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Dissertation Exposé

eHealth in South Africa: Data Protection Law and Traditional African Medicine

Field of study: Information Law

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1. Introduction

The African continent has a young and rapidly growing population of 1.4 billion people; the United Nations predicts that this number will double by the year 2050.¹ As Africa's population continues to grow, the current state of the region's healthcare system, shortage of health resources and the increased burden of disease are set to be major challenges to overall development and safety of the region.² The Corona-virus pandemic further illustrated shortcomings in the African health sector, such as, inadequate resources, lack of necessary equipment and lack of health services in relation to the needs of the population.³ As a result, most Africans rely on private healthcare; additionally, approximately 80% of Africans regularly consult with private Traditional Healers and Herbalists.⁴ The World Bank reports that the private healthcare sector; also consisting of traditional medicine delivers approximately half of Africa's health products and services.⁵

The potential for development in the African healthcare sector has resulted in rapid technological development in recent years. The year 2020 saw a boom in African private technology start-ups focused in the healthcare sector. HealthTech investment reached \$106.7 million USD in 2020, across 62 funding rounds, and represented 12% of all disclosed investment rounds on the continent.⁶ Capital for health tech start-ups increased by 257.5% from 2019 to 2020.⁷ This digital growth has also entered in to the traditional medicine sphere with more Traditional Healers adopting HealthTech tools.

This boom in HealthTech on the Continent, although positive for development, sheds light on the increasing gap between regulation and innovation as well as the fragmented data protection framework that governs the processing of data related to health. Furthermore, the rapid modernisation and digitalisation of Traditional African Medicine will inevitably lead to increased processing of sensitive health data through automated and electronic means. This triggers the need to evolve African data protection law beyond pre-existing paradigms. To address these concerns, this study aims to answer the central question: *is the current data protection framework in Africa adequate*

¹ United Nations, 'World Population Prospects 2019' (2019)

<https://population.un.org/wpp/Publications/Files/WPP2019_Highlights.pdf>.

² United Nations Department of Public Information, 'Africa Renewal, Healthcare Systems: Time for a Rethink' (2016)

<https://www.un.org/africarenewal/sites/www.un.org.africarenewal/files/Africa_Renewal_En_Dec2016_Mar2017_0.pdf>.

³ Gizachew A Tessema and others, 'The COVID-19 Pandemic and Healthcare Systems in Africa: A Scoping Review of Preparedness, Impact and Response' (2021) 6 BMJ Global Health <<https://gh.bmj.com/content/6/12/e007179>>.

⁴ Sianga Mutola, Ngambouk Vitalis Pemunta and Ngo Valery Ngo, 'Utilization of Traditional Medicine and Its Integration into the Healthcare System in Qokolweni, South Africa; Prospects for Enhanced Universal Health Coverage' (2021) 43 Complementary Therapies in Clinical Practice 101386.

⁵ Ludi Joseph, 'Health Care in Africa: IFC Report Sees Demand for Investment' (Ifc.org2019)

<https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/healthafricafeature>.

⁶ The Baobab Network, 'Baobab Insights | HealthTech Africa Market Map 2021' (Baobab Insights28 June 2021)

<<https://insights.thebaobabnetwork.com/africa-healthtech-2021-technology-market-map/>> accessed 17 February 2022.

⁷ The Baobab Network, 'Baobab Insights | HealthTech Africa Market Map 2021' (Baobab Insights28 June 2021)

<<https://insights.thebaobabnetwork.com/africa-healthtech-2021-technology-market-map/>> accessed 17 February 2022.

for the digitalisation of African Traditional Medicine? This central question will be addressed using South Africa as a case study.

2. Current State of Research

In the current academic discourse, there is existing research documenting the development of African data protection law. Studies have been conducted on the significance of e-Health in the African context. Extensive research on the regulation and adoption of Traditional African Medicine is also evident in the current academic discourse. However, these are few research projects that combine these three topics and focus on the intersection between data protection law, innovation, digital health and Traditional African Medicine. Furthermore, few studies investigate the real-life impact of recent developments in data protection law on Africa's rapidly modernising traditional medicine ecosystem. This study aims to fill the gap by focusing this discussion on data protection, digital health and traditional medicine, with the goal of producing sector specific value in the South African context. This section of the exposé outlines the current state of research regarding data protection law in Africa, Traditional African Medicine and Africa's eHealth ecosystem.

2.1 African Data Protection Law

Scholars such as Alex Makulilo have written in detail about the historical development of data protection law in different African jurisdictions.⁸ In the South African context, the case of *O'Keefee v Argus Printing and Publishing Co Ltd*⁹ is often cited as the starting point of this legal domain. Decided in the 1950s, this case resulted in the recognition of an independent right to privacy in South African common law of delict.¹⁰ In the post-colonial and democratic era, the right to privacy was included in most African Constitutions and Bills of Rights as a fundamental right,¹¹ including in Section 14 of the South African Constitution.¹² In Africa, the post-colonial and democratic legislative period marked an era of hope for democratic governance, respect for human rights and the end of European colonial domination. Therefore, the recognition of the right to privacy at this time in history is significant. Although the right to privacy and the right to data protection are distinct, in the African context, constitutional privacy has provided the normative basis for the adoption of data protection

⁸ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

⁹ 1954 (3) SA 244(C).

¹⁰ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

¹¹ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

¹² Constitution of the Republic of South Africa, 1996.

legislation.¹³ As a result, data protection law has developed on a regional, sub-regional and national level.

The general tracking of developments in African data protection law has been a prominent line of academic research. Scholars such as Greenleaf and Cottier¹⁴ have analysed the African Union's Convention on Cyber-Security and Personal Data Protection (the Malabo Convention)¹⁵ as the basis of the legal framework on data protection, from a regional level. From a sub-regional perspective, Greenleaf and Cottier have investigated the impact of legal documents on data protection developed by sub-regional bodies, namely ECOWAS (Economic Community of West African States),¹⁶ SADC (Southern African Development Community),¹⁷ CEMAC (Economic and Monetary Community of Central Africa)¹⁸ and EAC (East African Community).¹⁹ From a national perspective thinkers and legal practitioners such as, Cooper, Choi, Mkhize and Schneidman have traced and commented on newly enacted data protection laws in different African countries.²⁰ On a national level, this thesis will focus predominately on developments in South African data protection law, specifically the Protection of Personal Information Act (POPIA)²¹, which took effect on 1 July 2021.

Through the tracking of these developments, two important lines of research can be identified, namely, the European influence on African data protection law²² and the fragmentation of data protection law on the continent.²³ Most scholars analyse these issues from a general and theoretical point of view. This study aims to enhance existing literature by providing a sector specific and practical perspective in the context of eHealth and Traditional African Medicine.

¹³ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

¹⁴ Graham Greenleaf and Bertil Cottier, 'International and Regional Commitments in African Data Privacy Laws: A Comparative Analysis' (2022) 44 Computer Law & Security Review.

¹⁵ Convention on Cyber Security and the Protection of Personal Data 2014.

¹⁶ Directorate of Communication, 'Economic Community of West African States (ECOWAS)' (*Economic Community of West African States (ECOWAS2016)*) <<https://www.ecowas.int>>.

¹⁷ SADC, 'Southern African Development Community: Home' (*Sadc.int2022*) <<https://www.sadc.int>> accessed 17 February 2022.

¹⁸ COMMUNAUTÉ ÉCONOMIQUE ET MONÉTAIRE DE L'AFRIQUE CENTRALE, 'Economic and Monetary Community of Central Africa (CEMAC) – Mapping African Regional Cooperation – European Council on Foreign Relations' (*ECFR9 October 2020*) <<https://ecfr.eu/special/african-cooperation/cemac>> accessed 17 February 2022.

¹⁹ East African Community, 'East African Community' (*www.eac.int2022*) <<https://www.eac.int>> accessed 17 February 2022.

²⁰ Witney Schneidman and others, 'Tech Regulation in Africa: Recently Enacted Data Protection Laws' (*Inside Privacy: Updates on developments in data privacy and cyber security* 9 December 2021) <<https://www.insideprivacy.com/data-privacy/tech-regulation-in-africa-recently-enacted-data-protection-laws/#:~:text=The%20Republic%20of%20South%20Africa%27s>>.

²¹ Protection of Personal Information Act 2013.

²² Alex B Makulilo, "'One Size Fits All': Does Europe Impose Its Data Protection Regime on Africa?' (2013) 37 Datenschutz und Datensicherheit - DuD <https://www.researchgate.net/publication/257704023_One_size_fits_all_Does_Europe_impose_its_data_protection_regime_on_Africa>.

²³ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

2.2 Traditional African Medicine

The practice of Traditional African Medicine has a long history, dating back to the pre-colonial era and earlier. The World Health Organisation (WHO) defines Traditional African Medicine as “the knowledge, skills and practises based on the theories, beliefs and experiences indigenous to different cultures”.²⁴ This indigenous knowledge is used for the holistic maintenance of health and the prevention, diagnosis, improvement or treatment of physical and mental illnesses.²⁵ The practice of Traditional African Medicine differs based on region, tribe and culture. Furthermore, the practice is organised into different levels of speciality, namely divination, spiritualism and herbalism.

Traditional Healers are the practitioners of Traditional African Medicine. Traditional healers vary in expertise and in their practices of traditional medicine based on the culture, beliefs and knowledge that is prevalent in their specific community.²⁶ Traditional Healers are referred to differently, based on their culture and tribe. In Nigeria, Traditional Healers may be referred to as *babalawo* or *dibia*, in South Africa they are called *sangoma* or *inyanga* and *shaman* or *laibon* in Kenya.

The impact of colonisation on Africa from a social, economic and political perspective is widely researched and discussed. Scholars have identified the significant impact of colonialism on indigenous knowledge systems, especially on the practice of Traditional African Medicine.²⁷ Traditional African Medicine was stigmatised, marginalised and in some cases outlawed by colonial powers. Ali Arazeem explains that the introduction of Western medicine resulted in a “cultural-ideological clash”, giving rise to the stigmatisation and marginalisation of medical practices that were indigenous to the colonised people.²⁸ Colonial powers such as the British, Portuguese and French dismissed African Traditional Medicine as inferior and based in superstitions or “witchcraft”.²⁹ This dismissal was rooted in racism and the perceived inferiority of indigenous people and their belief systems.³⁰ There was a lack of understanding and an unwillingness to acknowledge the value of indigenous practices; this resulted in

²⁴ World Health Organization, ‘Traditional Medicine’ (WHO | Regional Office for Africa 2017) <<https://www.afro.who.int/health-topics/traditional-medicine>>.

²⁵ World Health Organization, ‘Traditional Medicine’ (WHO | Regional Office for Africa 2017) <<https://www.afro.who.int/health-topics/traditional-medicine>>.

²⁶ Ezekwesili-Ofili Josephine Ozioma and Okaka Antoinette Nwamaka Chinwe, ‘Herbal Medicines in African Traditional Medicine’ [2019] Herbal Medicine <<https://www.intechopen.com/books/herbal-medicine/herbal-medicines-in-african-traditional-medicine>>.

²⁷ Ali Arazeem Abdullahi, ‘Trends and Challenges of Traditional Medicine in Africa’ (2011) 8 African Journal of Traditional, Complementary and Alternative Medicines <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252714/>>.

²⁸ Ali Arazeem Abdullahi, ‘Trends and Challenges of Traditional Medicine in Africa’ (2011) 8 African Journal of Traditional, Complementary and Alternative Medicines <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252714/>>.

²⁹ Jacob Mapara, ‘Indigenous Knowledge Systems in Zimbabwe: Juxtaposing Postcolonial Theory’ (2009) 3 The Journal of Pan African Studies <<https://www.jpanafrican.org/docs/vol3no1/3.1%20Indigenous%20Knowledge%20Systems%20in%20Zimbabwe.pdf>>.

³⁰ Kristina Monroe Bishop, ‘Anglo American Media Representations, Traditional Medicine, and HIV/AIDS in South Africa: From Muti Killings to Garlic Cures’ (2010) 77 GeoJournal 571.

the systematic suppression of Traditional African Medicine.³¹ For example, in South Africa the Apartheid government banned traditional medical systems. The now amended Witchcraft Suppression Acts of 1957 equated traditional medicine to the practice of witchcraft and therefore found it to be unconstitutional and illegal.³²

Changes begun to emerge in the post-independence era as decolonial theory, popularised by political philosophers and activists such as Frantz Fanon³³, reshaped the discourse. Decolonial theory advances the argument that although from a political perspective colonisation has ended, previously colonised people are not truly independent. As such, the political and administrative separation from former colonial powers does not give rise to a post-colonial world.³⁴ This is because the cultures, beliefs, practices and psyche of previously colonised people remains rooted in European values and concepts of modernity.³⁵ The decolonial school of thought holds that colonisation was not merely an “episode in African history” but was actually a “global design” which significantly and systematically suppressed African culture, practices and advancement.³⁶ Therefore, in the post-independence and post-apartheid era, Africans needed to decolonise their laws, beliefs and systems.³⁷ The steps taken by African legislators to decolonise the medical system are well documented in the existing literature.³⁸

In 2007, South Africa passed the Traditional Health Practitioners Act³⁹, designed to formalise and regulate the delivery of traditional health care services. The Act acknowledges the importance of traditional health care and provides for the registration, training and legalisation of Traditional Health Practitioners in South Africa. Additionally, the Act aims to protect the interests of the public who rely on traditional medicine. Similar developments have taken place in West Africa. In Nigeria, the Federal Government established the Natural Medicine Development Agency to promote Nigerian traditional medicine products and integration into Nigeria’s overall health care system.⁴⁰ According to the WHO, similar legislative and policy advancements have taken place in 40 African countries.⁴¹

³¹ Ali Arazeem Abdullahi, ‘Trends and Challenges of Traditional Medicine in Africa’ (2011) 8 African Journal of Traditional, Complementary and Alternative Medicines <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252714/>>.

³² Kristina Monroe Bishop, ‘Anglo American Media Representations, Traditional Medicine, and HIV/AIDS in South Africa: From Muthi Killings to Garlic Cures’ (2010) 77 GeoJournal 571.

³³ Frantz Fanon, *Black Skin, White Masks* (Pluto Press 1986).

³⁴ Rachele Dini, *An Analysis of Frantz Fanon’s Black Skin, White Masks* (Macat International Ltd, Routledge 2017).

³⁵ Rachele Dini, *An Analysis of Frantz Fanon’s Black Skin, White Masks* (Macat International Ltd, Routledge 2017).

³⁶ Sabelo J Ndlovu-Gatsheni, ‘Decoloniality as the Future of Africa’ (2015) 13 History Compass 485.

³⁷ Sabelo J Ndlovu-Gatsheni, ‘Decoloniality as the Future of Africa’ (2015) 13 History Compass 485.

³⁸ Ali Arazeem Abdullahi, ‘Trends and Challenges of Traditional Medicine in Africa’ (2011) 8 African Journal of Traditional, Complementary and Alternative Medicines <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252714/>>.

³⁹ Traditional Healers Act 22 of 2007

⁴⁰ Nigeria National Medicine Development Agency, ‘Home -’ (nnmda.gov.ng) <<https://nnmda.gov.ng/>> accessed 28 February 2023.

⁴¹ 70 Regional Committee for Africa, ‘Progress Report on the Implementation of the Regional Strategy on Enhancing the Role of Traditional Medicine in Health Systems 2013–2023: Information Document’ (apps.who.int 2020) <<https://apps.who.int/iris/handle/10665/334009>> accessed 28 February 2023.

From a legal perspective, the existing literature analyses the legislative measures that are in place to regulate Traditional Healers and the practice of traditional medicine.⁴² This line of study focuses specifically on exploring the legal framework, policies, guidelines and codes of conduct governing this field. The existing literature also analyses the laws and policies governing the protection of intellectual property rights and use of indigenous knowledge by researchers and pharmaceutical companies.⁴³ From a medical perspective, extensive research has been conducted on the use of traditional medicine and herbs in the treatment and management of specific ailments such as malaria,⁴⁴ sickle cell anaemia⁴⁵ and HIV/AIDS.⁴⁶ Furthermore, medical experts have conducted research on the classification of herbs and their use from a traditional medicine perspective. Despite the existing research, there is a research gap regarding the adoption of eHealth that has occurred in recent years, the automated processing of personal data in this sector and the resulting impact of new data protection legislations on Traditional African Medicine.

2.3 Africa's eHealth Ecosystem

There is no universally accepted definition for eHealth; however, it can broadly be classified as the application of information communication technology (ICT) across different functions that influence health care.⁴⁷ Examples of eHealth systems include electronic health records (EHRS), telemedicine, tele-care services, mobile health (mHealth), virtual health care, remote patient monitoring and e-prescribing.⁴⁸

From a public health care perspective, scholars and international organisations have conducted extensive research into the necessity and ultimate benefits of eHealth in developing nations. Townsend proposes that the integration of ICT into the African public health care system is essential for future development. Townsend argues that ICT reduces healthcare costs, improves public health initiatives and enhances the delivery of health services and resources.⁴⁹ The potential of eHealth in the developing world also been acknowledged by international organisations. In its National eHealth

⁴² Traditional Healers Act 22 of 2007.

⁴³ Ali Arazeem Abdullahi, 'Trends and Challenges of Traditional Medicine in Africa' (2011) 8 *African Journal of Traditional, Complementary and Alternative Medicines* <<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3252714/>>.

⁴⁴ Jacques Ranaivoravo, 'Laboratory and Clinical Evaluation of Traditional Medicines for Care and Treatment of Malaria: Experience of the Malagasy Applied Research Institute' (2003) *World Health Organisation Regional Office for Africa: African Health Monitor* 33.

⁴⁵ Shingu Gamaniel, 'Evaluation of Traditional Medicine for the Management of Sickle Cell Anaemia in Nigeria' [2003] *World Health Organisation Regional Office for Africa: The African Health Monitor Magazine* 27 <https://www.afro.who.int/sites/default/files/2017-06/jan-jun_2003.pdf> accessed 25 February 2023.

⁴⁶ Jimoh Amzat and Ali A Abdullahi, 'Roles of Traditional Healers in the Fight against HIV/AIDS' (2008) 2 *Studies on Ethno-Medicine* 153.

⁴⁷ World Medical Association, 'WMA - the World Medical Association-WMA Statement on Guiding Principles for the Use of Telehealth for the Provision of Health Care' (WMA2009) <<https://www.wma.net/policies-post/wma-statement-on-guiding-principles-for-the-use-of-telehealth-for-the-provision-of-health-care/>>.

⁴⁸ Beverley Alice Townsend, 'Privacy and Data Protection in EHealth in Africa' (PhD Dissertation 2017) <<https://open.uct.ac.za/handle/11427/25510>>.

⁴⁹ Beverley Alice Townsend, 'Privacy and Data Protection in EHealth in Africa' (PhD Dissertation 2017) <<https://open.uct.ac.za/handle/11427/25510>>.

Strategy Toolkit, the WHO provides a resource to assist government departments in the development of national eHealth strategy.⁵⁰ To this end, approximately 42 Africa countries have formulated eHealth Strategies for the public sector.⁵¹ Despite these strategies, the adoption of eHealth in the public health sector has been unsuccessful largely due to the poor implementation of strategies, corruption and infrastructural barriers.⁵² Furthermore, most eHealth Strategies completely ignore Traditional African Medicine and fail to acknowledge this important sector of Africa's health care system.

Despite the failures in public health care, eHealth adoption in the private sphere and by Traditional Healers has grown. Africa is experiencing a phenomenon which is being referred to as the "new age of Traditional African Medicine", whereby the indigenous practice are delivered through new technological means.⁵³ A growing number of Traditional healers are employing telehealth tools to conduct medical consultations virtually. In addition, some are discussing symptoms and administering remedies via WhatsApp, social media and other communication platforms.⁵⁴ Other traditional healers are developing and adopting existing eHealth tools to manage health data, administer e-prescriptions and provide targeted information and marketing about traditional healthcare services.⁵⁵ Furthermore, Traditional Healers are entering into the e-commerce space with many opening online stores and selling herbal medicine online.

Past research has highlighted on the potential positive impacts of eHealth on the spread and adoption of Traditional African Medicine.⁵⁶ However, the data protection implications thereof have not been as popularly researched in the African or South African context. Furthermore, the intersection between eHealth, data protection law and Traditional African Medicine has yet to be effectively explored. Therefore, this study aims to incorporate this important aspect into the overall discourse on eHealth and data protection in South Africa.

⁵⁰ World Health Organisation and International Telecommunication Union, 'National EHealth Strategy Toolkit Overview' (2012) <<https://www.who.int/ehealth/publications/overview.pdf>>.

⁵¹ World Health Organisation, 'Global Diffusion of EHealth: Making Universal Health Coverage Achievable: Report of the Third Global Survey on EHealth' (www.who.int2016) <<https://www.who.int/publications/i/item/9789241511780>>.

⁵² Ezeani Obinna, 'Assessing the Level of E-Health in Africa Using Nigeria as a Model; Barriers and Innovations' (2021) <<https://www.hsprj.com/health-maintenance/assessing-the-level-of-ehealth-in-africa-using-nigeria-as-a-model-barriers-and-innovations.pdf>>.

⁵³ Kgomotso Moncho-Maripane, 'African Spirituality and Medicine in the Digital Age' (*SowetanLIVE*5 October 2021) <<https://www.sowetanlive.co.za/s-mag/2021-10-05-african-spirituality-and-medicine-in-the-digital-age/>> accessed 28 February 2023.

⁵⁴ Kuwaittimes, 'Ancient Traditional Healing Rituals Go Digital in Virus-Hit S Africa' (*Kuwait Times*2 June 2021) <<https://www.kuwaittimes.com/ancient-traditional-healing-rituals-go-digital-in-virus-hit-s-africa/>> accessed 28 February 2023.

⁵⁵ Bernard Kamsu-Foguem and Clovis Foguem, 'Telemedicine and Mobile Health with Integrative Medicine in Developing Countries' (2014) 3 Health Policy and Technology 264 <<https://www.sciencedirect.com/science/article/abs/pii/S2211883714000550>>.

⁵⁶ B Kamsu-Foguem and C Foguem, 'Could Telemedicine Enhance Traditional Medicine Practices?' (2014) 3 European Research in Telemedicine / La Recherche Européenne en Télémédecine 117.

3. Research Aim

This study aims to investigate the current data protection framework and analyse its adequacy for the digitalisation of African Traditional Medicine. Furthermore, this study aims to develop sector specific guidelines for Traditional African Medicine and data protection. This central objective will be addressed using South Africa as a case study.

4. Research Questions

In order to achieve the research aim, the following research questions will be analysed:

- What is the existing data protection legal framework for the processing of health data in Africa, from a regional, sub-regional and national perspective?
- What are the data protection concerns that arise from the adoption of eHealth in Traditional African Medicine?
- What impact do the recent developments in data protection law in South Africa have on Traditional African Medicine and the processing of data related to health in this context?
- What influence and impact has EU data protection law had on the development of African and South African data protection law, specifically in the context of Traditional African Medicine?
- What are the recommendations for legal reform and corresponding implementation guidance?

5. Research Objectives

- To Identify and analyse the existing legal framework that governs Traditional African Medicine, looking specifically at data protection law from a regional, sub-regional and national perspective.
- To examine and analyse the influence of EU data protection law on the development of African and South African data protection law, specifically in the context of Traditional African Medicine.
- To identify and examine the data protection concerns that arise from the digitalisation of Traditional African Medicine and the friction between digital health and data protection principles.
- To identify the legal problems facing Traditional Healers who are adopting eHealth and formulate solutions, in the South African context.
- To develop guidelines and codes of conduct for Traditional African Medicine and data protection.
- To develop a conceptual framework for legal reform and implementation guidance.

6. Description of the Study

The research questions will be investigated with a central focus on the protection of personal data related to health and the surrounding legal framework that regulates Traditional African Medicine, specifically in South Africa. In order to adequately identify and address arising legal problems, this study will investigate traditional healers who are increasingly utilising eHealth tools and are impact by

data protection law. Finally, this study aims to make recommendations for legal reform to evolve data protection in Africa and South Africa beyond pre-existing paradigms.

As a starting point, this study will provide a general overview on the African data protection legal framework from a regional, sub-regional and national perspective. From a regional perspective, the AU Malabo Convention⁵⁷ forms the foundation of the legal framework. Having established and analysed the regional perspective, this study will examine important agreements in sub-regions or Regional Economic Communities (RECs). This analysis will focus specifically on:

- The Supplementary Act on Personal Data Protection within ECOWAS (Economic Community of West African States),⁵⁸
- Model Law on Data Protection in SADC (Southern African Democratic Community),⁵⁹
- The Directive on the Legal Framework for the Protection of Users of Electronic Communications Networks and Services within CEMAC (Central African Economic and Monetary Community),⁶⁰
- Legal Framework for Cyber Laws within EAC (East African Community).⁶¹

Thereafter, national developments will be analysed, focusing specifically on the South African Protection of Personal Information Act (POPIA).⁶² By taking a deep dive into the African data protection legal framework, this study seeks to identify the position on personal data processing in relation to Traditional African Medicine. This analysis will also highlight the fragmented regulatory framework on the continent.⁶³ These disparities create a complicated and fragmented legal landscape for Traditional Healers utilising eHealth and digital health tools.

In addition to the fragmented legal landscape, scholars such as Makulilo have identified the European influence evident in African data protection law as a key issue.⁶⁴ This study will examine the effect of this in the context of eHealth and Traditional Medicine. The global reach of the former Data

⁵⁷ Convention on Cyber Security and the Protection of Personal Data 2014.

⁵⁸ Supplementary Act A/SA.1/01/10 on Personal Data Protection within ECOWAS 2010.

⁵⁹ Southern African Development Community (SADC) Secretariat, 'Establishment of Harmonized Policies for the ICT Market in the ACP Countries Data Protection: Southern African Development Community (SADC) Model Law' (2013)

<https://www.itu.int/en/ITU-D/Projects/ITU-EC-ACP/HIPSSA/Documents/FINAL%20DOCUMENTS/FINAL%20DOCS%20ENGLISH/sadc_model_law_data_protection.pdf> accessed 18 February 2022.

⁶⁰ Directive No. 07/08-UEAC-133-CM-18 of December 19, 2008 on the Legal Framework for the Protection of Users of Electronic Communications Networks and Services within CEMAC.

⁶¹ East African Community and United Nations Conference on Trade and Development, 'UNITED NATIONS CONFERENCE on TRADE and DEVELOPMENT EAST AFRICAN COMMUNITY DRAFT EAC LEGAL FRAMEWORK for CYBERLAWS' (2008)

<<http://repository.eac.int:8080/bitstream/handle/11671/1815/EAC%20Framework%20for%20Cyberlaws.pdf?seq>>.

⁶² Protection of Personal Information Act 2013.

⁶³ Alex B Makulilo, 'Myth and Reality of Harmonisation of Data Privacy Policies in Africa' (2015) 31 Computer Law & Security Review 78.

⁶⁴ AlexB Makulilo, "'One Size Fits All': Does Europe Impose Its Data Protection Regime on Africa?' (2013) 37 Datenschutz und Datensicherheit - DuD

<https://www.researchgate.net/publication/257704023_One_size_fits_all_Does_Europe_impose_its_data_protection_regime_on_Africa>.

Protection Directive⁶⁵ and the current General Data Protection Regulation (GDPR)⁶⁶ has had specific ramifications on Africa, in particular the Article 45 adequacy standards imposed on third countries. The transfer of personal data to a third country is prohibited, except in specific circumstances, such as when the European Commission determines that the third country ensures adequate levels of data protection. The Article 45 adequacy decisions have exerted indirect pressure on African countries, resulting in the exportation of European data protection norms into the African data protection framework.⁶⁷ Many African legislations, including the South African POPIA adopt principles and provisions directly from the EU. As a result, some fundamental issues and shortcomings that are evident in EU data protection law, in the area of digital health have been transposed into the African landscape. Furthermore, the adoption of European data protection standards will have a significant impact on the processing of health data in the context of Traditional African Medicine. In addition, given the infrastructural challenges that Africa faces, the implementation of EU data protection systems proves difficult in the African context.⁶⁸ In most cases, the EU data protection framework has been adopted without being adequately assessed and improved upon by African regulators, in order to be suitable in context of health data in Africa. This thesis will investigate this problem looking specifically at developments in eHealth and Traditional African Medicine from a South African perspective.

In the European context, the conflicts between current data protection laws and digital health have been identified and discussed by several scholars such as Marelli, Lievevrouw and Van Hoyweghen.⁶⁹ Beyond the legal issues, scholars such as Prainsack propose that GDPR provisions fail to adequately address the societal issues that arise from the increasing “Googlisation” of healthcare and health services.⁷⁰ This study will examine how these legal issues arise in the African context and in the South African context looking specifically at the digitalisation of Traditional African Medicine. This study will focus on the friction between digital health, African Traditional Medicine, data protection principles and categories, as well issues arising from consent as a legal basis in this context. This study will

⁶⁵ Directive 95/46/EC of the European Parliament and of the Council of 24 October 1995 on the protection of individuals with regard to the processing of personal data and on the free movement of such data.

⁶⁶ EU General Data Protection Regulation (GDPR): Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, and repealing Directive 95/46/EC.

⁶⁷ AlexB Makulilo, “One Size Fits All”: Does Europe Impose Its Data Protection Regime on Africa? (2013) 37 *Datenschutz und Datensicherheit - DuD* <https://www.researchgate.net/publication/257704023_One_size_fits_all_Does_Europe_impose_its_data_protection_regime_on_Africa>.

⁶⁸ AlexB Makulilo, “One Size Fits All”: Does Europe Impose Its Data Protection Regime on Africa? (2013) 37 *Datenschutz und Datensicherheit - DuD* <https://www.researchgate.net/publication/257704023_One_size_fits_all_Does_Europe_impose_its_data_protection_regime_on_Africa>.

⁶⁹ Luca Marelli, Elisa Lievevrouw and Ine Van Hoyweghen, ‘Fit for Purpose? The GDPR and the Governance of European Digital Health’ (2020) 41 *Policy Studies* 1.

⁷⁰ Barbara Prainsack, ‘The Value of Healthcare Data: To Nudge, or Not?’ (2020) 41:5 *Policy Studies* 1.

examine how these legal and societal issues arise in the South African context and the extent to which these issues impact on the protection of data subjects, innovation and the socio-economic benefits associated with the expansion of Traditional African Medicine.

In order to provide a practical perspective, this study will investigate a limited number of South Africa's Traditional Healers who use electronic means eHealth tools to administer health-related services. This investigation will be conducted to discover the practical implications of data protection laws and to identify issues facing traditional healers as data controllers when complying with a fragmented and poorly implemented data protection framework. Finally, using South Africa as a case study, this study aims to develop some recommendations to ensure that data protection laws adequately protect the processing of health data in the context of Traditional African Medicine.

7. Methodology

In order to address the aforementioned research questions, this study primarily adopts a doctrinal legal research approach. In order to analyse the law from a social lens, this study will combine elements of qualitative research.⁷¹ However, the qualitative aspects will be limited as the aim is simply to support the doctrinal study and offer limited social feedback.

The doctrinal aspect of the study will focus on providing a descriptive and detailed analysis of African data protection law found in primary sources⁷² including conventions, legislation and case law, from a regional, sub-regional and national perspective. Qualitative data will be gathered through surveys conducted with African Traditional Healers who adopt eHealth tools, process personal data and are therefore impacted by data protection law. A thematic analysis methodology will be used to analyse the data collected. A thematic analysis is a method used to analyse qualitative data that "entails searching across a data set to identify, analyse and report repeated patterns".⁷³ The Mailchimp platform will be used to conduct the surveys, organise, store and analyse data, furthermore this software will assist in finding patterns and connections in the data collected.⁷⁴

There are approximately 400 000 Traditional Healers in South Africa,⁷⁵ however, this study will not survey a large portion of this population because this is not an empirical study. The surveys are

⁷¹ Maggie Kiel-Morse, 'Research Guides: Legal Dissertation: Research and Writing Guide: Home' (*law.indiana.libguides.com* October 2019) <<https://law.indiana.libguides.com/dissertationguide#:~:text=Doctrinal>>.

⁷² Maggie Kiel-Morse, 'Research Guides: Legal Dissertation: Research and Writing Guide: Home' (*law.indiana.libguides.com* October 2019) <<https://law.indiana.libguides.com/dissertationguide#:~:text=Doctrinal>>.

⁷³ Michelle E Kiger and Lara Varpio, 'Thematic Analysis of Qualitative Data: AMEE Guide No. 131' (2020) 42 *Medical Teacher* 1 <https://www.plymouth.ac.uk/uploads/production/document/path/18/18247/Kiger_and_Varpio_2020_Thematic_analysis_of_qualitative_data_AMEE_Guide_No_131.pdf>.

⁷⁴ Mailchimp, 'Use Surveys in Mailchimp' (*Mailchimp*) <<https://mailchimp.com/help/use-surveys-mailchimp/>>.

⁷⁵ Palesa Moloi, 'Traditional Medicine Emerges at the Front of SA's New, Sustainable Businesses' (*ewn.co.za* 27 October 2022) <<https://ewn.co.za/2022/10/27/traditional-medicine-emerges-at-the-front-of-sa-s-new-sustainable-businesses>> accessed 28 February 2023.

conducted to support the findings of the doctrinal study and offer limited social feedback. Therefore, a non-probability, judgemental sampling technique will be implemented. This sampling technique is most effective when a study focuses on limited members of the population that fit the specific criteria and needs of the study. Between, 10 – 15 Traditional Healers will be surveyed based on the following selection criteria:

- Legally authorised under the Traditional Health Practitioners Act⁷⁶ to practice traditional medicine in South Africa;
- A member of a Traditional Healers Association such as the African National Healers Association;⁷⁷
- Utilises eHealth tools such as telemedicine and mHealth (mobile health) in their medical practices;
- Processes personal data related to health and therefore is subject to the provisions of the POPIA.

This study will implement measures to protect the rights of research participants, enhance research validity and maintain scientific integrity. Participation in the study will be voluntary and participants are free to opt in and out of the study at any time. Participants will be required to sign informed consent forms prior to enrolment in the study. The informed consent forms will outline the purpose, processing activities, benefits and risks associated with participation in the study. This study shall uphold academic and ethical standards. During the course of the study, the names and contact details of participants will be collected for communication purposes; as such, this study will adhere to all data protection requirements in accordance with the GDPR and POPIA.

8. Dissertation Outline

Chapter 1. *Introduction and Stating the Problem.*

Chapter 2. *An African Perspective on Data Protection and the Processing of Data Related to Health.*

- I. Conceptualising the Right to Data Protection.
- II. Historical Perspective on African Data Protection Law.
- III. African Data Protection Law and Data Related to Health: Regional, Sub-Regional and National Synopsis.
- IV. European Influence and Impact.

Chapter 3. *Traditional African Medicine (TAM).*

- I. Definition of TAM.
- II. Regional Overview: A Historical and Legal Synopsis of TAM.

⁷⁶ Traditional Health Practitioners Act 2007 (Act No. 22 of 2007).

⁷⁷ African National Healers Association, 'African National Healers Association' (*anha*2021) <<https://www.africannationalhealersassociation.org/>> accessed 20 February 2022.

III. The New Age of TAM.

Chapter 4. *A South African Perspective: Traditional African Medicine, eHealth and Data Protection Law.*

- I. The South African Perspective on TAM.
- II. The South African Perspective on eHealth.
- III. The Protection of Personal Information Act: Processing of Data Related to Health in South Africa.
- IV. The Impact of Data Protection Law on TAM.

Chapter 5: *Recommendations and Implementation Guidance*

- I. Regional and National Recommendations for Legal Reform.
- II. Implementation Guidance.

Chapter 6: *Conclusion*

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