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EXPLORING THE IMPACT OF ARTIFICIAL INTELLIGENCE IN DOCUMENTING AND PRESERVING ORAL TRADITIONS ASSOCIATED WITH CHIPADZE AND MASEMBURA CHIEFTAINSHIPS IN BINDURA DISTRICT.

BY

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ABSTRACT

This study explores the impact of artificial intelligence (AI) on the documentation and preservation of oral traditions associated with the Masembura and Chipadze Chieftainships. Oral traditions constitute an important component of indigenous knowledge systems, serving as repositories of historical memory, cultural identity and social values among local communities. However, the transmission of oral traditions has increasingly been threatened by modernization, urbanization and the passing of knowledge custodians, creating an urgent need for innovative preservation methods. This research investigates how AI technologies can enhance the recording, transcribing, translating, storing, and disseminating oral narratives while assessing the opportunities and challenges associated with their use. Using a qualitative research design, the study draws on interviews, conducted with traditional leaders, elders, and community members from Masembura and Chipadze chieftainships. The findings reveal that AI has significant potential to enhance the documentation of oral traditions by improving the efficiency of audio recording, speech-to-text transcription, language preservation, and digital archiving. AI tools also create opportunities for broader access to indigenous knowledge, particularly among younger generations and researchers. However, the study also identifies concerns regarding cultural sensitivity, data ownership, misrepresentation of sacred knowledge, and the ethical implications of digitizing traditions that are often restricted to specific custodians. The study concludes that while AI presents transformative possibilities for safeguarding oral traditions, its application must be guided by culturally sensitive frameworks that respect community consent, intellectual property rights, and indigenous custodianship. It recommends collaborative approaches that integrate technological innovation with local knowledge systems to ensure that AI supports, rather than undermines, the authenticity and spiritual significance of oral traditions in Masembura and Chipadze chieftainships.

APPROVAL FORM

The undersigned certify that they have supervised the student Ottis Otilia Zhou's dissertation Entitled: **Exploring the Impact of Artificial Intelligence in Documenting and Preserving Oral Traditions Associated with Chipadze and Masembura Chieftainships in Bindura District** submitted in Partial fulfillment of the requirements of **the Bachelor of Science Honours Degree in Culture and Heritage Studies** at the **Bindura University of Science Education.**

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DECLARATION

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DEDICATION

I dedicate this dissertation to my beloved parents, Mr. R and Mrs. E Zhou, for their love and sacrifices throughout my academic journey. I also dedicate this work to my sisters Nyaradzo, Ropafadzo and Nenyasha, and to my aunt, Rudo Zhou for their unwavering support and encouragement... ***With love***

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LIST OF ABBREVIATIONS AND ACRONYMNS

AI	Artificial Intelligence
ASR	Automatic Speech Recognition
IBM	International Business Machines
ICH	Intangible Cultural Heritage
ICT	Information and Communication Technology
LIG-AIKUMA	Language Independent Group Automated Interactive Knowledge Understanding Machine Aid
NAZ	National Archives of Zimbabwe
NMT	Neural Machine Translation
NLP	Natural Language Processing
UNESCO	United Nations Educational, Scientific and Cultural Organization

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CHAPTER ONE

1.0 GENERAL INTRODUCTION

Oral traditions are an important store of cultural knowledge, history and identity among many African communities. In Zimbabwe, chieftainships such as those of Chipadze and Masembura in Bindura District are rich in oral traditions that are important in understanding the social fabrics, governance and heritage. Oral histories are made up of stories, rituals and histories passed down through generations, often without written records (Mazarire, 2009). However, changes in modernity and social dynamics are putting these important intangible cultural heritages in danger of being lost or corrupted (Kang et al. 2020). Artificial Intelligence (AI) has become a revolutionary tool in different sectors including cultural heritage preservation. AI technologies provide new opportunities for data collection, speech recognition, transcription and digital archiving of oral traditions for the purposes of their documentation and transmission (Russel and Norvig, 2021). The use of AI for documenting the oral traditions associated with the Chipadze and Masembura chieftainships presents a possibility of preserving the cultural narratives for future generations and increasing wider accessibility and scholarly engagement.

The study seeks to examine the use of Artificial Intelligence in the documentation and preservation of oral traditions in Bindura district, with a focus on the Chipadze and Masembura chieftainships. It evaluates the viability of deploying AI as a heritage preservation tool and its capacity to record the intricate details of oral narratives that are often fluid and context-specific. Moreover, the research investigates the challenges of deploying AI technology in such a cultural environment, including ethical concerns and community involvement. By conducting this investigation, the study contributes to the broader discussion on digital heritage conservation and the use of emerging technologies in safeguarding intangible cultural heritage. It also provides a case study of how AI can be applied in Zimbabwe's cultural landscapes, offering insights for policymakers, cultural practitioners and technologists interested in heritage informatics.

1.1 BACKGROUND OF THE STUDY

Oral traditions represent a fundamental aspect of intangible cultural heritage (ICH) worldwide, encompassing the values, history and identity of communities across generations. The

2003 UNESCO convention for the safeguarding of the intangible cultural heritage recognizes oral traditions including storytelling, rituals and customary practices as crucial domains if intangible cultural heritage that require urgent preservation amid rapid social and technological changes (UNESCO, 2003). This global framework underscores the importance of safeguarding the living cultural expressions to ensure cultural diversity and sustainable development.

Oral traditions in Zimbabwe, especially in the Bindura District that has chieftainships such as Chipadze and Masembura, are rich in ancestral knowledge governance systems and cultural identity (Marzarire, 2009). However, these oral traditions are at risk of extinction due to modernization, urbanization and generational changes. The population of the elders and custodians who have traditionally narrated these stories orally is waning due to natural causes and the youth are leaning more towards digital and globalized forms of communication (Chikozho, 2023).

AI creates new possibilities for documenting, analyzing, and protecting intangible cultural heritage. Natural Language Processing (NLP), speech recognition, and machine learning can help document, transcribe, and safeguard oral histories more efficiently, accurately, and sustainably (Bird, 2020). Heritage organizations worldwide are experimenting with AI-powered solutions to digitize endangered languages, automate transcriptions of oral histories, and generate metadata for digital collections (UNESCO, 2023).

The application of AI in heritage management in the Zimbabwean context is still at its infancy. Digital heritage initiatives have mostly focused on tangible heritage such as monuments, archaeological sites, and museums with less focus on intangible forms such as oral traditions associated with indigenous/local leadership systems such as chieftainship. Bindura District, which is rich in traditional leadership structures and oral cultural expressions, offers a good case for exploring how AI can complement local knowledge systems in heritage preservation.

This study therefore straddles the crossroads of heritage informatics and AI seeking to explore the protentional and challenges of the application of AI tools in documenting and safeguarding oral traditions of chieftainships in Bindura District. It foregrounds local contexts and indigenous epistemologies while aligning to global digital preservation initiatives. International bodies such as United Nations Education Scientific and Cultural Organizations and International Council on Monuments and Sites advocate digital approaches to preserve intangible cultural heritage including use of AI in documentation and archiving (UNESCO, 2023). Locally, Zimbabwe's

National Museums and Monuments of Zimbabwe and the National Archives of Zimbabwe are beginning to digitize heritage data, yet AI applications remain largely unexplored, particularly in rural areas of Bindura District.

1.2 PURPOSE OF THE STUDY

The purpose of this study is to examine how Artificial Intelligence can be used to document and preserve oral traditions related to Chipadze and Masembura chieftainship in Bindura District.

1.3 STATEMENT OF THE PROBLEM

Despite the growing potential of Artificial Intelligence in heritage preservation, the oral traditions associated with Chipadze and Masembura chieftainships in Bindura remain inadequately documented and at risk of loss due to limited use of AI technologies. Although the global recognition of intangible cultural heritage through frameworks such as UNESCO's 2003 Convention for intangible cultural heritage, there remains a lack of effective strategies to preserve and document such traditions. especially using modern technologies.

1.4 RESEARCH OBJECTIVES

• To identify the oral traditions and cultural expressions associated with Chipadze and Masembura chieftainships in Bindura District.

• To assess current methods used in documenting and preserving these oral traditions.

• To explore the possibilities of using Artificial Intelligence in the capture, analysis and archiving of oral traditions.

• To evaluate the challenges and ethics of AI use in heritage documentation within a local context.

1.5 RESEARCH QUESTION

• What are the main oral traditions linked to Chipadze and Masembura chieftainship in Bindura District?

• How are these oral traditions being recorded and preserved?

• How can AI technologies be used to better document and preserve these traditions?

• What are the challenges and ethical issues in applying AI to the intangible cultural heritage?

1.6 ASSUMPTIONS OF THE STUDY

• The study assumes that Artificial Intelligence has the potential to improve the documentation and preservation of oral traditions through efficient data capture, transcription and analysis tools.

• It also assumes that community custodians are prepared to work together to incorporate AI tools without sacrificing cultural integrity.

1.7 SIGNIFICANCE OF THE STUDY

The study is significant in the development of heritage informatics by providing insights into how emerging technologies such as AI can be leveraged in the management of intangible cultural heritage. It also addresses the urgent need to preserve Zimbabwe's oral traditions associated with the Chipadze and Masembura chieftainships, particularly in Bindura District. These oral elements, including royal greetings, succession stories and ceremonial practices, are vital components of Intangible Cultural Heritage (ICH) that are increasingly threatened by generational shifts and modernization (UNESCO, 2003). By exploring how Artificial Intelligence can be utilized in the documentation and safeguarding of such traditions, the study contributes to the protection of indigenous knowledge systems and the promotion of cultural continuity. This also responds to calls for the integration of technology in cultural heritage management in Africa where conventional methods are often found to be inadequate (Ndoro, 2005).

1.8 CONTRIBUTION TO HERITAGE 5.0

This research is aligned with the Zimbabwe education 5.0 model that promotes teaching, research, community service, innovation and industrialization (Ochmann, 2021). In the Zimbabwean context, the Heritage Based Education 5.0 curriculum is a reflection of this shift to combine traditional knowledge with Science, Technology, Engineering, Mathematics (STEM), and Innovation to promote national development (The Chronicle, Zimbabwe, 2025). The proposed dissertation makes a direct contribution to Heritage 5.0 through the use of AI in protecting intangible cultural heritage (ICH), specifically oral traditions associated with chieftainships in Bindura District, thus aligning with the pillars of the movement of culture, innovation, technology, sustainability and inclusivity.

The study aligns with Zimbabwe's Education 5.0 model that emphasizes teaching, research, community service, innovation and industrialization. The study investigates the impact of AI in documenting oral traditions associated with chieftainships and this promotes innovation in the heritage sector. It complements traditional methods of cultural preservation through the application of Al tools such as natural language processing, speech-to-text technologies and digital archiving that automate, enhance and scale the documentation of intangible cultural heritage (Bertini et al., 2021). These innovations provide new models of heritage management that are not only efficient but also accessible to future generations, align with Zimbabwe's national development goals (Ndoro, 2001).

1.9 DELIMITATION OF THE STUDY

The study is limited to Bindura District in Zimbabwe. While oral traditions associated with chieftainship exist across various regions, this research solely focuses on Bindura to allow for in-depth analysis within a manageable context. The research explores oral tradition related to chieftainship such as succession narratives, royal greetings, clan totems and installation ceremonies. Only selected Artificial Intelligence tools such as speech- to- text software, natural language processing and transcription tools will be examined for their application in documenting and preserving oral histories. The study focuses on traditional leaders, chiefs and cultural custodians in Bindura District who are directly involved in oral knowledge transmission. It does not involve the general public or unrelated community members.

1.10 LIMITATIONS OF THE STUDY

Limited access to oral knowledge, some traditional leaders may not be willing to share sacred or sensitive aspects of chieftainship, but the researcher builds trust with participants through informed consent and assure confidentiality and cultural sensitivity. Technological constraints or bias in AI tools, most AI tools are trained on western datasets and may not recognize African speech patterns or cultural nuances, to counter for this there is need to train custom AI models using local data where possible and involve human oversight in data cleaning and interpretation.

1.11 DEFINITION OF KEY TERMS

• Artificial Intelligence (AI): The simulation of human intelligence processes by machines, especially computer systems, including learning, reasoning, and self -correction (Russel and Norvig, 2020).

• Oral traditions are cultural narratives, knowledge, beliefs and practices transmitted verbally from generation to generation often through storytelling, songs or rituals (Vansina,1985).

• Chieftainship is a traditional system of leadership rooted in indigenous governance, where authority and cultural knowledge are passed down through hereditary or customary lines within communities.

• Intangible cultural heritage refers to practices, expressions, knowledge and skills that communities recognize as part of their cultural heritage including oral traditions, rituals and performing arts (UNESCO, 2003).

• Cultural heritage informatics is an interdisciplinary field that applies digital tools and information science to the collection, preservation and dissemination of cultural heritage (Cameron and Kenderdine, 2007).

1.12 DISSERTATION OUTLINE

Chapter 1

This chapter consist of:

• Introduction

• Background of the study

• Purpose of the study

• Statement of the problem

• Research question

• Assumptions of the study

• Significance of the study

• Contribution to innovation and industrialization

• Limitations of the study

• Definition of key terms

• Dissertation out line

Chapter 2

This chapter consists of literature review and theoretical frameworks.

• Overview of oral traditions in African chieftainships

• Global and regional frameworks on intangible cultural heritage (UNESCO 2003).

• Role of technology in heritage preservation.

• Artificial Intelligence in cultural documentation.

• Previous studies on ICH and AI in Zimbabwe.

• Research gaps.

CHAPTER 3

This chapter covers the research methodologies.

Case study justification

Population and sampling

Data collection methods

CHAPTER 4

This chapter covers data presentation and analysis

CHAPTER 5

This chapter covers conclusions and recommendations.

CHAPTER TWO

LITERATURE REVIEW

Artificial Intelligence technologies have transformed heritage documentation globally, enabling efficient recording, transcription, translation, and archiving of ICH (UNESCO, 2021). AI-powered speech recognition, machine learning classifiers and automated metadata systems enable the large-scale documentation of oral traditions with greater accuracy and speed (Esposito et al., 2020). AI has also enhanced the restoration of degraded audio recordings and created new possibilities for digital re-packaging of oral traditions into interactive and educational formats (Khan et al., 2022).

2.0 INTRODUCTION

This chapter reviews the scholarly literature on the use of AI for documenting and preserving Intangible Cultural Heritage (ICH), with a focus on oral traditions. AI technology enables the large-scale documentation and preservation of oral traditions with increased speed and accuracy using speech recognition, machine learning classifiers, and automated systems for meta data (Esposito et al., 2020). AI has enhanced the restoration of damaged audio recordings and created new opportunities for digitally repackaging oral traditions into interactive and educational formats (Khnai et al., 2022). The aim is to position the study within broader academic and practical discourse surrounding AI, ICH and chieftainships documentation in Zimbabwe. The chapter also present and discusses the theoretical foundation underpinning the study, including Cultural Heritage Informatics Theory. The chapter further examines global, continental and Zimbabwean literature on AI- driven heritage documentation and highlights gaps and justify this study.

2.1 THEORETICAL FRAMEWORK

A theoretical framework is a structure that guides research by relying on a formal theory (or set of theories) to explain, predict and understand phenomena and relationships within a study (Adom, Hussein and Agye, 2018). It serves as a lens through which the researcher interprets data, develops arguments and construct meaning. According to Grant and Osanloo, (2014), the theoretical framework acts as blueprint, situating the study within existing knowledge and providing a context for interpretating findings. The researcher adopts the oral tradition theory as the primary theory of this study and the cultural heritage informatics theory as a supporting theory.

The researcher chose to use these two theoretical frameworks because the study is interdisciplinary. It combines cultural heritage and Information Communication Technologies. These frameworks were purposively selected to help conceptualize, interpret and evaluate the impact of AI in documenting oral traditions associated with chieftainships. Theory of oral tradition focuses on the transmission of cultural content, while cultural heritage informatics emphasizes technological mediation and preservation. This duality enables culturally sensitive, technologically relevant research and a holistic understanding of the implications of AI on the protection of oral traditions in Zimbabwean communities.

2.1.1 ORAL TRADITION THEORY

Oral Tradition Theory evolved as a way of analyzing, interpreting and understanding orally transmitted cultural knowledge, especially in non-literate societies. The theory was largely developed by Jan Vansina, a Belgian historian and anthropologist, often considered as the father of modern oral tradition studies in Africa (Vansina 1985). In his seminal work "Oral Tradition as History" (1985), Vansina argued that oral sources are legitimate historical records that can be critically examined and interpreted like written sources. In more recent years, scholars like Ngugi wa Thiong'o have contributed by situating oral tradition within post-colonial and decolonial discourse. Ngugi (1986) argue that oral traditions are not only historical records but also vehicles of resistance, identity and cultural continuity, especially in formerly colonized societies.

Oral tradition theory explains how societies transmit cultural knowledge, values, histories, and identity through spoken forms (Finnegan, 2012). The performance, memory community involvement and context are the key elements of oral knowledge transmission (Ong, 2013). Concerning AI, scholars argue that documentation technologies must be culturally sensitive and able to capture not only verbal content but also tone, rhythm, symbolism and performance style (Leemann, 2019). This is to ensures the authenticity and avoids oversimplifying of orally transmitted knowledge.

In the context of this study, this theory provides conceptual framework for understanding the value and structure of the oral traditions associated with Chipadze and Masembura chieftainships in Bindura District. It also justifies the legitimacy of oral traditions as cultural knowledge and guides how the traditions should be ethically and accurately preserved through use of AI tools.

2.1.2 CULTURAL HERITAGE INFORMATICS THEORY

Cultural Heritage Informatics is a theoretical and practical approach that explores how digital technologies can be used to document, preserve, interpret and disseminate cultural heritage. It emerged in early 2000s alongside the broader digital transformation of the heritage and museum sectors (Cameron and Kenderdine, 2007). The theory builds on the intersection of heritage studies, information science and digital humanities (Kalayetal., 2008). As heritage institutions began adopting digital tools such as Geographical Information Systems (GIS), databases, artificial intelligence and 3D scanning, cultural heritage informatics becomes essential for managing both tangible and intangible cultural heritage. It tackles the conservation of fragile or endangered culture such as oral traditions, rituals and Indigenous Knowledge Systems (Giaccard, 2012).

Cultural heritage informatics is concerned with accessibility, ethical digitization, and community participation, mirroring UNESCO's efforts to safeguard intangible cultural heritage by means of innovative methods of documentation and transmitting (UNESCO, 2003).

Cultural Heritage Informatics Theory is concerned with the use of digital tools, information systems and computational methods to organize, preserve, and share cultural heritage (Kalay, 2008). It conceptualizes cultural heritage as structured data that can be digitized, stored, accessed, and analyzed using technologies like AI, machine learning, and digital archiving systems (Cameron and Kenderdine, 2007). This theory allows the application of AI tools such as automatic speech recognition (ASR), natural language processing (NLP) and machine learning models to accurately document and archive oral narratives in the context of oral traditions (Jones and Christal, 2010). These systems are useful in minimizing information loss, ensuring long-term preservation and improving access for future generations.

2.2 HISTORY OF AI USE IN DOCUMENTING ORAL TRADITIONS

Documentation of oral traditions has evolved from manual recording and transcription to the use of sophisticated digital and AI technologies. Historically, oral narratives, songs and cultural knowledge were stored through field recordings, handwritten notes and manual transcription by researchers (Finnegan, 1970). Early digital technologies were mainly used as storage media for audio recordings of oral histories and folklore (Dwyer, 2006).

Oral traditions have been recorded in Zimbabwe by historians, anthropologists and folklorists using analogue recorders and written transcripts. Preservation has been largely left out to cultural

custodians, elders and researchers who collected oral narratives, praise poetry and chieftainship histories (Hodza, 1979; Fortune, 1981).

In the 1990s and early 2000s, speech recognition technologies advanced, representing a major step in the direction of AI-supported documentation. The systems were designed mostly for major global languages and did not perform well on African languages but were a step toward automated transcription and digital preservation (Pieraccini, 2012; Bird, 2020).

The advances in machine learning and natural language processing technologies from 2010 to 2020 have led to the documentation of previously under-resourced languages. Countries such as Australia, Canada, Kenya, Tanzania and India have increasingly adopted AI systems to transcribe, analyse and preserve oral traditions (Thieberger, 2016; Christen and Anderson, 2019; Bird, 2020). Recently, deep learning and large language technologies have improved the accuracy of transcription, translation and analysis of oral traditions, creating new opportunities for the preservation of indigenous knowledge systems (UNESCO, 2021; Zhang et al., 2022).

Although there is a growing interest in the use of AI for cultural heritage preservation in Zimbabwe, the absence of digital infrastructure and language datasets, as well as the limited technological resources, still hamper the broad application of AI-based heritage documentation (de Schryver, 2018; Nekoto et al., 2020).

Europe

In Europe AI has been used to document oral traditions in Basque and Gaelic (Agerri et al, 2018) and in Asia, UNESCO-backed initiatives have used machine learning to catalogue endangered stories and chants (UNESCO, 2022). European projects have used machine learning to classify cultural materials and to increase accessibility (Fresa, 2019). Speech technologies are employed in the Nordic countries to preserve endangered dialects and oral history archives (Hämäläinen and Alnajjar, 2021).

More and more, AI is being used to document and preserve oral traditions, with advancements in recording, transcribing, translating, and analyzing spoken heritage materials. Using speech-recognition systems, AI can transcribe stories, songs and genealogies in endangered European

languages such as Scottish Gaelic, Basque and Sámi languages which have historically passed down clan histories and local leadership narratives (MacLeod 2020). Machine - learning algorithms also restore old audio recordings, making deteriorated field tapes of storytellers, clan bards, and folk singers clearer and more accessible (García & Etxeberria 2019). In Europe, AI has supported several heritage initiatives, for example, projects in Scotland use AI- assisted transcription to preserve Gaelic oral histories related to clan traditions and community memory (UNESCO, 2023). In the Basque Country, neural network translation models help catalogue traditional bertsolaritza (improvised sung poetry) and oral narratives, ensuring accessibility for younger speakers (UNESCO, 2023). Similarly, in Sápmi, AI tools classify and annotate joik1 traditional Sámi vocal expressions helping to maintain indigenous oral heritage threatened by language loss (UNESCO, 2023).

Asia

AI has been crucial in documenting indigenous languages and traditional performances in Asia. For instance, India employs AI speech recognition to revive tribal languages (Patnaik, 2020), and Japan uses machine learning to preserve the cultural heritage of the Ainu people (Sato, 2021). Similar efforts in China apply AI to preserve operas and oral epics (Zhang & Li, 2020).

Asia is treasure trove of the world's most vibrant oral traditions epics, chants, folk songs, ritual performances, storytelling lineages, and community histories. As rapid urbanization, digitization, and language endangerment accelerates, AI has become a vital tool to support the preservation of this intangible cultural heritage (UNESCO, 2023). AI has been used for recording and transcribing Oral Traditions. Automated Speech Recognition for Asian Languages AI-powered speech recognition systems are increasingly used to transcribe oral narratives in languages with limited written resources, examples include, Hinglish and regional Indian languages (Hindi, Bengali, Tamil) where AI models are trained on code-mixed speech to capture folk tales and oral histories (UNESCO, 2023). used to record ethnic storytelling traditions such as Cantonese, Mandarin, and minority Chinese languages as Miao, Yi and Dong singing cultures (UNESCO, 2023). Philippines Indigenous languages (e.g. Ifugao, Kankanaey), in which AI speech tools are used to document oral narratives and traditional songs of the Ifugao and Kankanaey communities, help encode epic chants like Hudhud (Bird et al.,2020) These tools significantly reduce the time and cost of transcription and improve accuracy for low-pressure languages.

AI is also used on linguistic preservation and translation. AI supports the preservation of endangered languages by transcribing, translating and digitally archiving oral traditions. An important technology used in this is Neural Machine Translation, an AI-based translation system that uses deep learning algorithms to automatically translate spoken or written language while preserving contextual meaning. For instance, in Indonesia, scholars employ Neural Machine Technology (NMT) to translate Javanese and Sundanese oral histories into Bahasa Indonesia and English for digital myg (Universitas Gadjah Mada, 2021). AI translates Ainu oral narratives (kamuy yukar) into Japanese, preserving cultural-specific metaphors (UNESCO, 2023) in Japan. These systems facilitate academic research and cultural revitalization efforts.

New research shows that AI is widely used to restore and improve audio, with old field recordings, often on cassette tapes or reel tapes, being restored using AI-based noise reduction, frequency reconstruction and speech enhancement technologies. For example, the Vietnam Folk Music Digital Archive uses machine learning to enhance recordings of catrù, quanhọ, and ethnic minority chants, many of which were recorded between the 1960s and 1980s (Vietnam Institute of Musicology, 2020). This process ensures that older materials remain usable for both researchers and cultural communities.

Studies show that AI can support the narrative pattern analysis, machine learning helps identify recurring themes, motifs, and structures across Asia's large oral corpora for example, AI analysis of Indian epics identifies regional variations in Ramayana and Mahabharata storytelling practices (Indira Gandhi National Centre for the Arts, 2021). In Central Asia, NLP tools classify Kazakh, Kyrgyz, and Uzbek epic poetry by performance style and thematic elements (UNESCO Silk Roads Programme, 2022).

AI creates interconnected data systems linking storytellers, locations, story characters, ritual contexts, and historical timelines. The Korea National Heritage Database uses AI to map relationships among performers of p'ansori and other oral traditions, linking biographies with audio samples and geographic origins (Cultural Heritage Administration of Korea, 2022).

AI-guided VR recreates traditional settings for oral performances. In Mongolia, VR environments simulate the traditional greeting for epic recitations (tuuli), allowing youth to experience disappearing cultural contexts (UNESCO, 2021).

When used ethically, AI voice models reproduce extinct or endangered performance styles without replacing the current performers. Japanese researchers use AI to model the vocal styles of late master chanters of Heike Monogatari to support training and research (UNESCO, 2023) Local communities work with technologists to document and protect oral traditions using AI-enhanced mobile apps. Indigenous communities in Nepal are developing AI-enabled tools to record and transcribe oral histories in the Gurung, Tamang and Tharu languages (UNESCO Kathmandu Office, 2023). Orang Asli groups in Malaysia are working with researchers to create AI-assisted archives of myths, chants and customary laws (Bird et al., 2020). Projects such as these foster community ownership and cultural sovereignty.

The literature reviewed indicates a growing use of AI technologies in Asia for the preservation of oral traditions. However, the success of these technologies depends on community engagement, linguistic resources, and ethical considerations related to cultural ownership (UNESCO, 2023).

East Africa

There is a rise in digital preservation in East Africa through the use of AI-based linguistic tools. East African projects are increasingly using digital language technologies to help document oral histories and indigenous languages (Bird, 2020; UNESCO, 2022). These technologies enable faster and more accurate transcription than manual methods.

In recent years, East African universities and research institutions have been gradually building speech datasets and language technologies to facilitate the preservation and digital documentation of indigenous languages (Nekoto et al., 2020). Community digital heritage projects have also shown the promise of AI-assisted tools to support indigenous language learning and documentation (UNESCO, 2022).

The Makerere Radio Speech Corpus project in Uganda collected 155 hours of radio recordings in Luganda to aid Automatic Speech Recognition (ASR) for an almost entirely oral and under-reported language (Mukiibi et al., 2022). This work translates spoken broadcasts into a machine-processable format, allowing for the documentation and future analysis of oral speech patterns, dialogue and heritage narratives among Luganda speakers.

In East Africa, AI is increasingly used to document languages and oral tradition adjacent heritage through speech datasets, ASR models and mobile apps. While most projects emphasize language

preservation rather than direct ritual/ceremonial documentation, they lay important groundwork for capturing verbal cultural heritage. These initiatives demonstrate that AI can transform how oral traditions are preserved but also point to the need for more explicit focus on oral tradition genres (e.g., chieftainship greetings, ritual speech) and stronger community involvement.

Southern Africa

Southern African countries have gradually explored digital technologies for documenting indigenous languages and oral traditions (De Wet and Niesler, 2018). Although adoption levels vary, AI has been shown to increase the depth and accessibility of documentation across Southern Africa.

Countries of Southern Africa including Zimbabwe, South Africa and Botswana have rich oral traditions comprising praise poetry, folktales, proverbs, initiation songs and royal genealogies (Finnegan, 1970; Chabata, 2011). In the past, these were recorded using analogue methods such as tape recordings which required manual transcription that was labour intensive (Bhebhe and Ngoepe, 2012). However, such methods are limited in scale and accessibility. AI provides a scaleable solution, however the development of models to support under-resourced, tonal and agglutinative languages typical of Southern Africa (e.g., Shona, Ndebele, Setswana, Zulu) remains a major challenge (Nekoto et al., 2020). Through partnerships such as AI for Cultural Heritage, UNESCO has promoted the development of digital tools for safeguarding oral traditions inAfrica including pilot AI documentation projects in South Africa (UNESCO, 2022).

The main AI technologies are: Automatic Speech Recognition (ASR) - Converts speech to text and is useful for transcribing oral narratives. Models are being trained on Bantu languages, though data scarcity is a challenge (Adams et al., 2019). Natural Language Processing (NLP) - helps in analysing, interpreting and translating oral texts while preserving meaning, context and nuance (Bird et al., 2020). Machine Learning - allows AI systems to improve over time as they are exposed to more data from the oral language. Many Southern African languages lack digital corpora, which hampers the training of ASR and NLP (Besacier et al., 2014).

2.2.1 AI IN THE DOCUMENTATION OF ORAL TRADITIONS IN ZIMBABWE

Traditionally, heritage documentation in Zimbabwe has been through interviews, handwritten notes and audio recordings (Ndoro, 2005; UNESCO, 2021). Despite the increasing interest in digital technologies for cultural preservation in many African heritage contexts, the use of AI in documentation remains limited (UNESCO, 2020; Bird, 2020). Some local initiatives have led to digital archiving of folklore and development of speech corpora for the Shona and Ndebele languages (Mavunga, 2021). AI can be used to transcribe oral traditions such as lineage histories, praise poetry, rituals and myths. However, the implementation of AI tools is hindered by difficulties such as lack of infrastructure, limited language datasets and the absence of locally developed AI models (Bird, 2020; Nekoto et al., 2020).

2.3 GAP ANALYSIS OF THE RESEARCH

There is still little scholarly use of AI technologies in rural African heritage communities and traditional leadership institutions (Bird, 2020; UNESCO, 2023). There is also lack of AI tools developed for local languages, leading to poor transcription accuracy (de Schryver, 2018). Studies emphasize the need for greater participation of cultural custodians and local communities in digital heritage preservation initiatives (Cameron and Kenderdine, 2007). While significant progress has been made globally, very slight scholarly attention has been given to the use of AI in documenting specific oral traditions in local African contexts. Even those found in Zimbabwean chieftainships like Chipadze and Masembura in Bindura District. Most AI-driven projects have focused on more prominent or widely spoken African languages, leaving a gap in localized and community-specific oral heritage (Nekoto et al, 2020).

The existing studies have looked into the use of AI in language preservation, digital archiving and heritage documentation. Little has been done on the use of AI in documenting oral traditions of Zimbabwean chieftainship. There is little knowledge on the community perceptions on AI driven indigenous knowledge systems' preservation. This study aims to fill these gaps by focusing on Chipadze and Masembura chieftainships in Bindura District.

2.4 CHAPTER SUMMARY

In this chapter, theoretical frameworks and literature on global, regional and local use of AI in heritage documentation have been reviewed. It has shown that although AI has made incredible steps in ICH preservation elsewhere, Zimbabwe still faces significant infrastructural, linguistic and cultural acceptance challenges. The identified research gaps justify the present study's focus on exploring AI's role in documenting oral traditions associated with chieftainships within Chipadze and Masembura communities.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.0 INTRODUCTION

This chapter outlines the research design and methodology adopted to investigate the impact of artificial intelligence on documenting and preserving oral traditions within the Chipadze and Masembura chieftainships in Bindura District. The chapter describes the techniques employed for data collection, analysis and interpretation in line with the study's objectives. The selected methods are justified with regard to their strengths, limitations and ethical implications to ensure methodological rigour and trustworthiness.

3.1 RESEARCH DESIGN

A research design is a systematic plan that serves as a guide for the collection, measurement and analysis of data in a study. According to Creswell (2014), a research design is the overall plan for conducting research, incorporating philosophical assumptions, strategies of inquiry and specific methods. This study adopted a qualitative case study research design. Qualitative research is appropriate as it prioritizes the interpretation of meanings, experiences, and socially constructed realities (Creswell and Creswell, 2023). Oral traditions are not static data sets but dynamic cultural expressions embedded within specific historical and social contexts therefore, they require an interpretive and context sensitive approach. Unlike ethnography, which requires long-term immersion and cultural participation, this research used interviews, questionnaires, and desktop research. The strength of the case study design is that it can provide rich, contextual insights. The limitation is that findings cannot be generalized statistically. This study addresses this limitation by analytical generalization, where the findings contribute to broader discussions on AI and cultural heritage management. This study used exploratory research to gain an initial understanding of how AI is being used in the selected communities. The topic is relatively new and not yet well defined in existing literature, thus requiring flexible and open-ended inquiry which is appropriate. This approach allowed the researcher to identify emerging themes, perceptions and challenges from participants such as traditional leaders. The benefit of using case study approach in this study is that it enables an in-depth exploration of the impact of AI in documenting oral traditions associated with Chipadze and Masembura chieftainships. This approach also enables the

collection of rich data from multiple sources including traditional leaders, community members and ICT experts, improving the reliability of findings. It also helps to unearth how AI is impacting the preservation, transmission and authenticity of oral heritage in these specific chieftainships. During the study the researcher encountered several challenges in scheduling interviews with participants due their busy commitments and limited availability, which affected face to face data collection. As a result, desktop research was used to consult existing documents and literature to supplement primary data. In addition, Google Forms was employed to collect responses from participants, particularly the youth who preferred this method, as it allowed them to access and complete the interview questions conveniently through a shared link.

3.2 RESEARCH METHODOLOGY

Research methodology refers to the systematic framework that guides the collection, analysis, and interpretation of data (Creswell and Creswell, 2023). It ensures coherence between the research problem, methods, and findings. A research technique is a specific tool used in a particular context within this framework to collect or analyze data (Edlund and Nichols, 2024). In qualitative research, techniques such as interviews, observation, and document analysis are critical for producing in-depth insights. This study adopts a multi-method qualitative approach, combining semi-structured interviews, passive observation, and desktop research. The use of multiple techniques allows for methodological triangulation, which enhances the validity of findings through cross-verification of data from different sources (Snyder, 2019). Importantly, the use of multiple methods also offsets the weaknesses of individual techniques. For instance, while interviews obtain perceptions, these can be subjective; observation provides behavioral data but may lack context; and desktop research offers theoretical grounding but may not reflect local realities. Their combined use ensures a more balanced and comprehensive analysis.

3.3 POPULATION STUDY

The population of this study includes all individuals within the Chipadze and Masembura chieftainships in Bindura District who are directly involved in the transmission, preservation, and documentation of oral traditions. These includes chiefs, AI professionals and intangible cultural heritage practitioners. These individuals are considered key knowledge holders because they

possess deep understanding of historical narratives, rituals, artificial intelligence and community practices. The sample is drawn from this population and represents a subset of participants selected based on their ability to provide rich, relevant, and insightful information pertaining to the research objectives. In qualitative research, samples sizes are generally smaller than in quantitative studies because the focus is on depth and richness of data rather than statistical generalization (Palinkas et al., 2020).

Due to difficulties in scheduling meeting time, the researcher sampled the population. The targeted population was thirty participants however the number was eventually lowered to twenty-one (21) who were the traditional leaders, elder community members, AI professionals, youth in computer science and intangible cultural heritage practitioners. This includes, two traditional leaders (Chiefs), four elders recognized for storytelling and cultural knowledge, community members actively involved in cultural ceremonies and oral tradition documentation. Five individuals with experience in using or interacting with AI tools and two people who are actively involved in the documentation of intangible cultural heritage in Zimbabwe. The selected sample ensures that the study captures multiple perspectives while maintaining cultural sensitivity and logistical feasibility.

3.3.1 POPULATION SAMPLE

In research, a population sample refers to the entire group of individuals or elements that share common characteristics relevant to a study. According to Creswell and Creswell (2023), a population sample is the complete set of participants from which a researcher intends to draw conclusions. In this study, the population comprised all individuals within the Chipadze and Masembura chieftainships who are involved in the preservation, transmission and documentation of oral traditions, as well as individuals with expertise in AI. This study ensured representation of both indigenous knowledge holders and technological experts, which is central to the study. Sampling was necessary in this study for several reasons, it was not practical to study the entire population, as the communities are large and diverse. According to Creswell and Creswell (2023), sampling allow researchers to collect manageable yet meaningful data. Thirty respondents were nominated for interviewing and twenty-one responded. The researcher administered four set of questionnaires, with each participant group receiving a version specifically tailored to their roles

and expertise. The questions were designed to capture relevant perspectives from traditional leaders, community elders, AI experts, youth in computer science and intangible cultural practitioners.

3.3.2 SAMPLING METHODS

These are ways for sampling data in a study. The study employed purposive and snowball sampling techniques when dealing with the target population.

3.3.3 PURPOSIVE SAMPLING

This study uses purposeful sampling, a non-probability sampling technique where participants are chosen based on specific traits, knowledge, or experience relevant to the research questions (Etikan et al., 2016; Palinkas et al., 2020). Purposive sampling is suitable for qualitative research because it enables the researcher to focus on individuals who can provide rich, detailed, and contextual data, which is crucial when exploring complex cultural phenomena like oral traditions and AI-based preservation. The researcher used purposive sampling because the study seeks participants with specific knowledge of oral traditions and their transmission, which is not uniformly distributed across the population. Elders and cultural custodians are therefore intentionally selected. Certain ceremonies and oral narratives are restricted to specific members of the community. Purposive sampling enables the researcher to ethically identify those with legitimate access to these practices.

The study also pursues depth rather than breadth. By targeting participants most relevant to the research objectives, the researcher collected rich and meaningful data without unnecessary dilution. Alignment with case study method, in a case study design, purposive sampling enables the exploration of bounded systems (the two chieftainships) in detail, focusing on participants who provide the most insight into the phenomenon under investigation (Creswell and Poth, 2018). Limitations of purposive sampling, while purposive sampling ensures relevance and depth, it may limit the generalizability of the findings. Findings reflect the experiences and views of selected participants and do not necessarily represent the whole population. However, in qualitative research, transferability (applying findings to similar contexts) is considered more

appropriate than statistical generalization (Palinkas et al., 2020). Twenty-one people participated in this study.

3.3.4 SNOWBALL SAMPLING

Snowball sampling is a non-probability sampling technique in which existing study participants recruit or offer other participants who possess relevant characteristics for the study. It is particularly useful when the target population is difficult to access or not easily identifiable. According to Palinkas et al. (2020) snowball sampling is highly effectives in qualitative research where depth of information is more important than representatives. It allows researchers to access information-rich participants via social networks. The technique was necessary in this research because knowledge of oral traditions is not evenly distributed within the community and is often held by specific individuals who are not publicly identifiable. Snowball sampling therefore allowed the researcher gain accesses to culturally relevant and trusted participants, ensuring the collection of rich data, authentic and contextually grounded data.

3.4 DATA COLLECTION INSTRUMENTS

These are instruments utilized by the researcher in the field to gather data concerning the topic under study. The study utilized desktop research, semi-structured interviews, passive observation and questionnaires as key data collection instruments. Desktop research provided secondary data and theoretical grounding, while interviews generated in depth qualitative insights from participants. Passive observation enabled the capture of natural practices within the community and questionnaires collected standardized responses. The use of multiple instruments enhanced data reliability through triangulation.

3.4.1 DESKTOP RESEARCH

Desktop research refers to the review of existing literature and secondary data to inform the study (Snyder, 2019). In this research, it forms a critical foundation for understanding artificial intelligence and its application to cultural heritage preservation. The study looks at recent literature on AI technologies such as speech recognition, machine learning, and digital archiving, as well as their application to documenting intangible cultural heritage. This allows the researcher to locate

the study within global discourses while pointing to gaps specific to the Zimbabwean context. A major strength of desktop research is its ability to provide theoretical depth and comparative perspectives. It also allows for triangulation by comparing primary data with existing studies. However, the use of secondary data can lead to bias if the sources are outdated or not contextually relevant. To mitigate this, the study focuses on recent and credible sources (2019-2025) and critically evaluates their applicability. Desktop research utilized a variety of e-resource. These include online databases such as Google scholar and other e-resources available through the Bindura University of Science Education library portal.

3.4.2 QUESTIONNAIRE

The researcher used questionnaires and published a total of 14 closed questionnaires (see Annexure A). Questionnaires, allowed respondents to express their ideas independently and fearlessly, and without restraint, which eliminated the possibility of bias. The questionnaire was in closed-ended questions. The questionnaire was simply summarized and the answers were simple and straight. Researchers chose these because they provide useful information and are easy to use. All questionnaires were completed and returned. They were used as supplementary data collection tool to support qualitative findings obtained through semi- structured interviews, passive observations and desktop research.

3.4.3 SEMI-STRUCTURED INTERVIEWS

In this study, the researcher relied on semi-structured interviews for data collection. A semi-structured interview, allows the interviewer to explore deeper into particular topics or responses while still answering a predetermined set of open questions. Semi-structured interviews are a flexible qualitative data collection method that combines guided questions with the freedom to explore, emerging themes (Braun and Clarke, 2021). This flexibility is important in studies of oral traditions where information is often passed on in stories and not in strict question formats. In this research, interviews were held with traditional leaders, community elders, AI specialists and custodians of culture in the Chipadze and Masembura chieftainships. These are significant knowledge holders who provide a perspective on traditional practices of preservation and perceptions of AI.

To ensure relevance and depth, different interview guides were developed for each category of participants, for example, traditional leaders and elders were asked questions focusing on the nature, transmission and preservation of oral traditions, while AI experts were asked about technological tools, digital preservation methods and the role of AI in cultural heritage documentation. Intangible cultural heritage practitioners were asked questions related to documentation practices, authenticity and challenges of integrating technology with tradition.

The strength of semi-structured interviews lies in their ability to generate rich, detailed and contextually grounded data (Bhangu et al., 2023). This gives participants a voice to express their views on sensitive questions such as cultural ownership, authenticity and the potential risks of digitising oral traditions. However, this method is not without its drawbacks. Responses may be subject to social desirability bias, particularly when discussing sensitive cultural issues or power dynamics. Additionally, power dynamics between the researcher and participants may affect openness. To address these challenges, the researcher ensure confidentiality, builds rapport, and adopts culturally appropriate communication practices. The full set of interview guide used for different participant groups is provided in Annexure B. The interview questions were prepared in English, but they were also explained in indigenous language to ensure clarity and better understanding among participants. The response was later translated and presented in English for consistence in analysis and reporting.

3.4.4 PASSIVE OBSERVATION

Passive observation involves observing participants in their natural setting without direct interaction or interference (Angrosino, 2020). This method is particularly valuable in cultural research, where active participation may disrupt traditional practical. In this study, passive observation was used to examine the use of AI in documenting intangible cultural heritage, rituals, and cultural ceremonies within the Chipadze and Masembura chieftainships. It enables the researcher to capture how oral traditions are performed and how, AI tools are integrated into these practices. The main advantage of passive observation is its capacity to generate authentic and non-reactive data that mirror real cultural practices (Marshall and Rossman, 2021). This is especially true in the study of oral traditions, which are profoundly influenced by context, performance, and audience participation. Passive observation has a number of drawbacks. The researcher might

misinterpret behaviours without input from participants, and some meanings might remain hidden without direct engagement. Some cultural practices may also be inaccessible. To overcome these limitations, observational data are complemented with interview data, allowing for deeper interpretation and validation.

3.5 DATA ANALYSIS

Data collected from interviews, observation and desktop research were analyzed using thematic analysis. This involved identifying, coding and interpreting patterns within qualitative data. (Braun and Clarke, 2021). Thematic analysis was chosen as it provides flexibility while maintaining analytical rigor. It enables the researcher to identify key themes such as technological adoption, cultural authenticity, community perceptions and challenges in integrating AI into oral tradition preservation. Critically, the researcher adopts a reflexive approach to thematic analysis, acknowledging that theme development is influenced by the researcher's perspective. To enhance trustworthiness, the study employs strategies such as careful coding, comparison across data sources, and maintaining an audit trail of analytical decisions.

3.6 ETHICAL CONSIDERATIONS

Ethical considerations in this study ensured informed consent, confidentiality and respect for participants cultural values throughout the research. Participants were, particularly given the sensitivity of oral traditions and indigenous knowledge systems. All participants signed informed consent forms and the aim of the study was explained in detail. Attached is the consent form used in this study (Annexure C). The researcher adhered to cultural protocols and received permission from traditional authorities prior to engaging with the community. Confidentiality and anonymity were maintained. The study critically acknowledges the ethical issues relating to the use of AI in digitizing oral traditions including ownership, consent and potential misuse. Ethical research practice therefore extends beyond data collection to include responsible representation and use of cultural knowledge (Bhangu et al., 2023).

The study also considered the ethical issues around the use of AI in the documentation of oral traditions. Issues of ownership, consent and potential misuse of cultural knowledge were carefully

considered. The researcher ensured that the information collected would not be used for exploitation or misrepresentation but strictly for academic purposes.

3.7 CHAPTER SUMMARY

This chapter outlined the research methodology used in this study, including the qualitative case study design, sampling techniques and data collection methods such as interviews, observation and desktop research. It also explains the use of thematic analysis and highlighted the ethical considerations observed, with relevant annexures referenced.

CHAPTER FOUR

DATA PRESENTATION AND ANALYSIS

4.1 DATA PRESENTATION

The data presented in this chapter is structured in accordance with the qualitative research approach adopted for this study. The findings were organized thematically, guided by the research objectives and key issues that emerged during data collection. Data obtained from interviews, questionnaires, observation and desktop research are presented in a systematics manner to ensure clarity and coherence.

4.2 DEMOGRAPHIC INFORMATION OF RESPONDENTS

The study included a diverse group of respondents drawn from Bindura District, comprising of traditional leaders, youth, AI specialists and ICH practitioners. These participants were selected based on their direct involvement, knowledge and experience with oral traditions, cultural practices within the study area.

Traditional leaders were purposively selected due to their role as custodians of indigenous knowledge and oral history. Youth participants were incorporated to assess intergenerational knowledge transfer and their engagement with Artificial Intelligence. Additionally intangible cultural heritage practitioners were selected for their technical understanding of documentation and preservation process.

The selection of these respondents was guided by purposive sampling ensuring that individuals with rich, relevant and diverse perspectives were included. This approach enhanced the depth and credibility of the data by capturing both traditional and contemporary viewpoints on the use of artificial intelligence in preserving oral traditions.

Table 1: DEMOGRAPHIC DATA OF RESPONDENTS BY PROFESSIONAL CATEGORY

Youth	5	To capture the perspective of younger generations on cultural preservation, digital engagement and their awareness of emerging technologies such as AI

Intangible cultural heritage practitioners	3	To provide insights into traditional knowledge systems and practice of oral traditions.
Chiefs and community elders	8	They are the custodians of culture and they have authority over oral traditions within communities
AI experts	5	To offer technical expertise on the application of AI in documentation and preservation of oral traditions.

The inclusion of both elders' technology experts enabled the researcher to compare traditional methods of preserving oral traditions with emerging AI based approaches.

4.3 CUSTODIANSHIP AND MANAGEMENT OF ORAL TRADITIONS

The management and custodianship of oral traditions within the study area are characterized by interconnected roles among community members. Data collected from interviews indicate that leaders and elders are regarded as the primary custodians of indigenous knowledge, including oral histories, cultural practices and spiritual narratives. These participants emphasized that oral traditions are communally owned and are passed down through generations using informal methods such as storytelling and community gatherings.

Custodian of oral traditions regarding chieftainships in Zimbabwe rests primarily with traditional leaders (chiefs, headman and village heads), elders and spirit mediums who serve as the living archives of lineage, territory and cultural identity. These oral histories are vital for resolving succession disputes, are managed through community dialogues, customary rituals and increasingly through documentation in The National Archives of Zimbabwe (NAZ) and scholarly publications to complement colonial records. The traditional leaders Act (Chapter 29:17) formalizes the role of this local administration, encompassing their authority to uphold these traditions. Oral traditions and oral evidence remain central in reconstructing chieftainship histories

validating claims to traditional authority in Zimbabwe (Bishi, 2019). These findings support Oral Tradition Theory, which argues that cultural knowledge is transmitted and preserved through continuous social interaction and oral performance.

4.4 TRADITIONAL METHODS OF PRESERVING ORAL TRADITIONS

One of the major themes emerging from the study was the continued importance of traditional methods in preserving oral traditions within the Chipadze and Masembura chieftainships. Participants highlighted that oral traditions have historically been preserved through storytelling, praise poetry, ceremonies and direct teaching from elders. One community elder from Chipadze explained during the interview that:

"Isusu chivanhu chedu tinochichengetedza mumagariro edu, vana vanozviona nekuzvidzidza pavanoona tichizviita. Uyezve mukuudzwa nyaya kuti humambo hwedu takahuwana sei. Uyezve tinorarama chivanhu. Semuenzaniso, panoripiswa munhu atyora murairo wechisi kana vanenge vaita chipini munhu wese anenge achiona saka izvi zvinobatira pakuchengetedza chivanhu chedu". (Responded A. 27/04/2026).

English translation

"Our oral traditions were preserved through storytelling and practicing in our daily life. Practicing our culture is also a way of preserving it because generations to come will also be raised aware of the cultural practices."

Traditional leaders indicated that oral traditions are not merely information but sacred cultural knowledge that requires proper cultural context during transmission. Participants expressed concern that modernization and urbanization are weakening intergenerational knowledge transfer, as young people are no longer actively participating in cultural activities. A respondent from Masembura chieftainship highlighted that:

"Chivanhu chedu chiri kutoita chichifa nekuti takatora vana vadiki kuti tivabvunze havatozivekuti humambo hwedu isusu hwakabva nekupi nekuti zvinofambiswa sei pakugadzwa kwaMambo zvinofamba sei. Nekuti havachinei nazvo. Responded B. 21/04/2026

English translation

“Our culture is slowly dying because many young people no longer know the history of our chieftainships, the installation process of chiefs, or the importance of oral traditions of our community. Most of them no longer show interest in learning or preserving these traditions.”

These findings reveal the vulnerability of oral traditions due to declining participation by younger community members.

4.5 AWARENESS AND UNDERSTANDING OF AI

The research found varying levels of awareness and understanding of AI among participants. AI experts and youth in computer science demonstrated a strong understanding of AI technologies such as speech recognition systems, machine learning, digital archiving and automated transcription tools. However, many elders and some traditional leaders possessed limited technical term, several participants understood AI through practical examples such as mobile phone voice assistants, translationn systems and social media algorithms. One participant explained that:

“AI can help store voices, the voices of elders before that knowledge disappears.” Responded E 25/04/2026.

Youth participants generally viewed AI positively and considered it an important tool for modern cultural preservation. In contrast, some elders expressed the deeper meanings and spiritual significance embedded within oral traditions. The findings indicate a generational divide regarding perception of AI, where younger participants are more open to technological integration while older participants remain cautious.

4.6 THE ROLE OF AI IN DOCUMENTNING ORAL TRADITIONS

The findings revealed several ways in which AI can contribute to the documentation and preservation oral traditions.

4.6.1 SPEECH RECOGNITION AND AUDIO TRANSCRIPTION

Participants identified speech recognition technology as one of the most useful AI applications for documenting oral narratives. AI-powered transcription tools can convert spoken stories, songs and interviews into written text more efficiently than manual transcription. AI experts explained that

speech-to-text technologies can assist researchers in preserving large volumes of oral data within shorter periods of time. This is particularly important because many cultural custodians are elderly and some oral knowledge risks disappearing with time.

Challanges were identified regarding language recognition accuracy. Participants noted that many AI systems struggle to accurately recognize the indigenous languages, accents and dialects commonly used in Zimbabwean communities. This finding support cultural heritage informatics theory, which emphasized the use of digital technologies to improve the preservation, accessibility and management of cultural heritage resources.

4.6.2 DIGITAL ARCHIVING AND STORAGE

Another important theme was the use of AI-based digital archiving systems. Participants stated that AI can assist in organizing, storing and retrieving cultural materials such as recorded interviews, photographs, videos and historical documents. ICH practitioners highlighted that digital archives reduce the risk of losing important oral histories through death, migration or environmental destruction. AI systems can also categorize cultural information automatically, making retrieval easier for future generations and researchers. Desktop research findings further confirmed that many countries are increasingly adopting digital preservation systems to safeguard indigenous knowledge and intangible cultural heritage.

4.6.3 TRANSALATION AND LANGUAGE PRESERVATION

Participants also identified AI-powered translation technologies as potentially useful in preserving indigenous languages associated with oral traditions. Some respondents explained that AI systems may assist in translating oral narratives from Shona into English while maintaining accessibility for broader audiences.

However, participants expressed concern that literal machine translation may distort cultural meanings, idioms and symbolic expressions found within oral traditions. Elders stressed that cultural interpretation requirees human understanding and lived experience beyond automated translation. One elder stated during the interview that:

"Aaaaaa iyo AI yenyu inochinja zvinhu iyi ichiwedzeredza, chivanhu chedu tinoda chirambe c hakachengetedzeka zvakanaka chisina kuwedzeredzwa kana kubviswa zvimwe." (Responded C 21. 04.2026).

English translation

"AI changes things by adding information that was not part of the original tradition, which can affect the authenticity of our cultural narratives".

The concerns raised by participants demonstrate the need for human oversight when applying AI to culturally sensitive knowledge systems. The findings therefore suggest that AI should complement rather than replace human cultural interpreters.

4.7 PERCEPTIONS TOWARDS THE USE OF AI IN CULTURAL PRESERVATION

The study revealed mixed perceptions concerning the use of AI in documenting oral traditions.

4.7.1 POSITIVE PERCEPTIONS

Many participants believed that AI offers significant opportunities for preserving endangered cultural knowledge. Participants highlighted that AI can, preserve knowledge permanently through digital storage. It can also help improve accessibility of oral traditions through digital archives. Assisting younger generations in learning cultural history, since young children are now living in the technological world it will be easy for them to learn these oral traditions with AI. Research also finds out that the use of AI helps to reduce the time required for documentation. It also s supports educational and academic research. Youth participants particularly viewed AI as a bridge between modern technology and indigenous heritage. They argued that digital platforms may encourage younger people to reconnect with traditional culture.

4.7.2 NEGATIVE PERCEPTIONS AND CONCERNS

Despite the potential benefits, participants also expressed several concerns regarding the use of AI. Loss of cultural authenticity is one of the negative perceptions from the elders' Traditional leaders feared that digitization may remove the spiritual and emotional depth associated with oral

performances. Participants argued that oral traditions are not only words but involve tone, gestures, sacred spaces and community participation.

Ownership and misuse of cultural knowledge, participants expressed concern that digitally stored cultural information may be accessed or exploited without community consent. Some feared that sacred knowledge could be commercialized or misrepresented online. One of the elders from Chipadze said:

"Hapana chakaipa pakushandisa AI asi chakaipa ndezvinozofunga nekuitwa nemunhu kana achinge anzwa, semuenzaniso tinenge tataura kuti musadai kana mapinda mugomo iro rinoyera mumwe munhu anogona kupindamo kuti aite zvacho zviri kurambidzwa, hazvizoite zvakanaka." (Responded D 27/04/2026.)

English translation

"AI itself is not necessarily harmful, but the major concern is what people may do after gaining access to culturally sensitive information, sacred cultural knowledge could be misused, dis torted once it becomes publicly accessible online."

Research found that in Zimbabwe there are technological limitations, AI professionals acknowledged that many AI systems are designed primarily for dominant global languages and may not effectively processs indigenous, African languages and cultural contexts.

There is also limited access to technology, participants from rural communities highlighted challenges such as poor internet connectivity, limited digital infrastructure and lack of technological resources, which may hinder AI implementation.

4.8 CHALLENGES AFFECTING THE INTEGRATION OF AI IN ORAL TRADITIONS PRESERVATION

The findings identified several challenges affecting the successful integration of Artificial Intelligence (AI) into cultural heritage preservation within the Masembura and Chipadze Chieftainships. These challenges influence the effectiveness, accessibility, and sustainability of AI technologies in documenting and preserving oral traditions.

4.8.1 FINANCIAL CONSTRAINS

Participants stated that acquiring advanced recording equipment, digital storage systems, stable internet connectivity, and AI software requires significant financial investment. Limited funding remains a major barrier for rural communities and cultural institutions. Many communities lack the financial capacity to purchase modern technologies such as high-quality audio recorders, cameras, computers, and cloud storage systems necessary for digital preservation. In addition, maintaining AI systems requires continuous software updates, electricity, internet access, and technical support, all of which increase operational costs.

Respondents also highlighted that government and institutional funding for cultural heritage projects is often inadequate, making it difficult to implement long-term AI preservation initiatives. Some participants expressed concern that dependence on donor funding may affect the sustainability of projects once external support ends. As a result, valuable oral traditions remain under-documented and vulnerable to disappearance due to limited financial resources.

4.8.2 LACK OF TECHINICAL SKILLS

The study found that many traditional custodians lack the digital skills necessary to operate AI technologies effectively. This leads to a reliance on external experts who may not fully appreciate the local cultural contexts. Elder custodians of oral traditions, often the main knowledge holders, may struggle with digital devices, recording software and online preservation platforms.

Participants also indicated there are few training and capacity-building programs in rural communities on AI technologies and digital heritage preservation. The lack of technical expertise affects the collection, storage, management and interpretation of oral data. In some cases, technological errors can lead to poor quality recordings or loss of important cultural information.

The findings also revealed that younger generations who are digitally literate often lack interest in traditional cultural practices, thus creating a divide between technological skills and indigenous knowledge. Therefore, successful AI integration requires community programs that combine technological education with cultural awareness.

4.8.3 ETHICAL AND CULTURAL SENSITIVITIES

Some oral traditions are sacred and cannot be freely recorded or shared publicly, participants noted. Traditional leaders highlighted the need to respect cultural protocols and obtain community consent prior to digitizing cultural materials. Some rituals, songs, stories and spiritual practices are closely guarded secrets which are only shared with select members of the community.

AI technologies could be used to misuse, distort or gain illicit access to sacred knowledge if appropriate safeguards are not put in place. Some participants feared that digital platforms could be used by outsiders to commodify or misappropriate Indigenous cultural knowledge without community consent, leading to cultural exploitation and loss of ownership over traditional heritage.

The study also highlighted that ethical concerns around intellectual property rights, data ownership and cultural representation remain challenging in AI-assisted preservation efforts. Participants emphasized the need for collaborative approaches that engage communities in decisions on the documenting, storing and dissemination of their oral heritage. For AI to be effectively and ethically used in safeguarding oral traditions, it must respect indigenous values, customs and governance systems.

4.8.4 INSUFFICIENT INDIGENOUS LANGUAGE SUPPORT

Another major challenge identified by the study in the integration of AI in oral tradition preservation was insufficient indigenous language support. Participants indicated that many AI systems and digital preservation tools are developed mainly for dominant international languages such as English, with little consideration or capacity to process indigenous languages spoken in the Masembura and Chipadze chieftainships. This limits the efficacy of AI technologies in accurately capturing, translating and preserving oral traditions expressed in local languages.

The respondents pointed out, “often contain unique expressions, metaphors, idioms and cultural meanings that AI systems may not be able to interpret correctly. As a result, important cultural information may be distorted or lost in the transcription and translation processes.” Some traditional terms and spiritual concepts, participants continued, have no direct equivalents in foreign languages, making it difficult to accurately document them digitally.

The findings further revealed that the absence of indigenous language databases and language-processing models limits the use of AI technologies in their proper functioning in local cultural contexts. The participants expressed concern that the predominance of foreign languages on digital platforms might cause the marginalization and eventual disappearance of indigenous languages and cultural identity among the youth.

Participants thus emphasized the importance of AI systems that are sensitive to indigenous languages and embed local cultural knowledge, which would improve the accuracy, inclusivity, and cultural sensitivity of AI-powered oral tradition preservation initiatives.

4.9 DISCUSSION OF FINDINGS

The findings of this study show that AI has great potential to assist in the documentation, preservation and promotion of oral traditions among the Chipadze and Masembura chieftainships. The research revealed that AI technologies such as speech recognition systems, digital archiving platforms, automated transcription tools and machine translation applications provide novel and efficient means of preserving endangered cultural knowledge. These technologies can enable communities to preserve oral narratives, traditional songs, folktales, proverbs, praise poetry and indigenous histories in digital formats that are more accessible for storage, retrieval and intergenerational sharing. The findings also revealed that AI has the potential of improving the speed and accuracy of documenting oral traditions compared to traditional manual methods that are often time-consuming and costly.

Moreover, the study showed that AI-enhanced digital archiving systems can improve access to cultural materials for researchers, educators, and local communities. Oral traditions, which were previously confined to physical encounters or the custody of elders, can now be digitally recorded and preserved in online repositories for long-term conservation. This opens doors for cultural education, academic research, and intergenerational learning. Participants also pointed to the role AI technologies can play in increasing global awareness of African cultural heritage by providing wider audiences with access to oral traditions via digital platforms. In this context, the study demonstrates that AI is not merely a tool for preservation but also a method for culture promotion and revitalization.

Nevertheless, the findings also point to some limitations of using AI to protect oral traditions. The study found that AI cannot completely substitute for traditional methods of cultural transmission, which are heavily reliant on human interaction, spiritual significance, emotional expression, and lived cultural experiences. Oral traditions are intrinsically rooted in social and cultural contexts that involve performance, symbolism, collective participation, and spiritual interpretation. Participants emphasized that certain aspects of oral traditions, such as sacred rituals, gestures, tone, emotion, and cultural symbolism, may be difficult for AI systems to effectively record and interpret. Therefore, the study recommends that technology should be used as a supplement, not a substitute, for indigenous systems of knowledge preservation.

The results also revealed a number of practical challenges that basket the adoption of AI technologies for cultural preservation in Zimbabwean communities. These challenges include poor technological infrastructure, poor internet connectivity, lack of funding, low digital literacy levels, and the limited availability of AI systems for African languages. The study recognized that most of the existing AI technologies are developed using Western languages and datasets, which makes them less effective in processing indigenous African languages and dialects. This presents a significant gap in the digital preservation of oral traditions in rural communities such as Chipadze and Masembura. Participants highlighted the need to develop locally relevant AI systems that resonate with African cultural realities, languages, and knowledge systems. A further important finding of the study relates to ethical considerations in the use of AI in documenting oral traditions.

The study initiates that there are concerns on ownership, consent, privacy, and potential abuse of indigenous cultural knowledge. Community members expressed fears that digital recordings and archived materials could be accessed, commercialized, or manipulated without the permission of traditional custodians. The findings therefore emphasize the need for ethical frameworks that protect the intellectual and cultural rights of indigenous communities. Successful use of AI for cultural preservation relies on collaboration between technology developers, researchers, traditional leaders, cultural custodians and local communities to ensure the respectful and responsible use of cultural material.

The research also adds to the wider arguments by scholars that modern technology should complement indigenous knowledge systems in protecting cultural heritage. Rather than viewing AI as a replacement for traditional cultural practices, the findings suggest that it should be seen as

a supportive tool, which augments existing preservation efforts. The research highlights the importance of balancing technological innovation with cultural sensitivity in order to maintain the authenticity and integrity of oral traditions. Ultimately, the findings indicate that artificial intelligence offers valuable opportunities for preserving and revitalizing oral traditions within the Chipadze and Masembura chieftainships, provided that its application remains community-centered, ethically guided, and culturally sensitive.

4.10 CHAPTER SUMMARY

This chapter presented and analyzed the findings gathered from participants regarding the impact of artificial intelligence in documenting and preserving oral traditions within the Chipadze and Masembura chieftainships. The findings revealed that oral traditions continue to play a significant role in preserving cultural identity despite challenges posed by modernization. The study established that artificial intelligence offers opportunities for digital preservation, transcription, translation and archiving of oral traditions. However, concerns regarding authenticity, ownership, ethical issues and technological limitations were also identified. The next chapter presents the conclusions and recommendations of the study.

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

5.0 INTRODUCTION

This chapter presents the summary of the study, conclusions drawn from the research findings and recommendations based on the research objectives. The study investigated the impact of artificial intelligence in the documentation and preservation of oral traditions associated with Chipadze and Masembura chieftainships in Bindura District. The chapter also highlights areas for further research concerning artificial intelligence and indigenous cultural heritage preservation.

5.1 SUMMARY OF THE STUDY

The study explored the role of artificial intelligence in the documentation and preservation of oral traditions within the Chipadze and Masembura chieftainships. The research was motivated by growing concerns regarding the gradual loss of indigenous knowledge, cultural practices and oral histories due to modernization, urbanization and declining intergenerational transmission of cultural knowledge.

The study adopted a qualitative case study research design because it allowed the researcher to gain an in-depth understanding of participants' experiences, perceptions and cultural realities. Data was collected through semi -structured interviews, questionnaires, passive observation and desktop research. Participants included traditional leaders, community elders, youth in computer science, artificial intelligence professionals and intangible cultural heritage practitioners. The collected data was analyzed using thematic analysis.

The findings of the study revealed that oral traditions continue to play an important role in preserving cultural identity, history and social values within the Chipadze and Masembura communities. Traditional methods such as storytelling, rituals, ceremonies and oral teachings remain central in transmitting indigenous knowledge from one generation to another. However, the study established that oral traditions are increasingly under threat due to lack of interest among younger generations, modernization and technological changes. Many participants expressed concern that younger people are no longer actively learning about the history of their chieftainships, cultural ceremonies and indigenous practices.

The study also found out that artificial intelligence has the potential to significantly contribute to the preservation of oral traditions. Effective AI tools for capturing and conserving oral stories and cultural data involve speech recognition, automated transcript creation, digital archiving, and language translation systems. Nevertheless, there were a number of reservations expressed by the participants regarding the application of AI to cultural preservation. Such reservations pertain to the dilution of cultural authenticity, misrepresentation of sacred knowledge, ethical considerations concerning ownership and consent, technological gaps, and inadequate support for indigenous African languages.

The findings also revealed that although younger participants tended to have positive views on AI, many older participants were still wary about relying heavily on technology to preserve oral traditions. Participants emphasized that AI should complement rather than replace traditional cultural transmission systems.

5.2 CONCLUSIONS

The study findings suggest that oral traditions still have a significant role to play in cultural identity and indigenous knowledge preservation in the Chipadze and Masembura chieftainships. Oral traditions still document historical accounts, leadership structures, social values and spiritual beliefs within the communities. The study also concludes that oral traditions are under serious threat from modernization, globalization and decreasing participation of the youth in cultural activities. The gradual waning of interest among the younger generations poses a threat to the continuity of indigenous knowledge systems.

The study also highlights the potential of AI to aid in the documentation and preservation of oral traditions. AI technologies can enhance the efficiency of recording, transcribing, storing, and retrieving oral cultural information. Digital preservation techniques may also contribute to safeguarding endangered oral histories for future generations. Similar observations have been made in the studies on digital heritage preservation and AI-assisted cultural documentation (UNESCO, 2023; Bird, 2020). However, the study emphasizes that artificial intelligence alone cannot fully capture the deeper cultural, spiritual, and emotional aspects of oral traditions. Cultural knowledge is deeply connected to human interaction, performance, lived experiences, and community participation, which cannot be entirely replaced by technology. Ethical considerations

are paramount in the use of AI in cultural heritage preservation. Issues of ownership, consent, access, and protection of sacred knowledge must be carefully addressed to avoid exploitation and misuse of indigenous cultural information.

Finally, the study concludes that the successful integration of AI into oral tradition preservation needs collaboration among traditional leaders, local communities, cultural practitioners, researchers and technology experts.

5.3 RECOMMENDATIONS

The following recommendations are proposed based on the findings and conclusions of the study:

5.3.1Promotion of Youth Participation in Cultural Activities

Traditional leaders and communities should actively encourage young people to participate in storytelling sessions, cultural ceremonies and traditional educational practices. Youth engagement programs should be introduced to strengthen appreciation of indigenous heritage and oral traditions.

5.3.2 AI Should Complement Traditional Preservation Methods

AI should not replace but complement traditional methods of preserving oral tradition. Oral teaching, rituals and community participation should be used in parallel with digital recording, transcription and archiving.

Development of Indigenous Language AI Systems Technology developers and researchers should prioritize the development of AI systems that support indigenous Zimbabwean languages and dialects. Improved language recognition systems will contribute to more accurate and effective documentation of oraltraditions.

5.3.3 Establishment of Community-Controlled Digital Archives

Communities should establish culturally controlled digital archives to preserve oral histories and sacred cultural knowledge. Access to sensitive cultural information should remain under the authority of traditional leaders and community custodian to prevent misuse and exploitation.

5.3.4 Training and Capacity Building

Training workshops should be conducted to equip traditional leaders, cultural practitioners and c community members with digital skills necessary for using AI technologies effectively in cultural preservation.

5.3.5 Government and Institutional Support

The government, universities and cultural heritage institutions should provide financial and technological support for projects aimed at preserving oral traditions through digital technologies and artificial intelligence.

5.4 AREAS FOR FURTHER RESEARCH

This study focused on the Chipadze and Masembura chieftainships in Bindura District. Future studies could consider geographical expansion to other Zimbabwean communities to compare experiences and perceptions of the use of AI to preserve oral traditions.

Further research should explore the effectiveness of indigenous language translation systems using AI as well as the creation of ethical frameworks for safeguarding indigenous cultural knowledge in digital environments. Further research can also focus on the role of social media and digital platforms in the preservation of oral traditions and community perceptions of the preservation of digital cultural heritage in rural Zimbabwe as well as the impact of AI on authenticity and ownership of indigenous knowledge systems. Further research could also explore the creation of ethical frameworks for safeguarding indigenous cultural knowledge in digital environments.

Finally, more research is needed to understand the implications of artificial intelligence for authenticity, ownership, intellectual property rights and the long-term sustainability of indigenous knowledge systems.

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APPENDICES

ANNEXURE A QUESTIONNAIRE

BINDURA UNIVERSITY OF SCIENCE EDUCATION
Department of Culture and Heritage Studies

Research Topic: Exploring the Impact of Artificial Intelligence in Documenting and Preserving Oral Traditions Associated with Chipadze and Masembura Chieftainships in Bindura District.

Participant Consent
Your participation is voluntary. All responses will be treated confidentially and used solely for academic purposes. Please tick (☐) the appropriate response and provide comments where necessary.

SECTION A: DEMOGRAPHIC INFORMATION

1. Gender: ☐ Male ☐ Female ☐ Prefer not to say

2. Age Group: ☐ 18–25 ☐ 26–35 ☐ 36–45 ☐ 46–55 ☐ 56 and above

3. Participant Category: ☐ Traditional Leader ☐ Community Elder ☐ Youth ☐ AI Expert ☐ ICH Practitioner

4. Chieftainship: ☐ Chipadze ☐ Masembura ☐ Other _____

5. Highest Level of Education: ☐ Primary ☐ Secondary ☐ Diploma ☐ Degree ☐ Postgraduate

SECTION B: ORAL TRADITIONS AND CULTURAL EXPRESSIONS

6. Which oral traditions are commonly practiced in your community? ☐ Storytelling ☐ Clan Praise Poetry ☐ Folk Tales ☐ Traditional Songs ☐ Rituals and Ceremonies ☐ Succession Narratives ☐ Totem Histories ☐ Other _____

7. How important are oral traditions in preserving your community's identity? ☐ Very Important ☐ Important ☐ Neutral ☐ Less Important ☐ Not Important

8. Who are the main custodians of oral traditions in your community? ☐ Chiefs ☐ Elders ☐ Spirit Mediums ☐ Families ☐ Community Members

SECTION C: CURRENT METHODS OF DOCUMENTATION AND PRESERVATION

9. How are oral traditions currently preserved in your community? ☐ Storytelling ☐ Community Gatherings ☐ Ceremonies ☐ Written Records ☐ Audio Recordings ☐ Digital Platforms ☐ Other _____

10. Do you think the current methods are effective? ☐ Very Effective ☐ Effective ☐ Moderately Effective ☐ Ineffective ☐ Very Ineffective

11. What challenges affect the preservation of oral traditions? ☐ Modernization ☐ Urbanization ☐ Lack of Youth Interest ☐ Death of Knowledge Holders ☐ Lack of Documentation ☐ Financial Constraints ☐ Other _____

SECTION D: AWARENESS AND UNDERSTANDING OF AI

12. Have you heard of Artificial Intelligence (AI)? ☐ Yes ☐ No

13. If yes, where did you learn about AI? ☐ School/University ☐ Internet ☐ Social Media ☐ Workplace ☐ Other _____

14. How would you rate your understanding of AI? ☐ Excellent ☐ Good ☐ Fair ☐ Poor ☐ None

SECTION E: ROLE OF AI IN DOCUMENTING ORAL TRADITIONS

15. Which AI applications could assist in preserving oral traditions? ☐ Speech-to-Text Transcription ☐ Language Translation ☐ Digital Archiving ☐ Audio Restoration ☐ Voice Recognition ☐ Data Storage Systems

16. Do you believe AI can improve the documentation of oral traditions? ☐ Strongly Agree ☐ Agree ☐ Neutral ☐ Disagree ☐ Strongly Disagree

17. In what ways can AI contribute to preserving oral traditions?

_____
_____

18. Do you think AI can help younger generations access cultural knowledge? ☐ Yes ☐ No ☐ Not Sure

SECTION F: PERCEPTIONS TOWARDS AI IN CULTURAL PRESERVATION

19. What is your overall perception of using AI in preserving oral traditions? ☐ Very Positive ☐ Positive ☐ Neutral ☐ Negative ☐ Very Negative

20. Would you support the use of AI in documenting oral traditions in your community? ☐ Yes ☐ No ☐ Not Sure

21. Explain your answer:

_____
_____

SECTION G: CHALLENGES AND ETHICAL CONSIDERATIONS

22. What concerns do you have regarding the use of AI in preserving oral traditions? ☐ Loss of Cultural Authenticity ☐ Misrepresentation of Traditions ☐ Data Ownership Issues ☐ Unauthorized Access to Sacred Knowledge ☐ Lack of Technical Skills ☐ High Costs ☐ No Concerns

23. Should community consent be required before documenting oral traditions using AI? ☐ Yes ☐ No ☐ Not Sure

24. What measures should be taken to protect indigenous knowledge when using AI?

_____
_____

SECTION H: RECOMMENDATIONS

25. What recommendations would you make for the successful integration of AI in documenting and preserving oral traditions?

_____
_____
_____

ANNEXURE B INTERVIEW QUESTIONS

Interview Questions for Youth

1.In your daily life or academic work, what forms of AI technologies do you currently use, and how confident are you in applying them to new contexts such as cultural preservation?

2.What oral traditions associated with the Chipadze and Masembura Chieftainships are you aware of, and how did you come to know about them?

3.How do you think these oral traditions are currently being documented and preserved, what gaps or challenges do you observe in the present methods?

4. What is your view on using artificial intelligence to document and preserve oral traditions in Bindura District, particularly those linked to the Chipadze and Masembura Chieftainships?

5. What ethical concerns should be considered when using AI to record, store, or analyze sacred or sensitive cultural knowledge?

6. If you were to design an AI-based system for capturing and preserving these traditions, what features or functions would you prioritize?

Questions for ICH practitioners

1. From your experience working with intangible cultural heritage in Zimbabwe, what key oral traditions, both nationally and within communities such as Chipadze and Masembura have been documented so far, and which remain undocumented or at risk?

2. What methods, tools, or approaches are currently used across Zimbabwe to document and preserve oral traditions (for example, audio/video recording, transcription, community archives, institutional repositories), and how do these methods apply to chieftainship-related traditions?

3. Are AI or digital technologies currently being used in Zimbabwean heritage documentation initiatives? If so, how are they being applied, and what gaps or opportunities have you observed in practice?

4. In your professional view, how could AI technologies such as speech recognition, automated transcription, language processing, or digital preservation systems be used to strengthen the documentation and preservation of oral traditions linked to Zimbabwean chieftainships?

5. What challenges, limitations, or ethical concerns might arise when applying AI to sensitive cultural knowledge in Zimbabwe, especially traditions connected to lineage, rituals, or chieftainship authority?

6. What strategies or recommendations would you propose to ensure that the integration of AI into Zimbabwe's heritage documentation process is culturally appropriate, inclusive, and supportive of community ownership and control?

Interview Questions for Elders and Chiefs

1. Can you describe the history and origins of your chieftainship, including key oral traditions, rituals, and narratives that are passed down across generations?

2. What specific oral traditions, stories, ceremonies, or customary practices do you consider most important to the identity of your chieftainship?

3. How have these oral traditions traditionally been documented, preserved, or safeguarded within your community over the years?

4. To your knowledge, have any of your oral traditions been formally recorded (audio, video, written transcripts) by institutions, researchers, or community members? If yes, how was this done?

5. What are your views on using modern technologies such as digital recording tools, computers, or even artificial intelligence to document and preserve your oral traditions?

6. What concerns, risks, or ethical issues do you think may arise if AI or digital technologies are used to collect, store, or interpret your sacred or cultural knowledge?

Interview Questions for AI Specialists

1. From your perspective, which types of oral traditions such as succession narratives, praise poetry, origin stories, rituals, and conflict resolution customs are most suitable for AI supported documentation, particularly in contexts like Chipadze and Masembura chieftainships?

2. What AI tools or technologies do you believe are most effective for capturing, transcribing, storing, and analyzing oral traditions that are currently preserved mainly through manual recordings in Zimbabwe?

3. In your professional experience, how can AI be applied to enhance the accuracy, accessibility, and long-term preservation of oral traditions associated with traditional leadership structures?

4. What challenges do AI systems face when dealing with indigenous languages such as Shona, especially local dialects spoken in Bindura District, and how might these challenges affect the preservation of oral traditions?

5. What ethical issues should be considered when using AI to document sacred or restricted cultural knowledge within chieftainship structures, and how can these issues be mitigated?

6. Based on current trends, how do you see AI evolving in the next decade in relation to safeguarding intangible cultural heritage in Zimbabwe, and what innovations might particularly benefit communities such as Chipadze and Masembura?

ANNEXURE C INFORMED CONSENT FORM

Research Title: The Impact of Artificial Intelligence in the Documentation and Preservation of Oral Traditions Associated with Chipadze and Masembura Chieftainships in Bindura District.

I am a student at Bindura University of Science Education conducting research on the above topic. You are invited to participate in this study by completing a questionnaire or taking part in an interview.

Your participation is voluntary. You may refuse to participate or withdraw at any time without any penalty. Information provided will be treated confidentially and used solely for academic purposes. Your identity will not be disclosed in the final report.

By signing below, you confirm that you understand the purpose of the study and voluntarily agree to participate.

Participant's Name: _____

Signature _____

Date: _____

Researcher: Ottis Otilia Zhou

Signature: _____

BINDURA UNIVERSITY OF SCIENCE EDUCATION

FACULTY OF SOCIAL SCIENCES AND HUMANITIES

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DEPARTMENT OF CULTURE AND HERITAGE STUDIES

13 November 2025

TO WHOM IT MAY CONCERN

RE: REQUEST TO UNDERTAKE RESEARCH IN YOUR ORGANISATION

This serves to introduce the bearer, Zhou Otilia Ottis, Student Registration Number B222631B, who is a **BSc Honours Degree in Culture and Heritage Studies** student at Bindura University of Science Education and is carrying out a research project in your area/institution.

May you please assist the student to access data relevant to the study, and where possible, conduct interviews as part of a data collection process.

Yours faithfully

BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF SOCIAL SCIENCES & HUMANITIES
DEPARTMENT OF CULTURE & HERITAGE STUDIES
20 NOV 2025
PRIVATE BAG 1020, BINDURA, ZIMBABWE

M.E Sagiya (Dr)
Acting Chairperson