literature on the four aims of the study. It looks at the body of knowledge that has been developed by scholars in relation to the concept of artificial intelligence as applied in journalism, borrowing from sources published in the literature of media studies, communication theories, and digital journalism among other related disciplines. This chapter starts with the theoretical framework used for this study, followed by an analysis of the following themes: the application of AI in news production processes, how AI impacts journalistic effectiveness and accuracy, ethical concerns about AI use in journalism, and how AI affects audience engagement with news.

2.2 Theoretical Framework

The research presented here is based on the theory of Social Responsibility of the Press, which is a prescriptive approach based on the recommendations of the 1947 Committee on Freedom of the Press in the USA. This committee was established due to the increasing concerns about media concentration and the inability of news companies to address issues beyond their profit motives. The main point of view of the Committee on the responsibilities of a free press, put forward in its report, became a core of the Social Responsibility Theory as formulated by Siebert et al. in 1956.

In contrast to the Libertarian approach, which puts press autonomy from any external interferences at the core of its philosophy, the Social Responsibility Theory emphasizes that press autonomy is merely a tool for the creation of an effective democratic society. According to McQuail (2020), this theory viewed news organizations as watchdogs who had the privilege of freedom of reporting because such a freedom was in the interest of the common good, hence the need for these media outlets to utilize that privilege responsibly. In cases when such organizations do not live up to their responsibility by favoring commercial motives at the expense of accuracy or allowing certain interests to dictate their editorial policies, then according to the Social Responsibility theory, there should be an avenue to hold such entities accountable for their actions.

When applied to artificial intelligence being used in journalism, Social Responsibility Theory becomes especially relevant. As noted by Pavlik (2021), the increasing popularity of using artificial intelligence to create journalistic pieces poses a number of questions related to whom exactly is responsible for any inaccuracies, biases, or other negative consequences of its usage. While insisting that humans should remain accountable does not absolve them of responsibility just because the output was produced by a machine, in fact, it makes this responsibility even more significant, placing an added burden of controlling the usage of the technology on them. After all, the responsibility for the output rests with those humans who made the decision to publish the content created with their help.

It also addresses head-on the transparency issues that come into play through the involvement of AI in journalism. The inability of audiences to know whether the news story they are reading was produced by a human journalist or a machine, not being aware of the parameters upon which recommendations are based, and lack of knowledge about the data behind AI technologies among journalists themselves makes the accountability principle at the very core of the Social Responsibility Theory extremely hard to maintain. This link has been made in particular by Tandoc et al. (2020), who point out that using AI technologies imposes a responsibility on news organizations to be transparent in the process, to verify information they produce, and allow the individuals who are most likely to suffer from decisions made by algorithms to seek justice.

According to Singer (2020), the Social Responsibility Theory also applies to audience engagement in such a manner that the theory requires news media organizations to refrain from succumbing to the urge to employ AI-based personalization and recommendation mechanisms solely for the sake of increasing engagement measures. The tendency of algorithm-based systems to promote content that can attract clicks and shares at the expense of content that can benefit society represents a failure by the news organizations to honor the social responsibility accorded them. In the course of this research, the Social Responsibility Theory forms the lens used to interpret the results of AI integration.

2.3 Key Applications of Artificial Intelligence in News Production and Reporting Workflows

Artificial intelligence has seen significant growth in its application within journalism within the last ten years, from initial uses in just a few newsrooms that were technically advanced to a somewhat broader but uneven application within the media industry. According to Diakopoulos (2019), there have been some of the most detailed descriptions in relation to the areas within journalism where artificial intelligence has taken a firm hold. Automated content creation, data mining, audience customization, speech recognition, and editorial algorithms can be regarded as the main ones.

One such application is the automatic generation of written content, which is perhaps one of the more obvious examples. According to Graefe (2016), algorithms can generate news stories based on structured data inputs such as financial statements, sports scores, election results, weather observations, and other similar data, resulting in news reports that are easily understandable. The efficiency with which these algorithms generate reports makes them an appealing choice for news agencies that receive large amounts of data-based content. For instance, big news agencies such as the Associated Press and Reuters began adopting automated news-writing tools quite early on and utilized the technology to generate earnings reports and sports summaries, tasks that would not have been feasible without the help of humans. This issue was discussed in detail by Carlson (2015). While automation helps increase the amount of content that a news organization can create, it also opens up various questions regarding editorial control, the concept of authorship, and professional journalism.

Data mining and investigative journalism represent another important domain for AI application. As Howard (2019) noted, AI-driven analytical tools allowed journalists to sift through volumes of data too vast and complex to process via conventional means of analysis. Via the ability to uncover patterns and trends, identify anomalies, and make connections between pieces of information contained in large datasets of both structured and unstructured data, such tools have significantly expanded the scope of journalistic investigations in a manner that resulted in numerous news stories of great public interest. For example, the Panama Papers investigation was greatly helped by AI-enabled analysis of leaked records that ran into millions of files a feat that could not have been accomplished in a timely manner via any efforts of human journalists. Still, according to Carlson (2015), the interpretive aspect of such journalism interpreting identified patterns in terms of broader social and political context, and making editorial decisions remained beyond the capabilities of AI systems.

Another area of applications is audience personalization and recommendation. Thurman et al. (2017) described the way in which machine learning programs evaluate user activity on various online platforms based on their browsing habits, time spent on particular pages, content shared by users, and even the searches made on different topics in order to provide personalized content. Several of the world's most renowned news outlets including BBC and The Guardian have already implemented recommendation systems to some degree or another; their stated goal is to enhance user experience through increasing readership. In one of the early and notable discussions about personalization on the Internet, Pariser (2011) outlined potential risks posed by such technologies particularly that of creating filter bubbles whereby users only see information that supports their existing worldview.

Technologies such as speech recognition, transcriptions, and translations have become important tools for use in contemporary journalism. As shown by Jones and Jones (2020), technologies that facilitate automatic transcription have revolutionized the work carried out after interviews since these systems automatically convert recorded sound to text in extremely high levels of accuracy, taking significantly less time compared to manual transcription. Artificial intelligence translation systems have allowed news organizations to create multiple language versions of their content in real-time, while also providing them with the ability to work with source material in languages that they do not understand. Technologies related to computer vision that analyze the visual content have become an increasingly common solution when dealing with false visual content.

AI is playing an important and increasing role in the processes of editorial decisions; however, it is in this sphere that ethical issues become especially debatable. Cherubini and Nielsen (2016) showed how analytic software employed in the newsrooms analyzed the live audience engagement metrics and made recommendations on story positioning, publishing time and the means of distribution. Predictive analytic software took it one step further, as it attempted to predict which stories would be engaging for the audience before the stories were actually published, thus influencing editorial decisions regarding the stories selected. While agreeing with the potential effectiveness of using these types of software, Diakopoulos (2019) noted concerns about their tendency to alter editorial focus due to their commercial nature.

Finally, the use of AI for fact-checking and detecting misinformation can be discussed as one of the main areas of the technology's application in journalism. Graves (2018) studied how automated verification software searched online content for contradictions and compared facts with databases of information to identify potential lies and inaccuracies to verify manually by humans. These tools became highly necessary as misinformation spread on digital media platforms has exceeded the possibilities of human fact-checking in terms of its quantity. At the same time, Graves (2018) pointed out that automated verification does not always yield perfect results – it is effective only within particular frames but fails to deal with complex cases requiring context-specific interpretation and human intuition. It is believed in scholarly literature that automated verification must serve as a tool for enhancing human fact-checking ability.

The synthesis of many such examples is provided in Beckett's (2019) global overview of AI usage in journalism, where he mentions the organizations that would be most suitable for the introduction of AI precisely because of their strategic approach to this tool by recognizing and solving workflow issues through the use of AI, providing training and developing governance models to facilitate human supervision of these processes. The current study conducted at Uganda Christian University takes inspiration from the above-mentioned literature review.

2.4 How Artificial Intelligence Influences the Efficiency and Accuracy of Journalistic Output

The relationship between artificial intelligence and journalistic efficiency has attracted considerable scholarly attention, largely because efficiency improvements represent the most immediately measurable return on investment in AI tools. Diakopoulos (2019) identified the automation of repetitive and time-consuming tasks data sorting, preliminary report generation, transcription, content formatting as the primary mechanism through which AI enhances newsroom efficiency. By offloading these tasks to automated systems, journalists are freed to concentrate on the work that requires distinctively human capabilities: source cultivation, contextual analysis, ethical judgment, and narrative construction.

According to Graefe (2016), some efficiency were achieved by researching automated journalism software, which demonstrated the potential for natural language generation software to produce structured news reports in just a few seconds, thereby greatly reducing the amount of time needed in industries like financial journalism and sports journalism. Consistency of automatic reports was listed as productivity gain since unlike human beings, the algorithmic technology is not influenced by any changes in its level of efficiency caused by factors like deadlines, tiredness, and too much information. As explained by Beckett (2019), the importance of productivity gains extends beyond simple operational considerations because in today's competitive business environment, efficiency is essential.

This is where the benefits of AI with regard to journalistic accuracy become somewhat complicated. For example, AI verification systems have been shown to improve significantly the ability of journalism to detect inaccuracies in reports. According to Cherubini and Nielsen (2016), cross-reference technology allows comparing factual claims to be compared with multiple sources of information in less time than it takes a person to do the same job. Moreover, such comparison is less prone to mistakes, as it may be made by people who analyze vast amounts of information within a limited amount of time. Similarly, Graves (2018) noted that AI was increasingly used to spot any inaccuracies once the report had been published.

There is another way in which speech recognition and transcription technology helps ensure accuracy. Jones & Jones (2020) noted that manual transcription, which relies on listening, is error-prone. Mishearing a speaker, attributing the wrong quote to a person, and subtly altering the meaning of what has been said are quite common occurrences during manual transcription, especially when it is done by busy journalists who must complete several transcriptions in a short time frame. This problem is solved by automated transcription software, which converts audio into written words automatically. Transcription is also complemented by AI-enabled language translation tools, which facilitate multi-lingual reporting.

However, the advantage of higher accuracy offered by AI is not absolute. According to Carlson (2015), understanding the significance of such patterns found through big data analytics, situating them within context, and interpreting their importance for the population under study is an issue that demands the skills of human beings, which machines lack. While a machine could analyze data and determine the statistical anomaly, it cannot make sense of its importance or relate it to the experiences of the individuals in whose names the data is being collected. This aspect is of crucial importance in the field of investigative journalism since some of the best pieces of investigative reporting come from human stories hidden behind the numbers.

A related issue associated with accuracy concerns raised by Pariser (2011) involves the way that AI systems' emphasis on predictive measures of engagement, which is a potential source for distortion in terms of the information environment. This could cause journalists to adopt certain framing strategies in order to optimize the visibility of their articles within the framework of the algorithms in question, even if these do not maximize clarity from an information perspective. Evidence that this process occurs was provided by Thurman et al. (2017), who found that journalists did indeed consider algorithms when framing stories based on real-time analytics data.

Consistent themes emerge in relation to the achievement of potential efficiencies and accuracies afforded by AI from existing literature. According to Beckett (2019), it is imperative for journalists to have proper competency in order to fully benefit from the use of AI technology. In this regard, Beckett argued that journalists who lack the necessary skills in analyzing data and critically evaluating information provided by AI are likely to benefit less and even generate low quality work since they do not evaluate the work done by the AI system.

2.5 Ethical Issues and Challenges Associated with the Integration of Artificial Intelligence in Journalism.

Ethical concerns related to the integration of AI into journalism have been extensively examined by researchers as algorithms become increasingly vital for the practice of journalism. As Diakopoulos (2019) states, the main ethical concerns are related to algorithmic transparency and accountability as algorithmically driven systems that operate in the 'black box' manner and make decisions on important issues related to journalism in a way that is not understandable to journalists, editors, or their audiences make it very hard to be accountable. In case there are flaws in the information produced by a human journalist, establishing how the problem happened would not be too complicated. However, when it comes to an algorithm, it can be easily diffused.

An important ethical issue related to the topic at hand is also algorithmic bias, which has been widely studied in academic literature. Thus, for example, according to O'Neil (2016), algorithms cannot be viewed as purely objective instruments of mathematics, but rather as representations of subjective decisions about what sort of data to use, what value to give each factor, and what result should be achieved. It is true that subjective choices can never be separated from personal views, meaning that pre-existing social inequality and discrimination might affect automated decision-making. Moreover, in her review of the topic, Noble (2018) pointed out that algorithmic bias could make search engines and recommendation systems biased towards certain communities, reinforcing stereotypes that can negatively impact our understanding of reality. As for journalism, algorithmic bias can refer to the question of what can be considered news and who is represented in media discourse.

One additional important aspect concerning the ethics of AI is the risk of amplifying disinformation. In Graves' opinion, there is an inherent irony in the fact that AI systems are not only among the most effective solutions for detecting and correcting misinformation, but also among the most powerful tools for producing and distributing it. Such techniques as deep fakes, text synthesis, and content generation powered by AI algorithms help produce a huge amount of disinformation faster and more effectively than ever before. In Diakopoulos' view, AI technology is applied not only for writing authentic news articles through natural language generation but

can also be misused to produce disinformation disguised as real news. This trend has been gaining traction especially after the rise of large language models.

Privacy and Data Protection is another dimension of ethics that needs mentioning. The actions of large technology corporations concerning collection of personal data were termed as surveillance capitalism by Zuboff (2019) which describes surveillance on a huge scale and the processing of private data of unprecedented scope in history. The tendency towards using analytical methods to monitor an audience in journalism raises concerns as to how data is collected, saved and analyzed from an ethical point of view regarding an individual's privacy rights. According to Thurman et al. (2017), there is a dilemma of the necessity of personalizing news for people by accumulating vast amounts of personal data on their preferences versus ethics of privacy.

Another issue where ethical questions arise in the process of integrating AI into work is independence of editors. As stated by Cherubini & Nielsen, the use of real-time analytics and measures of algorithm performance has affected the relationship between editing and audience analysis, as certain companies started using a data-driven way of decision-making when choosing news stories for publication based on predictions of algorithms about audience reactions to those stories. Although such methods might lead to the development of better responses from editors regarding audience requests, according to Pariser, they can also motivate editors to publish more sensational content instead of news beneficial to the community, which does not fit into the definition of the primary role of journalists provided by Social Responsibility Theory.

Professional displacement and the transformation of the labor market form yet other aspects of the ethical terrain under discussion. Beckett (2019) pointed out that automation has been destroying some classes of routine work in journalism thus far, and this process will presumably go on as AI technology evolves. The ethical dimensions associated with such professional displacement involve not only the quantitative aspect related to statistics of employment but also institutional accountability with regard to the adaptation of the labor force, professional development assistance for journalists facing transformations in their careers, and the question about the consequences of such rapid change for education in journalism. According to Graefe

(2016), even if AI cannot fully replace journalism, it continues to transform it in terms of the emergence and disappearance of new types of professional activities.

Issues of intellectual property, authorship, and ownership of material generated pose yet another set of ethical dilemmas related to the use of artificial intelligence in journalism. According to Diakopoulos (2019), when materials are created using algorithmic procedures, current systems of copyright and attribution that presuppose human authorship become inadequate. Who will own the content generated by an AI? Can a media company claim copyright over articles that have been written with the help of AI algorithms based on data gathered elsewhere? Such issues still lack clear answers in law as well as ethics, and the rapid development of AI will only make their resolution more pressing.

The solution proposed by Floridi et al. (2018) to the ethical problems of AI in journalism is to create governance frameworks that go beyond the voluntary nature of self-regulatory codes of ethics of the journalism industry and ensure enforceable standards related to transparency, accountability, and human involvement. Floridi et al.'s research on AI ethics for a good society proposed the establishment of five AI ethics principles based on beneficence, non-maleficence, autonomy, justice, and explicability. These principles, when applied to journalism, imply that AI must make journalism better and not cause any harm, that its application will not affect people's rights or justice, that there will still be room for human judgment, and that the impact that AI has on journalism will be explainable.

2.6 How Artificial Intelligence Will Shape Audience Engagement and Interaction with News Content

Audience engagement via artificial intelligence may be seen as one of the most lucrative yet ethically challenging areas of influence of AI upon journalism. According to Thurman et al. (2017), personalization algorithms have revolutionized the process of interaction between journalists and audiences as it shifts away from the traditional broadcasting approach where editors pick up stories suitable for a wide range of viewers towards personalized content selection done according to preferences and behavior of each individual. There is no doubt that there are benefits of such approach in form of increased audience engagement, time spent online, number of visits, etc., however, there is something that is surely missing with disappearance of shared experience that was so characteristic for mass media journalism before.

In his work, Pariser (2011) laid down the most compelling critique of algorithmic personalization in journalistic practices by contending that filter bubbles the information cocoons formed when recommendation algorithms present consumers with only information matching their prior beliefs are a serious risk to democratic deliberation and the exposure to alternative points of view that it necessitates. In cases where news consumers never find themselves facing stories that challenge their beliefs, the author asserts that the very preconditions for meaningful civic discussion are diminished, leading to impacts beyond just individuals' access to information. Napoli (2014) took up this line of inquiry and investigated the changes that algorithms were causing in the makeup of audiences themselves changing the stable mass audience characterized by its media consumption habits into an assortment of algorithm-driven micro-audiences consuming partial versions of the information landscape.

Chatbots and conversational AI represent another way AI can be used to engage with audiences. As Jones and Jones (2020) show, chatbot technology has been put to use by media companies to give personalized news reports, answer audience questions, help people navigate complicated stories, and communicate with audiences on a scale impossible with the human editorial staff alone. This creates a style of interaction with audiences that looks more like a dialogue than reading news reports. According to Diakopoulos (2019), this change represents the shift from passively consuming information to actively being involved in conversations. In terms of ethics,

however, the problem is related to transparency. If the audience does not know they are talking to an automated system, they cannot give their informed consent to the conversation.

Recommendation algorithms have become an integral part of how people are exposed to news on digital platforms. Cherubini & Nielsen (2016) noted that recommendations algorithms have now become the key method through which users accessing news digitally discover articles and thus replace the traditional editor's function of deciding what makes the front page and therefore gets visibility. The effects of this on editorial decisions are profound; if particular types of content continually get recommended by algorithms more than other types of content, news outlets feel pressured to cover topics that do well algorithmically rather than those that have greater societal value.

Audience analytics tools provide unparalleled insight into the consumption of news organizations' content. According to Beckett (2019), these tools allow editors to analyze the engagement with specific stories and to make changes in the way stories are distributed based on their popularity. Audience-driven editing may lead to increased effectiveness in reaching out to potential readers, but at the same time, it poses some risks to the process of delivering news. Specifically, the use of engagement indicators for news stories might incentivize editors to focus on making the news sensational and appealing rather than informative and accurate an approach that contradicts journalistic standards of practice as well as the principles of Social Responsibility Theory.

Another aspect of the ways in which AI can help create an engaged audience lies in interactive multimedia and immersive forms of storytelling. According to Pavlik, AI enables journalists to generate interactive graphics and visualizations of data, as well as multimedia stories customized to the interests and existing knowledge of individual users. The value of this approach lies in the fact that such stories are more likely to be understood and appreciated by people who have difficulty engaging with standard journalistic practices based on traditional text. However, whether this engagement contributes to greater understanding of the problems covered or merely results in improved platform metrics remains an open question.

The issue of AI's connection with trust in journalism by audiences might be regarded as one of the most controversial in the discussed body of knowledge. According to Diakopoulos (2019), AI transparency was identified as the crucial factor determining the ability of those audiences aware of AI-driven processes behind news content consumption to judge whether a given story can be trusted or not. In their article, Tandoc et al. (2018) stressed that perceptions regarding the authenticity and accountability of news production process were important factors influencing the assessment of the credibility of digital news. Consequently, organizations capable of making the use of AI transparent and demonstrating human control over their work will be able to preserve audience trust to a greater extent than others.

For example, Hermida (2010), who explored the role of digital technologies and social media in journalism even before AI became its primary technological tool, claimed that the lines dividing news producers and news consumers had become increasingly blurred at that time. However, the development of AI has contributed significantly to making this trend even more pronounced, which allows the public not only to create user-generated content but also to engage in personalized experiences in terms of interaction with the news. Klinger and Svensson (2015) characterized the network media logic – the set of principles and values that governed the processes of content production, distribution, and consumption in digital spaces algorithmically mediated – as something truly novel. In particular, the authors suggested considering it as an alternative to the editorial logic in professional journalism, which created a challenge for the industry. The latter included understanding the way these two logics could work in synergy while preserving journalism's dedication to truth and accuracy in spite of algorithmic mediation.

2.7 Research Gaps

It must be noted from the outset that the extensive body of international literature examined in this chapter offers detailed knowledge concerning the impact of AI technology on journalism practice from numerous angles. Nonetheless, there is no doubt that there are several areas where the current state of research has obvious shortcomings. And herein lies the scholarly contribution made by this dissertation. Most fundamentally, the research has discovered an important geographic gap in the extant literature base. The vast majority of research on the subject of AI in journalism focuses on technologically advanced media landscapes in North America, Western Europe, and East Asia. African and developing world contexts have been relatively overlooked in literature, thus making it impossible to gain adequate understanding of the specificities of adopting and implementing new technologies in journalism in such circumstances. As Mutsvairo and Bebawi (2019) point out, the professional development of journalism in Africa is studied using frameworks that originate in the West.

Journalism education organizations are one specific place in Africa where AI adoption has been under researched. In particular, most studies conducted have focused on commercial journalism organizations, while there has been minimal research done on how AI has been implemented or has failed to be implemented within these education centers where future journalists get educated. The reason why it is important to study AI adoption within these learning institutions is because journalism education is more than just educating individuals about journalism practices; rather, it is an institution where journalists come up with their values.

Although the country has undergone considerable changes in the use of digital technologies in its media environment, as well as having a number of journalism schools, Uganda does not get much recognition in the existing literature on AI in the field of journalism. As Mwesige (2018) pointed out, there has been insufficient empirical research into journalism practices in Uganda, including the application of AI in journalism. In order to address this gap, this paper will provide empirically-based information on AI in journalism in one of Uganda's journalism schools.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

In this chapter, the research design, population of the study, sample size, data collection techniques, sampling techniques, research instruments, and reliability and validity of the instruments are discussed. All these aspects collectively constitute the methodology used to conduct this study on the importance of artificial intelligence in producing news and reports at the Uganda Christian University. Other aspects discussed in this chapter included data collection techniques, data analysis and processing, limitations and delimitations, and ethical considerations for this study.

3.1 Research design

By definition, research design is the planned structure and strategy of collecting, measuring, and analyzing data relevant to testing research hypotheses or answering research questions (Sileyew, 2019). In this particular study, a descriptive research design was used through two approaches to analyze the role played by artificial intelligence in the production and reporting of news at Uganda Christian University. Descriptive research design allowed the researcher to conduct an accurate description of the existing phenomenon (Creswell, 2014).

In addition, the research used both quantitative and qualitative research designs to ensure comprehensive coverage of the topic. In this case, quantitative research design made it possible for the researcher to gather statistical data which would reveal the pattern of relationship between variables (Babbie, 2016). It involved determining the extent of the use of artificial intelligence, frequency of use, and impact on the processes of producing news.

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3.2 Study population

According to Saunders et al. (2019), a research population is described as a whole collection of individuals/elements possessing similar characteristics pertinent to the study. The population of interest in the study was made up of journalism and media studies students, lecturers, and staff members in media productions at Uganda Christian University that participate in news production and reporting.

The target population consisted of 200 people participating in media work academically or professionally within the university. They included journalism and media studies students undergoing news production training; lecturers in journalism and media courses, and staff members in digital media.

3.3 Sample Size and Sample Selection

3.3.1 Sample size

Sample size determination was done through the use of the Krejcie & Morgan (1970) sample size determination table. From the table, it is clear that a population of 200 has a corresponding sample size of 127. Hence, the sample used comprised 127 respondents.

Table 3.1: Sample Size

Category of Participants	Target population	Sample size (N)	Sampling method to be employed
Students (Journalism & Media Studies)	150	95	Simple random sampling
Lecturers (Media-related disciplines)	30	20	Purposive sampling
Media production staff	20	12	Purposive sampling
Total	200	127	

3.3.2 Sampling techniques and procedure

Sampling refers to a process whereby a sample is drawn from a larger population. In this research, both simple random and purposive sampling techniques were applied.

The purposive sampling technique was employed in selecting lecturers and media production staff, owing to their expertise in artificial intelligence in news production. Purposive sampling enables a researcher to selectively choose participants who are knowledgeable about the subject matter being investigated (Amin, 2005; Creswell, 2014). This can be achieved by choosing students involved in lecturing in journalism and supervision of media productions or students involved in managing digital media.

The simple random sampling method was used in selecting students of journalism and media studies. This ensures that all the participants have an equal chance of being included in the sample, thus enabling a researcher to have unbiased results (Saunders et al., 2019).

3.4 Data Sources

Both primary and secondary sources of data were used in conducting this research. Secondary sources of data were gathered from journal articles, institutional documents, books, and digital media to give background knowledge about artificial intelligence and journalism.

On the other hand, primary sources of data were gathered using questionnaires and personal interviews directly with the respondents for the information they possess regarding the use of artificial intelligence in journalism within the university setting.

3.5 Data collection instruments

Data collection instruments are tools used to gather and record research information (Mugenda & Mugenda, 2013). The study utilized questionnaires and interviews to collect data.

3.5.1 Questionnaires

According to Mugenda & Mugenda (2013), a questionnaire refers to a well-structured list of questions that are prepared in writing and which aim at eliciting responses from the respondent. Structured questionnaires will be employed for gathering quantitative data regarding the usage and perceptions about artificial intelligence in news production among students.

The questionnaires comprised closed questions to facilitate statistical analysis. The respondents answered the questionnaires on their own, but help was offered when required.

3.5.2 Interviews

These interviews were conducted through direct communication between the researcher and respondents to collect specific data (Amin, 2005). The structured interviews were conducted with lecturers and members of the media production house in order to gain insights regarding artificial intelligence tools and automated newsrooms in the field of digital media.

The interview guide contained pre-defined set of questions related to implementation of technology in digital media. These interviews supplemented data collected from questionnaires.

3.6 Reliability and validity

To ensure that the quality of the data obtained is top-notch, the researcher made sure that the tools used for the study were clear and appropriate to meet the set goals. The pilot test was conducted on subjects who possessed traits similar to the target audience but outside the research area.

3.6.1 Reliability

The term reliability is related to the consistency of the measurement outcomes (Creswell, 2014). Reliability was guaranteed through well-thought-out instrument design and application of standard methods for data collection. Besides, a test-retest reliability procedure was employed to measure the consistency of results from the questionnaire administered two times to the same sample.

3.6.2 Validity

Validity is the degree to which a tool is capable of measuring what is intended to be measured (Saunders et al., 2019). The validity of content was achieved by matching the items within the questionnaire with the aims of the study and expert consultations.

3.7 Data collection procedure

After gaining approval from the respective universities, the researcher arranged for meetings with the subjects. The questionnaires were administered among the students, while interviews were carried out among the lecturers and media staff. The data collection process involved a systematic approach that included briefing the participants and obtaining their consent.

3.8 Data processing and analysis

The collected data was recorded in excel sheet for its analysis and cleaning. Descriptive analysis was done to analyze the respondents' views on the usage and effects of the adoption of artificial intelligence technology. Thematic analysis was done to analyze the interview questions in relation to the problems related to artificial intelligence in news making.

3.9 Limitations and delimitations of the study

Limited time and financial resources affected data collection. The researcher addressed these constraints through careful planning and efficient sampling procedures. The study was limited to participants directly involved in journalism and media production at the university, ensuring relevance and feasibility.

3.10 Logistical and ethical considerations

Ethics were observed in all phases of the research process. Consent forms were signed by the participants after informing them about the purpose of the study, procedures, risks, and rewards involved. Participants voluntarily took part in the study and could withdraw at any point in time.

Confidentiality was assured by keeping the participants anonymous and safeguarding their information. The researcher was ethical in presenting accurate results. The study was approved by relevant authorities prior to its implementation.

CHAPTER FOUR

DATA PRESENTATION, ANALYSIS AND DISCUSSION OF FINDINGS

4.0 Introduction

This chapter contains the results that were collected in the field study, as well as their interpretation against the research objectives. The analysis and discussion of the results are done in a structured manner, starting from the response rate, then moving on to demographic information of the respondents, and ending with main themes covered in this study. They consist of the following factors: application of AI in news writing, its effect on efficiency and accuracy, ethics in using this technology, and the audience engagement factor.

4.1 Response rate

A total of 127 survey sheets and interview guide sheets were handed out. Among those, 120 surveys were submitted back in their complete form, making the response rate reach up to 94.5%. The interviews went well, reaching all the 32 people involved, making the response rate 100%. As mentioned by Babbie (2016), anything above 70% can be considered to be good in the field of social sciences.

4.2 Demographic characteristics of respondents

The following section provides information on the profile of the respondents, which include information about their age, gender, position within the university, education, and experience in journalism/communications.

4.2.1 Age distribution of respondents

Respondents indicated their age groups and the results appear in Table 4.2 below.

Table 4.2: Age distribution of respondents

Age Bracket	Frequency	Percentage (%)
20 – 29 years	88	73.3
30 – 39 years	25	20.8
40 – 49 years	6	5.0
50 years and above	1	0.8
Total	120	100.0

Source: Primary Data (2026)

The results from Table 4.2 indicate that the greatest number of participants, which is 88 (73.3%), falls within the age range of 20 to 29 years. The second largest number of participants (25), comprising 20.8% of the total number, are those who fall within the age range of 30 to 39 years. Those in the age range of 40-49 years constitute 6 (5.0%) of the respondents, while those aged 50 years and above are just 1 (0.8%).

4.2.2 Sex Distribution of respondents

Respondents were further asked to indicate their sex. Table 4.3 presents the findings.

Table 4.3: Sex Distribution of Respondents

Sex	Frequency	Percentage (%)
Female	67	55.8
Male	53	44.2
Total	120	100.0

Source: Primary Data (2026)

According to Table 4.3 below, there were more women than men who responded, with 67 (55.8%) women and 53 (44.2%) men. It means that women make up a somewhat higher number among the students enrolled in the Journalism and Mass Communication programme at the Uganda Christian University. The results portray some gender inequality in favor of female students in the programme. This is also evident across the overall trend of female enrolment in humanities and social sciences subjects in Uganda.

4.2.3 Role at the University

Respondents were asked to indicate their different positions within the institution of Uganda Christian University. The results obtained are tabulated in Table 4.4 below.

Table 4.4: Role at the University

Role	Frequency	Percentage (%)
Student	88	73.3
Lecturer	20	16.7
Media Production Staff	12	10
Total	120	100.0

Source: Primary Data (2026)

From Table 4.4, it is clear that most of the respondents were students, forming 88 people or 73.3% of the total number. The lecturers formed 20 people or 16.7% while media producers formed 12 or 10.0%. The administrators did not feature in the sample because they failed to satisfy the inclusion criteria. The above pattern is indicative of the sampling technique used in the research process.

4.2.4 Level of Education of Respondents

Respondents were asked to indicate their highest level of education. The results are presented in Table 4.5 below.

Table 4.5: Level of Education

Level of Education	Frequency	Percentage (%)
Certificate	3	2.5
Diploma	11	9.2
Undergraduate	92	76.7
Postgraduate	14	11.7
Total	120	100.0

Source: Primary Data (2026)

As Table 4.5 illustrates, the largest group were the undergraduate respondents, making up 92 or 76.7% of the total respondents. Postgraduate respondents comprised 14 or 11.7% of the respondents, while the number of diploma respondents was 11 or 9.2%. The remaining respondents, who made up just 2.5%, were certified. The preponderance of undergraduate respondents is because of the category under which sampling took place.

4.2.5 Years of involvement in journalism or media production

Table 4.6: Years of Involvement in Journalism or Media Production

Years of Involvement	Frequency	Percentage (%)
Less than 1 year	28	23.3
1 – 3 years	54	45.0
4 – 6 years	27	22.5
7 years and above	11	9.2
Total	**120**	**100.0**

Source: Primary Data (2026)

As can be observed from Table 4.6, the largest percentage, 54 (45.0%), of the respondents has been working in the field of journalism or mass communication between 1 to 3 years. Respondents having an experience of less than 1 year have been 28 (23.3%), followed by respondents having experience between 4 to 6 years, which amounted to 27 (22.5%), whereas only 11 (9.2%) respondents had 7 or more years of experience in this field. The fact that the large number of respondents has 1-3 years of experience is an indicator of the large number of undergraduate students enrolled in three-year journalism programs.

4.3 Key Applications of Artificial Intelligence in news production and reporting workflows at Uganda Christian University

Objective one of the study entailed looking into the major uses of artificial intelligence in news making and reporting processes within Uganda Christian University. The following results were gathered from questionnaire questions six to eleven, along with their interview counterparts.

4.3.1 Whether Artificial Intelligence tools are currently used in news production

Question was asked to the respondents about the application of artificial intelligence in news production activities in the university. Findings have been shown in Table 4.7 below.

Table 4.7: Use of Artificial Intelligence Tools in News Production

Response	Frequency	Percentage (%)
Yes	87	72.5
No	33	27.5
Total	120	100.0

Source: Primary Data (2026)

As shown in Table 4.7 above, the survey data reveal that a vast majority, comprising of 87 participants (72.5%), verified that artificial intelligence software is currently being utilized in news writing processes in Uganda Christian University. On the other hand, 33 respondents (27.5%) were unable to confirm the presence of such processes. From this evidence, it can be seen that many of the media operations taking place within the university environment currently employ AI-enabled technology. The findings herein are consistent with the findings of Beckett

(2019) that show the gradual uptake of AI technologies by media training institutions, including those operating in developing nations.

When interviewing lecturers, this observation was further confirmed. A senior lecturer in the School of Journalism confirmed:

"We are increasingly encouraging our students to use AI-driven writing assistants, transcription software and content analysis tools as part of their learning. This enables our students to learn about the realities of digital journalism practice."

For instance, an interviewee from the staff working in the production process noted that the university had included speech-to-text technology and automation technologies in the process of editing. This shows that there has been significant adoption of AI in academic journalism within the University of Uganda, despite being patchy to some extent.

4.3.2 Specific Artificial Intelligence applications used

Respondents were requested to mention the applications of artificial intelligence utilized in news production processes. It was a multiple response question. The findings have been illustrated in Table 4.8 below.

Table 4.8: Specific Artificial Intelligence Applications Used in News Production

AI Application	Frequency	Percentage (%)
Automated news writing	51	42.5
Content editing and proofreading	82	68.3
Data analysis for news stories	49	40.8
Speech-to-text transcription	74	61.7
Image or video generation	38	31.7
Audience analytics	35	29.2
Other (social media monitoring)	14	11.7

Source: Primary Data (2026)

From Table 4.8, content editing and proofreading is seen as the most popular AI tool, employed by 82 (68.3%) respondents. Following content editing and proofreading, speech to text transcriptions stood at 74 (61.7%), automatic news writing at 51 (42.5%), data analysis in news stories at 49 (40.8%), and image or video creation at 38 (31.7%). In addition, audience analysis stood at 35 (29.2%) respondents, whereas social media monitoring tools was selected by 14 (11.7%) respondents.

This corroborates Diakopoulous' observation on the role of automatic editing, transcription, and content generation as major areas of entry for AI tools. This is due to the higher cost-effectiveness associated with content editing and proofreading tools compared to more sophisticated data analytics tools and audience analytics software. The interviewees went on to note that tools like Grammarly, Otter.ai, and speech recognition tools offered by Google were most widely used by the university media department staff and students.

4.3.3 Stage of news production where Artificial Intelligence is most applied

Participants were required to indicate the stage in the news generation process where artificial intelligence is mostly used. These results are depicted in the table below.

Table 4.9: News Production Stage Where Artificial Intelligence Is Most Applied

Stage	**Frequency**	**Percentage (%)**
Story gathering	22	18.3
Content creation	46	38.3
Editing and verification	38	31.7
Distribution and publishing	14	11.7
Total	120	100.0

Source: Primary Data (2026)

According to Table 4.9, the most prevalent application stage of artificial intelligence among respondents was found to be content creation, mentioned by 46 (38.3%) of those surveyed. This was followed by editing and verification with 38 (31.7%), story gathering with 22 (18.3%), and distribution and publication with 14 (11.7%). The prevalence of content creation as the main application stage aligns with the view expressed by Graefe (2016), who posited that the most

obvious use of AI in journalism was the creation and structuring of news content out of raw information. This is further substantiated by interviews conducted with lecturers, who confirmed that students are mainly exposed to AI technology during content creation tasks.

4.3.4 Frequency of Artificial Intelligence use in news production

Respondents were questioned regarding the frequency with which artificial intelligence systems are utilized in news production processes. Results are shown in Table 4.10 below.

Table 4.10: Frequency of AI Use in News Production

Frequency	**Frequency (f)**	**Percentage (%)**
Daily	21	17.5
Weekly	42	35.0
Occasionally	46	38.3
Rarely	11	9.2
Total	120	100.0

Source: Primary Data (2026)

According to the results provided in Table 4.10, 46 individuals (38.3%) claimed to use AI tools occasionally, whereas 42 people (35.0%) used them on a weekly basis. Additionally, 21 individuals (17.5%) claimed that they made use of AI tools daily. Lastly, 11 respondents (9.2%) claimed that AI tools were used rarely. Based on the data presented above, one can assume that while AI tools are available at the university, where journalists get trained, the integration of these tools into news production routines is not consistent. This could be explained by various organizational, technological, or educational barriers preventing the full implementation of AI solutions. The results of the research correspond to the findings by Mutsvairo and Bebawi (2019), who claim that the integration of AI into African media organizations is an inconsistent process.

4.3.5 Newsroom tasks where AI will perform most efficiently

Respondents were requested to list the newsroom activities that artificial intelligence will accomplish more effectively than humans. The results can be found in Table 4.11.

Table 4.9: Newsroom Tasks AI Will Perform Most Efficiently

Task	Frequency	Percentage (%)
Data processing	58	48.3
Content formatting	29	24.2
Trend analysis	43	35.8
Personalized news delivery	34	28.3
Other (fact-checking)	15	12.5

Source: Primary Data (2026)

As indicated in Table 4.11, data processing was established as the role for which AI would be the most efficient with 58 (48.3%) respondents citing this. Other areas in which AI showed high efficiency were trend analysis (43; 35.8%), personalized news (34; 28.3%), content formatting (29; 24.2%) and fact-checking (15; 12.5%). The above results indicate that the efficiency of AI is seen to emanate from its ability to handle huge amounts of data, analyze trends and provide personalized content. According to Howard (2019), AI proves to be most efficient in performing data-intensive activities that would require lots of human efforts in analyzing data.

4.3.6 Whether Artificial Intelligence will expand the scope of news production

Table 4.10: Whether AI will expand the scope of news production

Response	Frequency	Percentage (%)
Yes	91	75.8
No	12	10.0
Not sure	17	14.2
Total	120	100.0

Source: Primary Data (2026)

As seen from Table 4.12, out of the total number of respondents, 91 (75.8%) considered that artificial intelligence will increase the scope of news production processes, while 12 (10.0%) did not think so, whereas 17 (14.2%) remained undecided. This indicates that the respondents have a positive attitude regarding the impact of AI on news production. This can be corroborated by some responses provided by interviewees, including that of one professor who stated that through artificial intelligence, students and journalists can create content in various languages and different mediums, thus increasing their audiences. This is in line with the theory propounded by Deuze (2019).

4.4 Influence of Artificial Intelligence on efficiency and accuracy of journalistic output at Uganda Christian University.

The second aim of the research was to investigate the impact of artificial intelligence on the effectiveness of journalistic work at Uganda Christian University. The findings discussed in this part were collected through questionnaire items 12–17 and the related interviews.

4.4.1 Whether AI has reduced the time required to produce news content

Table 4.11: Whether AI has reduced time required to produce news content

Response	**Frequency**	**Percentage (%)**
Yes	83	69.2
No	19	15.8
Not sure	18	15.0
Total	**120**	**100.0**

Source: Primary Data (2026)

From Table 4.13, it is seen that a total of 83 (69.2%) respondents supported the view that AI has decreased the amount of time needed for the creation of news stories. Eighteen respondents (15.0%) were uncertain, whereas nineteen respondents (15.8%) did not agree with the above view. A very high percentage of respondents who have confirmed the saving of time because of the use of AI is in agreement with the study done by Graefe (2016). Automated software is able to generate news stories in a structured form within a few seconds.

4.4.2 Whether AI has improved the accuracy of information processing

Table 4.12: Whether AI Has Improved Accuracy of Information Processing

Response	**Frequency**	**Percentage (%)**
Yes	76	63.3
No	22	18.3
Not sure	22	18.3
Total	**120**	**100.0**

Source: Primary Data (2026)

In Table 4.14, we can see that 76 (63.3%) respondents agreed with the fact that the use of AI technology helped improve the accuracy of information processing in the process of news generation. There are 22 (18.3%) respondents who either disagreed or were uncertain. In this case, we may confirm the view proposed by Cherubini and Nielsen (2016) that the use of AI tools promotes the cross-referencing and fact-checking of information, thus enhancing the reporting accuracy. Nevertheless, it should be noted that a rather large number of respondents were uncertain about the positive effect of AI technology on accuracy (18.3%).

4.4.3 Aspects of journalism AI will improve most

Table 4.13: Aspects of journalism AI will improve most

Aspect	Frequency	Percentage (%)
Speed of reporting	62	51.7
Fact-checking	34	28.3
Content consistency	27	22.5
Data interpretation	38	31.7

Source: Primary Data (2026)

From Table 4.15 above, the most common response received, where 62 (51.7%) of participants, pointed to reporting speed as the area of journalism that would benefit from AI's capabilities. Secondly, data interpretation received 38 (31.7%) responses; fact-checking received 34 (28.3%) responses while content consistency had 27 (22.5%) responses. From these results, it is clear that many participants see AI improving journalism by speeding up the process and enhancing data interpretation through automation of data analysis. This finding is consistent with those made by Diakopoulos (2019), whereby the greatest benefits of AI in journalism include rapid data analysis and presentation in narratives.

4.4.4 Whether AI helps journalists manage large volumes of data

Table 4.14: Whether AI Helps Manage Large Volumes of Data

Response	Frequency	Percentage (%)
Yes	98	81.7
No	22	18.3
Total	120	100.0

Source: Primary Data (2026)

The results shown in Table 4.16 confirm that an extremely high number of respondents, 98 people or 81.7%, supported the idea that artificial intelligence enables journalists to handle large amounts of data more effectively, while 22 respondents or 18.3% rejected this assumption. This finding provides solid evidence for the assertion put forward by Howard (2019) about how AI data analysis tools enable journalists to process large amounts of information, discover certain patterns within them, and formulate evidence-based stories that are impossible to develop through analytical skills of journalists themselves.

4.4.5 Whether AI Will Enhance Productivity among Media Practitioners

Table 4.15: Whether AI will enhance productivity

Response	Frequency	Percentage (%)
Yes	88	73.3
No	14	11.7
Not sure	18	15.0
Total	**120**	**100.0**

Source: Primary Data (2026)

From the results shown in Table 4.17, one can observe that 88 (73.3%) respondents have noted the role of AI in increasing the productivity of media workers. However, there were 14 (11.7%) respondents who disagreed with the above notion, while there was another 18 (15.0%) who were uncertain. The positive perception regarding the benefits of productivity enhancement corresponds to the perception shared by Beckett (2019) that states that the use of AI technology for automating tasks saves human effort for journalists in order to engage in analysis.

4.4.6 Whether AI can reduce human error in news reporting

Table 4.16: Whether AI can reduce human error in news reporting

Response	Frequency	Percentage (%)
Yes	71	59.2
No	27	22.5
Not sure	22	18.3
Total	**120**	**100.0**

Source: Primary Data (2026)

From Table 4.18, it is clear that 71 (59.2%) survey respondents were of the opinion that artificial intelligence can help in reducing errors in news. In addition, there were 27 (22.5%) who disagreed with this and 22 (18.3%) who remained uncertain about it. Though a majority of the survey participants were confident about AI being capable of helping minimize errors, it is quite clear from the uncertainty or disagreement among many others that there continues to be a level of mistrust among people when it comes to AI helping maintain journalistic accuracy. This

conclusion is consistent with what Graves (2018) says in his report that AI verification tools are effective in identifying certain errors but are not always right and thus require human intervention. In an interview, a respondent working at media production noted how AI tools can commit errors because of biased training datasets.

4.5 Ethical issues and challenges associated with the Integration of Artificial Intelligence in Journalism at Uganda Christian University

Objective number three involved analyzing some of the main ethical concerns related to the incorporation of artificial intelligence into journalism at Uganda Christian University. The results of this study, based on questionnaire items 18 to 23 and interviews, are provided in this section.

4.5.1 Whether ethical concerns are associated with AI use

Table 4.17: Whether ethical concerns are associated with AI use in news production

Response	Frequency	Percentage (%)
Yes	105	87.5
No	15	12.5
Total	120	100.0

Source: Primary Data (2026)

The findings illustrated in Table 4.19 clearly reveal that an extremely high number of 105 participants or 87.5% perceived that ethical considerations exist regarding the use of artificial intelligence in the production of news articles. However, a much smaller number of 15 participants or only 12.5% revealed that no ethical considerations were involved. The high number of participants' recognition regarding ethical considerations indicates the increase in students, lecturers, and media personnel's awareness regarding the possible implications arising from AI journalism. These findings are in line with Diakopoulos (2019), who suggested that the major ethical considerations involved include biases in algorithms, lack of transparency, and editorial independence.

4.5.2 Most Significant Ethical Concerns

Table 4.18: Most Significant Ethical Concerns in AI-Assisted Journalism

Ethical Concern	Frequency	Percentage (%)
Misinformation or fake news	78	65.0
Bias in automated systems	63	52.5
Loss of editorial control	55	45.8
Privacy violations	47	39.2
Lack of transparency	61	50.8

Source: Primary Data (2026)

According to Table 4.20, the issue of misinformation or fake news was identified as the most critical ethical problem, highlighted by 78 respondents (65.0%). Algorithmic bias was mentioned by 63 respondents (52.5%), lack of transparency by 61 respondents (50.8%), loss of editorial control by 55 respondents (45.8%), and violation of privacy by 47 respondents (39.2%). Concerns related to the problem of misinformation voiced by respondents are in agreement with wider discussions around the potential risks of using AI to generate content. As pointed out by Graves (2018), AI is capable of generating and spreading misinformation, especially when the training data includes inaccuracies or faked information. The extent of concerns related to algorithmic bias agrees with the claims made by O'Neil (2016) that AI is able to reinforce biases and reproduce them.

The risk of students relying on AI-generated information without further verification was mentioned by a few interviewees as well. In particular, a lecturer working in the field of media ethics said:

"Indeed, the problem is when students rely on the AI output without checking if what they have generated from the tool is correct and without analyzing how the AI reached its results. We are trying to integrate AI literacy within the curriculum such that students learn to analyze AI results."

It is clear from the responses that the ethical use of AI within academia requires proper education and governance policies.

4.5.3 Whether AI may threaten journalistic employment

Table 4.19: Whether AI may threaten journalistic employment

Response	Frequency	Percentage (%)
Yes	62	51.7
No	34	28.3
Not sure	24	20.0
Total	120	100.0

Source: Primary Data (2026)

As indicated in Table 4.21, 62 individuals (51.7%) thought that AI might threaten jobs in journalism, 34 people (28.3%) disagreed, and 24 (20.0%) were undecided on the issue. The slight majority showing worry regarding job displacement is aligned with concerns being raised by journalism and media studies experts regarding job losses associated with automation. These results are similar to those found in Beckett (2019), where she noted that automation was capable of replacing some functions performed by journalists. Nonetheless, most of the interviewees indicated that AI is more likely to change the way journalism is done without completely eradicating the profession itself.

4.5.4 Whether AI use in journalism should be regulated

Table 4.20: Whether AI Use in journalism should be regulated

Response	Frequency	Percentage (%)
Yes	102	85.0
No	18	15.0
Total	120	100.0

Source: Primary Data (2026)

As reflected in Table 4.22 below, out of the respondents, 102 (85.0%) supported the notion of regulating the utilization of AI in journalism, whereas 18 (15.0%) were against it. The high level of approval by participants suggests that there exists a general acceptance among professionals in the industry regarding the significance of regulatory frameworks governing the integration of AI technology in media practices. This observation is in line with the claims made by Floridi et al.

(2018), who pointed out that the effective governance of ethical AI entails the establishment of regulatory policies ensuring accountability towards protecting the best interest of the people.

4.5.5 Whether AI systems require human supervision in news production

Table 4.21: Whether AI systems require human supervision

Response	Frequency	Percentage (%)
Yes	109	90.8
No	11	9.2
Total	120	100.0

Source: Primary Data (2026)

Table 4.23 reveals that 109 (90.8%) of respondents agreed that AI systems require human supervision in news production, with only 11 (9.2%) disagreeing. This near-unanimous endorsement of human oversight reflects a shared professional understanding that AI tools, while powerful, cannot substitute for human editorial judgment, ethical reasoning, and contextual sensitivity. This finding strongly aligns with the Social Responsibility Theory of the Press, which emphasizes that regardless of the tools employed, media practitioners carry a fundamental duty to ensure accuracy, fairness, and public accountability in all content produced (McQuail, 2020). Interview participants consistently emphasized that human supervision is non-negotiable, particularly in the context of emerging journalists still developing professional competencies.

4.5.6 Major Challenges in Integrating AI into Journalism

Table 4.22: Major challenges in integrating AI into journalism

Challenge	Frequency	Percentage (%)
Limited technical skills	63	52.5
High cost of technology	49	40.8
Ethical uncertainty	31	25.8
Institutional resistance	22	18.3

Source: Primary Data (2026) Note: Multiple responses allowed.

As indicated in Table 4.24 above, the major problem identified for the application of AI technology within the journalism context involved low technical expertise among 63 (52.5%) participants in the study. Other problems included high cost associated with AI technology among 49 (40.8%), lack of ethical awareness among 31 (25.8%), and institutional resistance among 22 (18.3%). All the problems identified above validate the problems associated with the implementation of AI technology within media training institutions in developing nations as highlighted by Mutsvairo and Bebawi (2019). According to the authors, lack of sufficient skills and resources represents the most significant barrier to the adoption of digital technology in African journalism schools.

4.6 Role of Artificial Intelligence in shaping audience engagement and interaction with news content at Uganda Christian University

Objective number four was to assess the impact that AI will have on audience participation and engagement with news stories at Uganda Christian University. Results of questions 24 through 29 of the questionnaires as well as answers in the interviews are discussed below.

4.6.1 Whether AI supports personalized news delivery to audiences

Table 4.23: Whether AI supports personalized news delivery

Response	Frequency	Percentage (%)
Yes	84	70.0
No	17	14.2
Not sure	19	15.8
Total	120	100.0

Source: Primary Data (2026)

From Table 4.25, it is clear that out of all respondents, 84 (70.0%) considered that artificial intelligence technology is used for personalized news distribution among users, whereas 17 (14.2%) denied this statement, and 19 (15.8%) had no opinion on this matter. The high percentage of those who recognized personalization as one of the main aspects of AI application in news distribution confirms results of studies conducted by Thurman et al. (2017). These scholars found that machine learning algorithms can examine the patterns of user activity and thus deliver news in accordance with personal interests.

4.6.2 Whether AI Has improved Interaction between audiences and news platforms

Table 4.24: Whether AI has improved audience-platform interaction

Response	Frequency	Percentage (%)
Yes	72	60.0
No	24	20.0
Not sure	24	20.0
Total	120	100.0

Source: Primary Data (2026)

According to Table 4.26, 72 (60.0%) respondents agreed with the notion that AI technology has improved communication between the audiences and news media, whereas 24 (20.0%) respondents disagreed or were uncertain. From the findings above, it can be inferred that the theory proposed by Jones & Jones (2020) regarding the role of AI technologies in promoting communication between news organizations and their audiences is supported. As per the responses given by the participants, it is clear that the influence of AI algorithms in social media platforms on the interactions of the students during their training sessions was considerable.

4.6.3 Tools that enhance audience engagement most

Table 4.25: Tools that enhance audience engagement most

Tool	Frequency	Percentage (%)
Chatbots	31	25.8
Recommendation systems	57	47.5
Automated notifications	43	35.8
Interactive media content	52	43.3

Source: Primary Data (2026) Note: Multiple responses allowed.

As shown in Table 4.27, recommendation systems are considered to be the most influential tool for audience engagement, with 57 out of 120 (47.5%) participants mentioning their significance. Interactive media content had been mentioned by 52 out of 120 (43.3%), automated notifications by 43 out of 120 (35.8%), and chat bots by 31 out of 120 (25.8%) participants. Such results are linked to the importance of recommendation algorithms as a method to increase audience engagement through digital journalism practices. This point of view was shared by Cherubini and Nielsen (2016), who argued that recommendation algorithms significantly influence the direction of the audience's actions and help to spend more time engaged with particular websites.

4.6.4 Whether AI helps media organizations understand audience preferences

Table 4.26: Whether AI helps understand audience preferences

Response	Frequency	Percentage (%)
Yes	94	78.3
No	26	21.7
Total	120	100.0

Source: Primary Data (2026)

From the results presented in Table 4.28, it is apparent that 94 (78.3%) respondents felt that AI plays an important role in helping media companies to identify audience preferences as compared to only 26 (21.7%) who held contrary views. This is in agreement with the opinion expressed by Beckett (2019), whose work shows that artificial intelligence provides a news company with deep insights about the behavior of its audiences and how they consume content. This can be seen to imply that the respondents appreciate the importance of utilizing AI-enabled analytics in formulating appropriate content strategies. During interviews, one of the lecturers mentioned that understanding audience preferences from data analytics has become part of journalism training.

4.6.5 Whether AI will increase audience trust in news content

Table 4.27: Whether AI will increase audience trust in news content

Response	Frequency	Percentage (%)
Yes	48	40.0
No	36	30.0

Response	Frequency	Percentage (%)
Not sure	36	30.0
Total	120	100.0

Source: Primary Data (2026)

The data provided in Table 4.29 provides an even more varied view on the correlation between AI and audience trust. In particular, although 48 (40.0%) interviewees considered that AI would have a positive effect on audience trust in news media, 36 (30.0%) of the interviewed individuals had opposite views or did not feel confident about their opinions. The varied results obtained can be explained by the complicated connection between AI journalism and audience trust found in academic sources. For instance, according to Diakopoulos (2019), transparency about AI technology usage in news production is crucial when considering audience trust since people might start distrusting the use of AI technologies unless their influence on editing processes is clearly disclosed.

4.6.6 Whether AI will transform how audiences consume news in the future

Table 4.28: Whether AI will transform future news consumption

Response	Frequency	Percentage (%)
Yes	108	90.0
No	12	10.0
Total	120	100.0

Source: Primary Data (2026)

As per Table 4.30, out of all respondents, 108 (90.0%) agreed that Artificial Intelligence is going to change the way audiences will consume news in the future, while 12 (10.0%) disagreed. As seen, there was a clear understanding among the respondents regarding the transformational potential of Artificial Intelligence. The same concept is explained by Napoli who stated that "algorithmic media systems" are making it increasingly possible for people to interactively engage with news, and thus gradually taking them away from passive broadcasting of news. The interview participants were more concerned about the role played by AI in the process of consumption, evaluation, sharing, and discovery of news, rather than merely changing the nature of consumption.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

The present chapter entails the discussion of the findings; conclusions arrived at through data analysis and recommendations as per the findings of the study. Additionally, future directions for research are stated. The study investigated the application of artificial intelligence in news production and news reporting in Uganda Christian University, and its four main research objectives include: (i) exploring the applications of artificial intelligence in news production and news reporting processes; (ii) investigating the influence of artificial intelligence on the effectiveness and precision in journalistic production; (iii) evaluating the main ethical concerns related to artificial intelligence in journalism; and (iv) analyzing the impact of artificial intelligence on audience engagement.

5.1 Summary of findings

The study results have been highlighted according to the four research objectives below. Concerning the first objective, it was found out that the use of artificial intelligence tools exists in the production of news in Uganda Christian University. Content editing, speech-to-text transcription, and automatic news writing emerged as the most common uses of the technology in question. Artificial intelligence is mostly utilized during the creation of content and although the usage of this technology is increasing, it is not done regularly and on a daily basis. This implies that it has not been fully integrated into the institution. With regard to the second objective, it was evident that artificial intelligence has positive impacts on the efficiency and accuracy of journalism production. Most interviewees confirmed that the technology reduces the time taken for production, makes it easy to manage information, and increases productivity while checking facts.

Regarding the third research objective, it was found that there was substantial awareness among students of the ethical issues related to using AI in journalism, especially those linked to disinformation, algorithmic bias, lack of transparency, and loss of editorial control. The use of human oversight over the application of AI was greatly appreciated, and so was the regulation of

AI in journalism. Inability to perform technical tasks and the high cost of technology were the two main obstacles to the application of AI among journalists trained at the university. As for the fourth objective, it is important to note that AI contributes substantially to engaging audiences, including personalization and interactivity of media products. Although most participants were aware of the potential of AI to improve engagement and communication, their views about increased audience trust in journalism varied considerably.

5.2 Conclusions

In light of the results of the research, the following can be concluded:

5.2.1 Use of Artificial Intelligence in News Production

It is found from the results of the research that artificial intelligence has been increasingly becoming a vital aspect of news production and reporting practices at Uganda Christian University. Although the usage of artificial intelligence has remained mainly on the basis of occasional use, the number of applications already in use, including content editing, automatic transcription of spoken words into written text, and news article writing, shows how the advent of artificial intelligence technology has affected the practice of producing news among students and staff members engaged in journalism training.

5.2.2 Influence on efficiency and accuracy

Conclusively, the research findings indicate that there is a significant positive impact of artificial intelligence on the effectiveness and efficiency of journalism outputs at Uganda Christian University. Through the increase in the pace of production, better data handling abilities, and improvement in the accuracy of journalism through better fact-checking abilities, it can be noted that AI can positively impact the work of journalists. On the other hand, the relatively lower levels of confidence by participants about the ability of AI to entirely remove human error indicate that AI must be treated more as a tool to complement human editorial judgment.

5.2.3 Ethical issues and challenges

This research shows that the adoption of artificial intelligence technology in journalism comes with a number of ethical problems that require intervention by organizations. Issues such as the prevalence of false information, biases and the lack of transparency point to a larger global debate on the appropriate use of artificial intelligence in media. The prevalent opinion that there is the need for human oversight in the implementation of AI and the need for regulations show that there is adequate ethical maturity in the respondents, according to the theory of social responsibility of the press.

5.2.4 Audience engagement and interaction

From the results of the research carried out by the group, it is apparent that artificial intelligence has become very crucial in terms of changing the way that audiences experience news. It is evident that in terms of acknowledging recommendation systems, interactivity, and personalization as major elements of audience engagement with news implies that the potential of artificial intelligence to enhance engagement between the provider of news and its audience has been realized. However, it is clear that there is disagreement concerning the matter of trust, implying that the potential of artificial intelligence with respect to engendering trust needs to be addressed. In essence, it looks like everyone expects AI to change the consumption of news in the future.

5.3 Recommendations

From the results and conclusions drawn from the research, the following recommendations are forwarded:

5.3.1 Recommendations for Uganda Christian University Administration

The management of Uganda Christian University should create and adopt an official policy concerning the usage of AI technology in academic journalism training and media production. This policy would provide clarity on the proper use of AI in the journalism training program within the School of Journalism, Media and Mass Communication at Uganda Christian University. In addition, this policy will address ethical issues regarding the usage of AI within the training process. Uganda Christian University should also consider increasing investments in

infrastructure development to ensure accessibility to modern equipment and AI technology among others.

5.3.2 Recommendations to journalism educators and curriculum developers

The teachers of journalism at the Uganda Christian University and in other higher learning institutions of Uganda need to integrate technology and AI literacy as part of the journalism curriculum. The inclusion should entail teaching about applications of AI in the production of news, data journalism, algorithm verification, and media ethics in the era of digitalization. The training should give students the know-how to effectively utilize AI tools and techniques. For instance, they must learn how to analyze and verify the output produced by AI algorithms, as well as applying journalistic principles in an era of AI technology.

5.3.3 Recommendations to media organizations and practitioners

The media houses as well as the journalist fraternity in Uganda need to establish editorial policies that clearly stipulate the role of artificial intelligence in news creation and dissemination. Issues such as transparency when it comes to the use of AI in creating news stories, human control over the AI process, and an accountability mechanism in case of mistakes and ethical breaches need to be clearly outlined. The media houses must ensure that there is continued professional development among journalists, enabling them to acquire the skills required to operate alongside new technologies.

5.3.4 Recommendations to government and regulatory bodies

It is recommended that the Government of Uganda together with other regulatory bodies such as the Uganda Communications Commission come up with regulatory guidelines that take into consideration the ethical, legal, and professional use of artificial intelligence in journalistic endeavors. These guidelines need to cover issues such as data protection, algorithmic transparency, freedom of the press, and accountability in the production of news through AI technologies. The regulatory agencies should partner with academic institutions, media outfits, and civil societies to formulate AI governance policy that fits the conditions of Uganda's media landscape. Partnership with regional organizations such as the African Union and global organizations like UNESCO could be useful in this regard.

5.3.5 Recommendations to students

The students in journalism and mass communication in Uganda Christian University are urged to take up the challenge of developing themselves digitally and gaining literacy about AI independently from the curriculum requirements. The students are required to interact with different AI technologies and digital verification systems in their daily studies so that they can master these critical abilities in order to make proper use of these technologies. The students must familiarize themselves with issues surrounding AI ethics in journalism, which they could do by engaging with academic material, joining professional bodies, and attending media industry forums.

5.4 Areas for future research

The study has been carried out with the limitations of being confined only to one case study site, Uganda Christian University, and being mainly centered around perceptions and practices in an academic media training institution setting. The research areas that may be studied in future include:

Comparative study on the issues of AI adoption and integration in journalism training programs across multiple media training institutions in Uganda/East Africa to gain insight into the process of technology adoption in media training in a developing country context.

Longitudinal study aimed at studying the trends in AI adoption, professional competencies development, and ethical practices among journalism students during and after the AI-integrated journalism training program.

Studying algorithmic bias and misinformation challenges associated with AI-based journalism in Uganda media organizations to gain empirical basis for the implementation of ethical frameworks.

Audience trust and factors affecting the relationship with AI usage transparency in media organizations.

This study will analyze the economic implications of implementing artificial intelligence in small and independent media organizations in Uganda in terms of cost and revenue generation.

A research project focused on the regulation of artificial intelligence in the field of journalism in Africa, analyzing existing regulations, pinpointing shortcomings, and offering recommendations for governance in developing countries.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Dear Respondent,

Greetings! My name is Alweny Catherine Magara and I am currently undertaking a research on the following topic: "The Use of Artificial Intelligence in News Production and Reporting." The research will be conducted to understand how artificial intelligence has been employed in news production process, the effect it will have on efficiency and accuracy of news reporting, the ethical concerns related to its implementation and the effect it will have on engagement of audiences with news stories.

Through the completion of this questionnaire, your thoughts and opinions on how artificial intelligence can be used in news production and reporting will be gathered. Your opinion will provide an insight on how the technology can help improve productivity in newsrooms, performance and the ethical challenges it can pose to journalists.

You will be kindly requested to participate by responding to the questions provided. Your responses will be very important to the successful completion of this research. All information you will provide will be treated with the utmost confidentiality and will be used strictly for academic purposes. Participation will be voluntary, and you may choose not to answer any question if you so wish.

Please tick (√) or write where appropriate.

SECTION A: BIO DATA

Age

20–29 □

30–39 □

40–49 □

50 and above □

Sex

Female □

Male □

Role at the University

Student □

Lecturer □

Media production staff □

Administrator □

Level of Education

Certificate □

Diploma □

Undergraduate □

Postgraduate □

Years of involvement in journalism or media production

Less than 1 year □

1–3 years □

4–6 years □

7 years and above □

SECTION B: Applications of Artificial Intelligence in News Production and Reporting

(Objective i: To examine key applications of artificial intelligence in news production workflows)

Are artificial intelligence tools currently used in news production activities within the university?

Yes ☐

No ☐

Which of the following artificial intelligence applications are used? (Tick all that apply)

Automated news writing ☐

Content editing and proofreading ☐

Data analysis for news stories ☐

Speech-to-text transcription ☐

Image or video generation ☐

Audience analytics ☐

Other (specify) _____

At what stage of news production is artificial intelligence most commonly applied?

Story gathering ☐

Content creation ☐

Editing and verification ☐

Distribution and publishing ☐

How frequently are artificial intelligence tools used in news production?

Daily ☐

Weekly ☐

Occasionally □

Rarely □

Which newsroom tasks will artificial intelligence most likely perform more efficiently than humans?

Data processing □

Content formatting □

Trend analysis □

Personalized news delivery □

Other (specify) _____

Do you think artificial intelligence will expand the scope of news production activities?

Yes □

No □

Not sure □

SECTION C: Influence of Artificial Intelligence on Efficiency and Accuracy

(Objective ii: To assess how artificial intelligence will influence journalistic efficiency and accuracy)

Has artificial intelligence reduced the time required to produce news content?

Yes □

No □

Not sure □

Has artificial intelligence improved the accuracy of information processing in news production?

Yes ☐

No ☐

Not sure ☐

Which of the following aspects of journalism will artificial intelligence improve most?

Speed of reporting ☐

Fact checking ☐

Content consistency ☐

Data interpretation ☐

Does artificial intelligence help journalists manage large volumes of data more effectively?

Yes ☐

No ☐

Will artificial intelligence enhance productivity among media practitioners?

Yes ☐

No ☐

Not sure ☐

In your opinion, can artificial intelligence reduce human error in news reporting?

Yes ☐

No ☐

Not sure ☐

SECTION D: Ethical Issues and Challenges of Artificial Intelligence in Journalism

(Objective iii: To analyze ethical issues and challenges associated with artificial intelligence)

Are there ethical concerns associated with the use of artificial intelligence in news production?

Yes ☐

No ☐

Which ethical concerns are most significant? (Tick all that apply)

Misinformation or fake news ☐

Bias in automated systems ☐

Loss of editorial control ☐

Privacy violations ☐

Lack of transparency ☐

Do you think artificial intelligence may threaten journalistic employment?

Yes ☐

No ☐

Not sure ☐

Should artificial intelligence use in journalism be regulated?

Yes ☐

No ☐

Do artificial intelligence systems require human supervision in news production?

Yes ☐

No ☐

What is the major challenge in integrating artificial intelligence into journalism?

Limited technical skills □

High cost of technology □

Ethical uncertainty □

Institutional resistance □

SECTION E: Artificial Intelligence and Audience Engagement

(Objective iv: To evaluate how artificial intelligence will shape audience engagement)

Does artificial intelligence support personalized news delivery to audiences?

Yes □

No □

Not sure □

Has artificial intelligence improved interaction between audiences and news platforms?

Yes □

No □

Not sure □

Which tools enhance audience engagement most?

Chatbots □

Recommendation systems □

Automated notifications □

Interactive media content □

Does artificial intelligence help media organizations understand audience preferences better?

Yes □

No □

Will artificial intelligence increase audience trust in news content?

Yes □

No □

Not sure □

Do you think artificial intelligence will transform how audiences consume news in the future?

Yes □

No □

Thank you for your cooperation.

APPENDIX II: INTERVIEW GUIDE

Dear Respondent,

Warm greetings. I am Alweny Catherine Magara, a student at Uganda Christian University conducting research on the role of Artificial Intelligence (AI) in newsrooms. This interview will aim to gather your professional insights on how AI tools are currently integrated into journalism, how they will influence efficiency and accuracy in news production, and the ethical dilemmas they may present.

The information you will provide will be treated with the utmost confidentiality and will be used strictly for academic purposes. Your participation will be voluntary, and your views will greatly contribute to understanding the evolving role of artificial intelligence in journalism practice.

Applications of Artificial Intelligence in news production

Please explain how artificial intelligence is currently applied in news production and reporting processes.

In your experience, how will artificial intelligence transform newsroom workflows and professional journalism practices?

Efficiency and accuracy of journalistic output

How will artificial intelligence influence the speed and accuracy of news production?

What changes in productivity and performance will media practitioners experience due to artificial intelligence adoption?

Ethical issues and challenges

What ethical concerns will arise from integrating artificial intelligence into journalism practices?

How should institutions address issues such as bias, misinformation, and accountability in automated news production?\

Audience engagement and interaction

How will artificial intelligence shape audience engagement with news content?

In your opinion, what strategies should media institutions adopt to maximize the benefits of artificial intelligence while minimizing risks?

APPENDIX III: KREJCIE AND MORGAN (1970) MATHEMATICAL TABLE

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382

95	76	270	159	750	256	2600	335	100000	384

Note:

N=Population

S=Sample