Cape Peninsula
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# THE IMPACT OF INTERNET STREAMING TECHNOLOGIES ON THE TELEVISION BROADCASTING INDUSTRY IN SOUTH AFRICA

**by**

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**Thesis submitted in partial fulfilment of the requirements for the degree**

**Master of Information and Communication Technology**

**in the Faculty of Informatics and Design**

**at the Cape Peninsula University of Technology**

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**Cape Town**
**April 2025**

# DECLARATION

I, **Tendai Stephen Samusodza**, declare that the contents of this thesis represent my own unaided work and that the thesis has not previously been submitted for academic examination towards any qualification. Furthermore, it represents my own opinions and not necessarily those of the Cape Peninsula University of Technology.

25/04/2025

**Signed** **Date**

# ABSTRACT

This study explored how the broadcasting industry in South Africa has been affected by the emergence of online streaming services, also referred to as over-the-top (OTT) services. Over the past few years, there has been rapid advancement in technology, which has revolutionised how media content is distributed and consumed across the globe. This revolution has affected the media industry in South Africa in a number of ways, and it has disrupted the business models of traditional broadcasters negatively. Many other aspects, such as policy making, cultural dilution, advertising models and media consumption, have been disrupted by this rapid technological advancement. Netflix and DSTV were used as case studies in this study. The study investigated the technologies that have enabled streaming to disrupt traditional media and how traditional broadcasters, policymakers, advertisers and consumers can respond to the challenges posed by continuous technological advancements. To understand the shift of consumers to online streaming services, the study examined the technologies behind streaming services such as cloud computing, artificial intelligence (AI) personalisation algorithms, adaptive bitrate streaming, content delivery networks (CDNs) and highspeed networks (4G/5G). It was revealed that these technologies enhance the quality of experience for consumers as these systems are consumer-centric, unlike traditional broadcasters like DStv, which have rigid scheduled programmes that can clash with people's day-to-day activities. Once it is aired, it cannot be viewed again. The findings of the study revealed the need for traditional broadcasters to adapt streaming technologies and modern business models so that they can remain competitive. Policymakers also need to generate hybrid regulations to cope with the ever-changing technologies in such a way that streaming service providers remain in check, the local industry is protected, and a level playing field for all stakeholders is created. It was also revealed that revenue for traditional broadcasters, originally derived from advertisements, has now been shifted to target advertising, which is only possible with streaming technologies and other modern technologies like social media. This study, therefore, highlights the critical role of information technology (IT) in redefining media consumption and the need for traditional broadcasters and other stakeholders to adopt these technologies in order to keep up with emerging technologies.

**Keywords:** Streaming services, Content delivery networks (CDNs), Artificial Intelligence (AI), Over-the-top (OTT), Quality of experience (QoE), Disruptive Innovation.

# ACKNOWLEDGEMENTS

**I wish to thank:**

- Dr Errol Francke, my supervisor, for holding me by the hand when the going got tough (from registration to the write-up of this thesis). I appreciate you, Dr.
- Dorothy Samusodza, my wife, for encouraging me when I did not have the energy to continue and for sacrificing her family time as I focused on this study.
- Chengetai Samusodza, my sister and the rest of the family for giving me hope when I did not have hope.
- Farirai, Precious and Michael for being my cheerleaders all the way.
- My colleagues for guiding me through the turbulent waters.
- All the people who participated in this study.

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# GLOSSARY

| Terms/Acronyms/Abbreviations | Definition/Explanation |
|---|---|
| **Disruptive innovation** | These are innovations/technologies that change the way an industry works. Disruptive innovations displace market leaders/incumbents and emerge as the newly established markets. |
| **Generative mechanisms** | Entities that explain why observable events occur. |
| **Internet service providers (ISPs)** | These are companies that provide internet access to subscribers. |
| **Over-the-top (OTT)/Online streaming** | This is when video content can be accessed directly from the internet without the need to download the content. |
| **Quality of experience (QoE**) | This is a measure of the level of satisfaction/ dissatisfaction a user experiences with a given service. |
| **Socio-technical approach** | An approach to understanding the relationship between technology, individuals, organisations and society. |
| **Subscribers** | This refers to people who receive television/streaming services from television broadcasters or online service providers. |

# CHAPTER 1: INTRODUCTION AND BACKGROUND

## 1.1 Introduction

Internet content mainly constitutes traffic that is distributed over content delivery networks (CDNs), which include online streaming services and Internet service providers (ISPs) (Yang et al., 2023). The distribution of content through the internet creates a two-way relationship between network providers and CDNs. Over-the-top (OTT) content is defined as “video content offered through an Internet or other Internet Protocol (IP)-based transmission path over a public network”. One of the leading OTT providers, Netflix, has over 300 million subscribers internationally (Netflix, 2024). This means all these subscribers rely on online streaming to access their content. This is prima facie evidence that online streaming is a significant contributor to the creation of Big Data, which then affects the telecommunications industry in a variety of ways. These enormous volumes of data created by online streaming require complex and efficient networks to be manageable. They also require massive memory for storage. This forces the telecommunications industry to acquire new techniques and technologies, making it expensive to manage these online platforms. OTT services can be streamed online through platforms and device providers such as Apple Inc. These emerging streaming services have a significant impact on latency, reliability and throughput. Li, Jia et al. (2021) argue that fourth-generation networks (4G) cannot handle these demands. This calls for the incorporation of new technologies. Fifth generation (5G) architecture is the result of this redesign effort, which is currently being deployed. In the South African context, online streaming services have not been extensively adopted due to the inability of Internet service providers (ISPs) to provide reliable network service. Due to the high network demand, the quality of live streaming services cannot always be regular, guaranteed and stable as the networks take time to buffer and sometimes fail to load. However, a considerable number of people have chosen to use streaming services, thereby abandoning traditional television, which is mainly monopolised by Multichoice in South Africa (Labuschagne, 2024).

The Merriam-Webster dictionary definition of “impact” is the significant effect or influence that one thing has on another. In the context of this study, the term impact refers to the extent, nature and consequences of change that are brought about by internet streaming services to the broadcasting industry of South Africa. This impact can be both positive and negative. The rapid growth of streaming technologies has affected the quality of experience (QoE) in the services offered by traditional television broadcasters such as DStv. They have also affected ISPs, as most of these streaming services are generating enormous amounts of data that do not benefit the ISPs in any way, regardless of them riding freely on ISPs’ infrastructure. In the television industry, subscriber loyalty depends on the level of QoE by users (Kao & Wu, 2023).

Cozzolino et al. (2018) propose that further research is required into how established organisations should adapt their business models in the wake of disruptive innovation brought about by digital transformation. Cozzolino et al.'s ' research focused on the Italian news media publishing industry since the inception of the internet and the development of new business models by innovative competitors in the industry between 1995 and 2017.

According to Daria (2024), video traffic is predicted to rise above 82% of internet traffic by the year 2025. Regrettably, Third-generation (3G) networks cannot efficiently handle such enormous amounts of data traffic. The emergence of 4G networks has opened opportunities for streaming videos in real-time. However, the demand for online streaming services has grown significantly, thereby generating vast amounts of data traffic. There are different types of video streaming services, such as live streaming, high-definition (HD) and ultra-high definition (UHD) (Daria, 2024). All these services require efficient networks for them to function at optimum quality. Such streaming services are regarded as 'free-riding' on ISPs' infrastructure, negatively affecting the load of their networks and requiring them to upgrade their networks continuously. The inception of Netflix in South Africa, which is a leading online streaming service provider, has resulted in many subscribers of DSTV unsubscribing and opting for online streaming services instead (Labuschagne, 2024). Even the world over, vast amounts of data traffic being generated from online streaming has proven Long-Term Evolution (LTE*)* not to be good enough to handle the traffic, prompting new research on the 5G network.

It is against this background that the study explores the South African telecommunication industry to ascertain the impact of disruptive innovation by way of OTT service providers on incumbent organisations. This study, therefore, explores the impact of disruptive innovation by OTT service providers in the South African television broadcasting industry.

### 1.2 Research problem

Traditional film and electronic media providers have been disrupted by the rise of online streaming service providers that offer lower-priced, more accessible and more appealing services (Chalaby & Plunkett, 2021; Shao, 2024; Tian, 2024). This disruption has negatively affected traditional service providers because OTT services are not heavily regulated and offer lower-cost substitute services, thus posing a credible threat to traditional service providers' social contracts and revenues (Chalaby, 2024; Fruits, 2025; Ramasoota & Kitikamdhorn, 2021). There is, therefore, a need to explore the impact of disruptive innovation by way of OTT service providers in the South African television broadcasting industry.

## 1.3 Aim, objectives and research questions

### 1.3.1 Aim of research

This study aims to understand the operations of broadcasting service providers in the television broadcasting industry in South Africa.

### 1.3.2 Research objectives

**Objective 1:** To understand how the broadcasting service providers operate in the television broadcasting industry in South Africa.

**Objective 2:** To determine the influence of OTT services as an instance of disruptive innovation in the television broadcasting industry in South Africa.

**Objective 3:** To examine the factors that influence the adoption of OTT services as an instance of disruptive innovation in the television broadcasting industry in South Africa.

## 1.4 Research questions

### 1.4.1 Main research question (RQ)

**RQ:** What is the state of diffusion of internet streaming technologies as an instance of disruptive innovation in the television broadcasting industry in South Africa?

### 1.4.2 Research sub-questions (RSQ)

**RSQ 1:** How do broadcasting service providers operate in the television broadcasting industry in South Africa?

**RSQ 2:** What is the influence of OTT services as an instance of disruptive innovation in the television broadcasting industry in South Africa?

**RSQ 3:** What are the factors that influence the adoption of this disruptive innovation in the television broadcasting industry in South Africa?

## 1.5 Literature review

The focus areas of this literature review include the South African television broadcasting industry, video streaming distribution services, disruptive innovations, online streaming services, information and communications technologies, OTT services, related work in this field of study, relevant theoretical frameworks and theories that could underpin the study.

### 1.5.1 The South African television broadcasting industry

In 1994, South Africa saw the birth of the Independent Broadcasting Authority (IBA). In June 2000, the IBA was merged with the South African Telecommunications Authority (SATRA) to

form what came to be known as the Independent Communications Authority of South Africa (ICASA). In this post-colonial era, electronic media were a powerful instrument for news and information dissemination. This continued until 1998, when ETV came into play, offering free-to-air television services. Forty-five percent (45%) of the e-TV services were to be local content. In the same year, television broadcasters were invited to apply for subscription television services. This was based on whether the broadcasters were to use terrestrial or non-terrestrial broadcasting services. Broadcasters were to apply for either satellite or cable broadcasting services. Only five broadcasters, i.e., ESAT, Telkom Media, Multichoice, On Digital Media, and Walking on Water, were licensed, and to date, MultiChoice has taken the lead with its digital satellite television (DStv) (National Association of Broadcasters, 2025). MultiChoice had not faced any significant threat until recently, when Netflix took the world by storm with its models, which are favourable to many people. With the popularity of the latest technologies, such as smart televisions and mobile devices, people now prefer to select the content they want from anywhere and at any time, which Netflix offers. This has led to some subscribers leaving DStv for Netflix (Chalaby & Plunkett, 2021; Alforova et al., 2021). Netflix focuses mainly on movies and shows, while DStv offers live news, movies and sports. This provision has sustained DStv for the time being, but no one knows what other streaming service providers plan, hence, DStv cannot be 100% immune to competition in this aspect. Internationally, Netflix is competing with technology companies like Apple and Amazon. However, its CEO, Reed Hastings, still argues that Netflix is not a technology company but a media company that rides on technology. It is, therefore, impossible to separate the media and the technology as both work hand in glove. Netflix, for example, relies on Amazon Web Services (AWS) for cloud computing and storage (Satyam, 2023; Marvin, 2020).

### 1.5.2 Video streaming distribution services

Several internet protocols have been used for distributing video content over the internet (Yang et al., 2023). Real-Time Protocol (RTP) and User Datagram Protocol (UDP) are good examples of protocols that have been used to bring about online streaming of videos. YouTube media streaming service and Netflix, for example, use the Transmission Control Protocol (TCP), a reliable protocol that delivers packets in the order in which they were sent. Interactive/conversational types of services, such as Skype video conferencing, are based on RTP/UDP because they utilise bandwidth more efficiently (Yang et al., 2023).

### 1.5.3 Disruptive innovations and information technologies

Due to the increase in mobile devices and efficient networks, wireless data traffic has experienced significant growth over the years (Teodorescu et al., 2023). This unparalleled increase in data traffic, which is an outcome of online streaming services and OTT applications,

is forcing telecommunication service providers to innovate how they can best manage the scarce backhaul resources and their ever-increasing complex networks. This explosion of structured and unstructured data traffic is called Big Data. According to Leliopoulos and Drigas (2022), due to the increase in the use of online streaming services, telecommunications networks are adopting new ways of handling Big Data. Telcos cannot continue to collect and store information in data centres; they are now adopting flexible and decentralised network architectures, such as Cloud computing.

According to Teodorescu et al. (2023), the increasing affordability and usage of electronic devices have caused people to abandon traditional cable television and adopt online streaming services for entertainment. González-Neira et al. (2022) and Budzinski et al. (2021) postulates that the fast growth rate of OTT service providers like YouTube, Netflix, Apple, Facebook and Google is greatly intensifying competition in the broadcasting and telecommunications industry. They are giving people a cheaper option to watch movies and communicate. They, however, create vast volumes of data while riding on the telecommunications companies' infrastructure. This is forcing the telecommunications industry to divert its focus from its primary objective of providing voice calls to building faster networks that can handle the vast volumes of data being generated by OTT and streaming services. Telecommunications networks have evolved from the 2$^{nd}$ generation (2G) through to the fifth generation (5G) in a bid to support the use of OTT services on their networks (Leliopoulos & Drigas, 2022). Without these technologies, online streaming would not have been possible. This means telecom operators have to optimise through continually upgrading the infrastructure, capacity planning, performance management, transmission of network traffic, and upgrading the infrastructure. To cater for these changes, telecom companies are using technologies such as Hadoop and NoSQL to process Big Data in shorter times in distributed environments. Li, Wu et al. (2021) define trust as "someone's willingness to become susceptible regarding a certain issue, context or information". In computing, trust is of the utmost importance because humans have to rely on virtual assistance and digital agents, which act on the humans' behalf. (Satyam) 2023 postulates that online streaming services, which run on multi-data-centre systems, provide excellent quality services to end-users. Elastic Optical Networks (EONs) have been used to support online streaming services and multi-data-centre (Multi-DC) systems.

### 1.5.4 Online streaming services

Netflix is an ICT-enabled platform that has revolutionised the way people watch movies and series online (Satyam, 2023). "Netflix.com might go down in TV history as the single most important company that disrupted and rewrote television in the twenty-first century" (Baker et al., 2023). The technological shift, which took place in the 1990s, offered enough processing

speed and bandwidth on devices to avoid video and audio buffering. In the year 2000, broadband penetration started to increase rapidly, allowing many people to connect to the internet. At the same time, Hyper-Text Markup Language 5 (HTML5) was adopted, enabling the construction and display of web content. In 2010, smartphones and internet connections became ubiquitous. This gave birth to Netflix in 2012, building its own Content Delivery Network (CDN) called the 'Last Mile'. Unlike traditional television broadcasters, Netflix does not use the number of viewers to make decisions; instead, it uses an algorithm that predicts the interests of its customers based on their viewing history to make recommendations accordingly (Baker et al., 2023). Many people are adopting Netflix as a replacement for traditional satellite television service providers like MultiChoice (DStv) in South Africa and brick-and-mortar movie rental stores. This is because Netflix offers applications on different platforms, subscription plans, and exclusive content. According to Zhang (2024), Netflix knows the demands of their clients, which have been unmet for some time; therefore, it has utilised the online service to cover this gap.

### 1.5.5 Impact of over-the-top streaming

Almeida et al. (2023), Sandhu (2022) and Fowora et al. (2018) argue that over-the-top (OTT) streaming is creating vast amounts of data when it does not have any tie to any network service providers or telecommunications service providers. OTT architecture relies on the internet to deliver its content to consumers, thereby going over the top of the telecommunications providers' networks. OTT services are generally used to deliver communications and media services at lower-cost rates compared to the same services being offered using the traditional network delivery process. This affects the telecommunications service providers negatively as OTT services bring intense competition to them, yet they are also utilising a significant amount of their bandwidth freely. Some examples of applications that employ OTT are Skype, Twitter, YouTube, Instagram and WhatsApp.

Social media traffic is predicted to multiply sevenfold globally by 2025 (Eslami et al., 2022). This creates demand for fast and more efficient networks, such as 5G networks. A vast amount of this data traffic in our current networks originates from online video streaming and social media.

### 1.5.6 Business models of the traditional television broadcasting industry and OTTs

Table 1.1 illustrates the different business models in the South African television broadcasting industry.

**Table 1.1: Relevant business models**

| | SABC | MultiChoice | Netflix | Amazon | YouTube |
|---|---|---|---|---|---|
| **Premiums** | No | Yes | Yes | Yes | No |
| **Annual licence** | Yes | No | No | No | No |
| **Advertisements** | Yes | Yes | Yes | Yes | Yes |
| **Decoder** | No | Yes | No | No | No |

### 1.5.7 Work related to this study

Studies and other literature related to this research are presented in Table 1.2.

**Table 1.2: Related work to this study**

| Author/year | Paper/thesis Title | Methodology | Findings |
|---|---|---|---|
| (Leal et al., 2017) | Analysis of the technologies enabling the broadcast convergence | Literature analysis | • Need for the broadcasting industry to adopt emerging technologies to survive competition with OTT services.<br>• The importance of technologies that have made online streaming services a success over the years, e.g.:<br>  ○ Television services and access technologies<br>  ○ Devices<br>  ○ Emergent platforms<br>• The industrial and economic impact of online streaming services.<br>• The emergence of new mobile access technologies such as 4G and 5G.<br>• Pros and cons of OTT services over IPTV. |
| (Soares da Silva & De Andrade Lima, 2022) | Is Netflix a threat to the cable TV industry? Evidence from Brazil | • Interviews<br>• Observations<br>• Literature analysis<br>• Industry statistics | • The impact of 4G and mobile devices on content distribution.<br>• The benefits of multiple-screen viewing.<br>• The impact of aggregation, distribution and promotion of content-to-content producers.<br>• The effect of national policies or regulations on both OTT and traditional broadcasters.<br>• The landscape of TV today. |
| (Shin et al., 2024) | Exploring the impact of paid over-the-top services and mobile network profiles in watching TV content on mobile devices | Desktop literature review | • The causes of the decline in traditional satellite TV subscriptions.<br>• The socioeconomic and technological factors leading to the adoption of OTT services and the abandonment of traditional broadcasting TV.<br>• Focuses on all streaming services, including OTT VoIP platforms such as Facebook, Viber, Tango, and Skype, to make calls and to watch media content, e.g., Netflix.<br>• The convenience of watching live sports via OTT live-streaming services.<br>• Competition strategies being used by TV broadcasters in response to the threats posed by online streaming services.<br>• The impact of net neutrality on both OTT and cable TV.<br>• The impact of geographical constraints on cable TV versus OTT services (which do not have any boundaries). |

| Author/year | Paper/thesis Title | Methodology | Findings |
|---|---|---|---|
| (Harvey, 2020) | Broadcasting in the age of Netflix: When the market is master | Literature review | • The emergence of the term “cord-cutting”.<br>• The convenience brought about by online streaming.<br>• Will Netflix address pressing issues (News). |
| (Da Silva Klehm et al., 2022) | A survey of digital television interactivity technologies | Literature review | • Importance of technology to broadcasters in responding to digital disruptions.<br>• The emergence of VoIP and its impact on traditional TV.<br>• The advantages of IPTV.<br>• The challenges or risks associated with online streaming services.<br>• How to overcome the problem of slow bandwidth in the era of online streaming services.<br>• Methods of evaluating quality of service performance of IPTV networks. |
| (Teodorescu et al., 2023) | The rise of the mobile internet: Tracing the evolution of portable devices | Literature review | • Perceived advantages of video streaming over traditional TV.<br>• Factors leading to the abandonment of traditional cable TV.<br>• Web-based streaming services also offer existing programming and new content, thereby posing a significant threat to traditional cable TV. |
| (Chalaby & Plunkett, 2021) | Standing on the shoulders of tech giants: Media delivery, streaming television and the rise of global suppliers | Literature review | • The impact of online streaming on revenues of the broadcasting industry.<br>• Reasons why the legacy TV industry is managing to survive the competition from OTT services.<br>• The new business model strategies being implemented by the legacy broadcasting industry.<br>• The impact of the online video revolution (Netflix, YouTube, etc.) on how people watch TV.<br>• The advantages of multi-screen viewing over single-screen viewing.<br>• Privacy issues associated with online streaming services.<br>• What is the role of legacy broadcasters facing competition from OTT services?<br>• Digital TV offers an enhancement to the viewer. |

## 1.6 Theoretical frameworks relating to disruptive innovation

A number of frameworks have been developed for disruptive innovations. The table below shows some of the frameworks that have been considered for this study, and below the table, the most suitable framework for this study has been selected.

**Table 1.3: Theoretical frameworks relevant to disruptive innovation**

| Theoretical framework | Description |
|---|---|
| **Diffusion of virtual innovation** (Guo & Pan, 2019) | In Rogers’ diffusion of innovation theory (1995), innovative technologies are adopted and diffused in a 5-stage model, which includes knowledge, persuasion, decision, implementation and confirmation.<br>This theory aims to identify the accelerators and inhibitors of technological innovation adoption. It is made up of three levels of analysis, i.e., the individual level, the group level, and the organisational level of analysis. The individual level of analysis focuses |

| Theoretical framework | Description |
|---|---|
| | on factors such as the technology's usefulness and ease of use. It also discusses how individuals' trust, enjoyment and self-efficacy may influence how technology can be adopted or rejected. |
| **Disruption framework** (Kilkki et al., 2018) | The term *innovation* often has positive connotations, while disruptions have negative connotations; hence, there is an internal conflict in the term *disruptive innovation* (Kilkki et al., 2018), and therefore entails that some firms will benefit at the expense of others. This framework was designed for studying and understanding disruptive changes at the level of entire industries. It makes use of a combination of technology, consumer behaviour and business. Since it is a general framework, it also considers scientific and applied research as well as social and political processes (Kilkki et al., 2018).<br>On the scientific layer, scientific disruptions, also called paradigm shifts, might occur. Many decisions are made on this layer by the tactical managers who initially identify the potential of an invention.<br>On the firm's layers, strategic management makes key decisions. The adoption of established technologies may lead to disruptions. Sometimes a product can skip the industry layer without immediate disruptive effects on the industry. However, if the product is in high demand by consumers, technology push may become market pull, and the industry and durable layers will suffer the consequences. Disruptive products/services can prompt a drastic change in usage behaviour. In some cases, disruptive technologies and social changes may disrupt the social order of nations.<br>**Firm level strategies:** There are three main strategic categories, which are i) number of potential customers, ii) industries, and iii) product quality. |
| **Assessment framework for disruptive Innovation** (Hang et al., 2011) | According to (Hang et al., 2011), scholars have differing views on the ex-ante applications of disruptive innovation theory in predicting whether an entrant will ultimately succeed, because the theory has traditionally been applied in an ex-post context.. This framework consists of three main parts, namely market positioning, technology, and other drivers. Christensen (2006) postulates that there are two appropriate market segments for a disruptive innovation, namely:<br>1. Low-end market, promoting a lower-cost service/product yet providing a basic 'job-to-be-done' at that level.<br>2. New niche market.<br>In this framework, favourable drivers will be denoted by "yes", while enabling drivers will be denoted by "no". A case study will be needed to answer either "yes" or "no". An assessment was therefore used with the following conditions:<br>i) "If all the answers are 'yes', the framework indicates that both new market and low-end disruptions are progressing at the same time".<br>ii) "If all the answers are 'yes', with only two 'no' being ticked for the low-end market (in market positioning and technology), then the framework indicates new market disruption is on its way. Contrary to this, if two 'no' are ticked for a new market, it indicates that a low-end disruption is on its way".<br>iii) "If there are other 'no' ticks, the framework indicates that there exist doubts about the eventual success of the disruption". |
| **Praxis model for disruptive innovation** (Francke & Alexander, 2017) | This model shows the relationship between the state of disruptive innovation and the response models of the business ecosystem. The praxis model has two axes, which are the disruptive innovation condition and the business model innovation response.<br>**Disruptive innovation condition** is made up of a service/product, function, feature and technology platform.<br>**Business model innovation response** consists of response, adopt, adapt, and innovate. These concepts have been revealed through retroductive reasoning. When the disruptive innovation condition has lower features than the incumbent, the business innovation model could respond by integrating the business components. On the other hand, if the disruptive innovation condition has more convenient features, the business innovation model may respond by streamlining its business processes. If the disruptive innovation condition improves the quality of a product/ service, the business model for innovation response model may respond by interacting with clients through technological improvements. |

| Theoretical framework | Description |
|---|---|
| | The business model for innovation responds to improve simplicity of use by collaborating in business networks to create new value propositions based on a unified approach to value creation. If the disruptive innovation condition is offering inferior products/services compared to those being offered by incumbents, it may respond by adapting industry fundamentals to promote product value creation. In most cases, disruptive innovations will not win the hearts of many the first time since people will be trusting the products/services of incumbents. Since they are usually less costly, they appeal to new customers who are usually less demanding. |

## 1.7 Theory underpinning the study

Several theories, such as the Technology Acceptance Model (TAM), Actor-Network Theory (ANT), Diffusion of Innovation (DOI), Activity Theory (AT) and Structuration Theory, were considered. Researchers use socio-technical theories to study how certain actions/ activities take place, and why they happen. This research made use of TAM. Researchers devised different ways of determining whether a user is satisfied with a technology. Legris et al. (2003) define satisfaction as the total of a person's feelings or attitude about a range of factors that affect the situation. Davis and Granić (2024) define acceptance as the positive decision to use an innovation. It is a common question in information technology to ascertain why people accept or reject new technologies. Consequently, this study was guided by TAM.

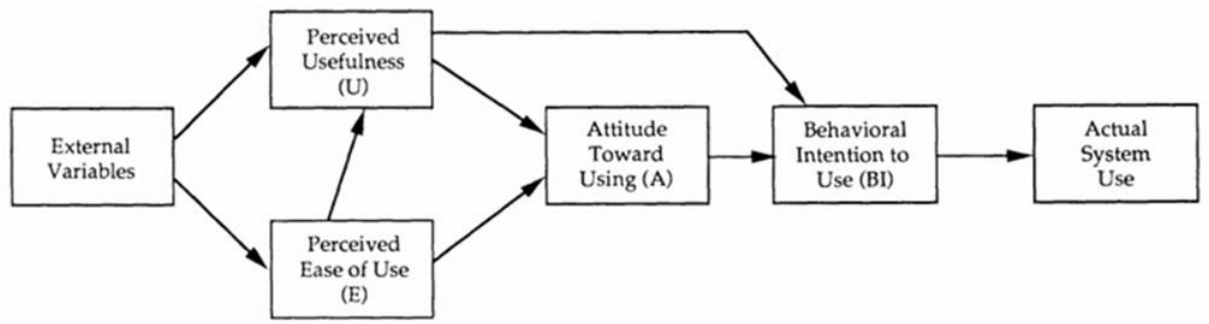



**Figure 1.1:Technology Acceptance Model (TAM) (Source: Davis & Bagozzi, 1989)**

TAM is a framework that helps to understand why people adopt or use a technology. It was first introduced by Fred Davis in 1986. It is based on the Theory of Reasoned Action (TRA). According to TAM, a person's intention to use a technology is influenced by two factors:

i) Perceived usefulness (PU) – The degree to which someone believes their job performance or productivity will be improved by using a particular system (Davis & Bagozzi, 1989) .

ii) Perceived ease of use (PEOU) – The degree to which one believes that using a particular system will be free from effort (Davis & Bagozzi, 1989)

TAM has evolved, and some additional constructs have been introduced:

i) Attitude toward use – refers to an individual's feelings about using a technology. The feelings could be negative or positive (Gunawan et al., 2023).
ii) Behavioural intention to use – is the degree to which an individual intends to use a technology. It is influenced by PU and PEOU (Gunawan et al., 2023).
iii) Actual usage – refers to real-world adoption and use of a technology.

TAM was chosen because of its effectiveness in predicting the adoption of technology in the media context, particularly relevant to the digital divide in South Africa were PEOU and EU are the major drivers of OTT shifts amid high data costs. Unlike diffusion theories, the main focus of TAM is user perception which addresses this study's aim of examining consumer led disruption.

## 1.8 Design, methodology and ethics

### 1.8.1 Research approach

According to Jebreen (2012), "a research method is a strategy of inquiry which includes research design and data collection". The chosen method determines how the data will be collected. A specific research method requires a variety of assumptions, practices and skills to be used in a study. In research, there are two main methods of reasoning, namely the inductive approach and the deductive approach (Burney & Saleem, 2008). The deductive approach works from general reasoning to more specific reasoning. It is highly associated with certainty. The inductive approach is the complete opposite. It implies observing more specifically, moving towards more general theories. The term bottom-up approach can also be used to refer to the inductive approach. The inductive approach is mainly used to predict or forecast; hence, it is associated with uncertainty. This study aims to explore the impact of disruptive innovation by way of OTT service providers in the South African television broadcasting industry. The researcher adopted the inductive approach in this study, because the South African broadcasting industry is already functional, but its future is unknown due to the emergence of new players such as online streaming and OTT services.

### 1.8.2 Research methods

It is imperative to clearly define the research strategy for the success of an empirical study (Amaratunga et al., 2002). Two main research methods are used in research, i.e., qualitative and quantitative research. Qualitative research aims at understanding why things happen or why people behave the way they do. In doing this, it uses words, not numbers, to ensure quality. Kaplan and Maxwell (2005) point out that qualitative data are usually collected from documents, interviews and observations. Kaplan and Maxwell also point out that qualitative

methods are usually inductive. Different researchers using the qualitative research approach differ in their attitude towards the use of numbers and other types of quantification (Allwood, 2012). On the other hand, Baxter and Jack (2008) postulate that the main focus of quantitative research is on statistics and numbers only. Since this research aims to explore the South African television broadcasting industry, literature, and the opinions of respondents in this industry, the qualitative research method was adopted.

### 1.8.3 Research design

According to Martinsuo and Huemann (2021) and Avella (2016), the case study is perhaps the most frequently used research design in postgraduate research. Other research designs, although not as popular as the case study, include phenomenology, purposeful sampling, ethnography, and narrative inquiry. There is a common challenge of taking the case study as both a method and a methodology. Harrison et al. (2017) describe methods as techniques and procedures employed in a study, and a methodology as a lens used by the researcher to view and make decisions about the study. Case studies are based on in-depth investigations of a single individual, group or event to explore the causes of underlying principles (Hunziker & Blankenagel, 2024). The case under investigation is the South African television broadcasting industry and how it has been disrupted by the adoption of Internet streaming technologies. Examples of Netflix and DStv subscribers were used to evaluate and understand different aspects of the research problem in this study.

### 1.8.4 Socio-technical research

A socio-technical system encompasses technical systems, operational processes and people who use and interact with the technical system for technical efficiency (Baxter & Sommerville, 2011). Socio-technical systems recognise the interaction between people and technology as a defining factor in the makeup and functioning of the overall system. Socio-technical systems are broken down into three distinct parts:

- The social system deals with all aspects of an industry related to the human side.
- The technical system deals with everything, apart from the human side, needed to produce goods and services.
- Joint optimisation is a combination of the social system and the technical system.

According to Jarrahi and Sawyer (2013), socio-technical research relies on the inseparable relationship between the features of technology, social norms, and the involvement of people. This study explores the resulting phenomena of the interaction that takes place between streaming technologies and society.

## 1.9 Data collection

Data for this study were collected by interviewing a population of OTT and DStv consumers in South Africa. Netflix and DStv subscribers were chosen as a case study. This, therefore, implies that the users of Netflix and DStv services constituted the research sample for consumers who were interviewed for the study. Hox and Boeije (2004) describe primary data as data that are collected for a specific research problem. Techniques such as interviews, document analysis and observations are mainly used in qualitative research (Hox & Boeije, 2004). However, the most commonly used technique is the interview (Gill et al., 2008). The three main types of interviews are structured, semi-structured, and unstructured interviews. According to Gill et al. (2008), semi-structured interviews are made up of questions that help in defining the area to be explored. This method gives the participants room to probe further, understand better, and yield a more valid result. It is a flexible method that allows one to discover information the participants may not have expected. Semi-structured interviews were therefore used in this study. Literature relating to online streaming services and the South African television broadcasting industry was also used as a source of data. The documents that were used included newspaper articles, websites and organisational or institutional papers. According to Denzin (2012), documentation helps to obtain sensitive information that organisations or individuals may not want to disclose. Documentation is also efficient, cost-effective and readily available, but it lacks engagement (Bowen, 2009).

### 1.9.1 Data analysis

Analysing unstructured data is not a simple task. Interviews in qualitative research often generate vast amounts of data (Pope et al., 2000). Coding a typical interview can generate up to 40 pages of raw data. The researcher can only understand this data by interpreting and sifting it so that recommendations can be made. Qualitative data can be analysed using grounded theory, thematic analysis, framework analysis, narrative analysis, content analysis and discourse analysis, among others (Berglund & Johansson, 2007). Thematic analysis was used to analyse the data that were gathered. The researcher examined themes and patterns that appeared repeatedly in the interview transcripts.

**Table 1.4: Unit of analysis for this study**

| Level of investigation | Unit of analysis |
|---|---|
| Country | South Africa |
| Province | Western Cape |
| City | Cape Town |
| Sector | South African television broadcasting industry |
| Individuals | Subscribers of both OTT and traditional broadcasting service providers |

The Technology Acceptance Model (TAM) was used to guide the formulation of the data collection instrument and the data analysis of the study.

### 1.9.2 Integration of the Technology Acceptance Model into the study

Table 1.5 shows how TAM was used in this study during data collection and data analysis.

**Table 1.5: Use of the Technology Acceptance Model in this study**

| Data collection | Data analysis |
|---|---|
| **Perceived usefulness (PU)**<br>How do OTT services align with the respondents' beliefs, past experiences, values and needs? | **Technical compatibility**<br>To analyse how OTT services align with the respondents' beliefs, past experience, values and needs. |
| **Perceived ease of use (PEOU)**<br>To what extent are OTT services perceived to be easy or difficult to use? | **Perceived ease of use (PEOU)**<br>To analyse whether OTT services are perceived to be easy or difficult to use. |
| **Behavioural intention to use**<br>Why are OTT services regarded as better (or worse) than traditional service providers?<br>Which factors of OTT services have impacted their adoption? | **Behavioural intention to use**<br>To analyse why OTT services are regarded as better (or worse) than traditional service providers.<br>To analyse the factors that have impacted OTT services' adoption. |

## 1.10 Ethical considerations

A research project needs to be guided by ethical values and principles to protect participants from infringing on copyrights (Zhang & Liu, 2018). The study was undertaken ethically. Participants were guaranteed the privacy and confidentiality of their contributions and their details. Permission was sought for all data collection and any other activities that involved individuals and organisations. The data collected were used for this project only. All participants were informed of the risks that could be involved in conducting the research, and consent forms were signed. People were not forced to disclose or participate in this research. The contributions of other authors were referenced, and no plagiarised work was used.

## 1.11 Delineation

This research explored the impact of disruptive innovation by way of OTT service providers in the South African television broadcasting industry in the Cape Town Metropolitan area.

## 1.12 Outcomes, contribution and significance

This research aimed to explore the impact of disruptive innovation by way of OTT service providers in the South African television broadcasting industry. In so doing, the outcomes of this study are significant to all its stakeholders, including the South African Government, OTT service providers, traditional broadcasters and the general South African populace. The study provides information that can be useful to the Competition Commission of South Africa in the

formulation of its policies in this industry. It may also help the general populace in deciding the best media distributor to subscribe to, as the findings of the study explain the services offered by OTT service providers.

The theory and empirical findings of this study contribute to understanding the impact of disruptive innovation by way of OTT service providers in the South African television broadcasting industry. This study, therefore, makes a theoretical contribution in this regard.

It is further anticipated that a practical contribution of this research is the comprehensive understanding of the impact of OTT services on the South African television broadcasting industry provided by the case. It may help service providers to keep up with the competition, advertisers to cope with modern and effective trends, policymakers to continuously fine-tune their policies, and the general populace to decide the best media distributor to subscribe to, as the findings of the study explain the services offered by such service providers.

### 1.13 Summary

This study explored the impact of online streaming services on traditional television broadcasters in South Africa. Television companies like DStv are being affected in many ways by the emergence of OTT service providers like Netflix, as evidenced by a drop in their revenues and subscribers. This research explored the extent to which the traditional television broadcasting industry has been disrupted by online streaming services and the opportunities that have arisen in the same industry. Netflix was identified as the primary example of OTT service providers and DStv as the primary example of traditional television broadcasters.

The Technology Acceptance Model was adopted in this qualitative study, with critical realism as philosophy. Recommendations on how best the television broadcasting industry can respond to these disruptions were provided.

# CHAPTER 2: LITERATURE REVIEW

## 2.1 Introduction

The emergence of streaming technologies has not only transformed the way people consume media but also revolutionised the entire landscape of traditional television, bringing unprecedented changes to content delivery, viewer habits and industry economics (Rimock, 2013). Other than just providing entertainment conveniently as an alternative to traditional television, media streaming platforms like Netflix, Amazon Prime and YouTube have become a catalyst for cultural shift (Sutrisno, 2023). These digital platforms have not only promoted the production and distribution of new content but also sparked new forms of storytelling and cultural trends. As a result, this has disrupted the traditional business models and advertising strategies in the entertainment industry (Yim et al., 2021). These technological advancements have also affected governments in terms of policymaking and the regulation of content. Currently, the laws being used to regulate these emerging technologies are not dynamic. Hence, they cannot keep up with the rapid technological developments (Babikian, 2023). One of the reasons why it is difficult to regulate these technologies is that they operate across boundaries, so there are no universal regulations that guide the use of these technologies – each country has to come up with its own strategies.

This chapter, therefore, explores the impact of media streaming technologies on the traditional television industry in terms of business models, market dynamics, technological disruption, regulation of content, policy-making, content production and distribution, cultural shift and consumer behaviour in the digital age. The study is underpinned by the Technology Acceptance Model (TAM), which is also discussed in this chapter.

## 2.2 Content production and distribution

The three main subscription models in existence today are Advertising Video on Demand (AVoD), Subscription Video on Demand (SVoD), and Transactional Video on Demand (TVoD). Netflix is a good example of SVoD, which requires users to pay a recurring fee to access their content library. Unlike SVoD, AVoD gives its content for free. Its revenue comes from advertising. Some service providers use both ad-supported plans and ad-free plans. TVoD requires users to pay per view or purchase content like on iTunes (Chalaby, 2024).

YouTube is a video-sharing platform that does not create its own content. It generates its revenue from adverts and shares it with content creators, which guarantees them that new content is always created across the world (Arthurs et al., 2018). This model works with AI recommendation algorithms, making it easy for target marketing. For one to use these

services, they have to log in with their email address, which will then be used to track their likes when they search online. When someone views an item online, they assume the person is interested in it. Thus, they begin showing advertisements related to that item, which is a more effective advertising strategy than broadcasting on television. This ad-supported content has led some people to shift entirely from traditional television, which requires monthly subscriptions. However, some of the free content is of poor quality, as anyone can create content and upload it without any restrictions.

Social media platforms like Twitter and TikTok allow people to capture and share videos with their followers, and they can easily trend and reach millions of people. These videos are uncensored, and they resonate well with many consumers who complain about legacy media propaganda (Ren et al., 2024). Such platforms also allow fake news to spread, unlike traditional TV, which airs verified news only. This shows the power of media streaming, as people mostly believe what they see on social media without verifying the facts, as is the case with traditional broadcasters (Allcott & Gentzkow, 2017).

Streaming companies generate vast amounts of content that require storage space and fast processing speeds. For them to focus on their main business, they use third parties like AWS or Google Cloud to handle the technical aspects, like data storage and distribution of content. These third parties design algorithms that analyse user behaviour and preferences and provide personalised recommendations, which enhance user engagement, unlike legacy media, which broadcasts the same content to everyone at the same time.

### 2.2.1 Market dynamics and technological disruption

Online streaming services boast vast libraries of content, enabling consumers to watch anywhere and anytime, unlike traditional media, which dictates what and when to watch. This flexibility and control given to consumers is an attraction that has cost the traditional television subscriber losses. However, this control is limited by algorithms that suggest content to viewers based on viewing history (Lüders, 2022). MultiChoice DStv, a leading South African broadcaster affected by these streaming companies, still has leverage of live sporting viewership, especially soccer and Formula 1, which are the favourites for many South African residents. One can argue that live sports events can also be viewed online, but it is different in that DStv gives a package of various sports at one charge, unlike subscribing to various platforms to watch different sports. Inasmuch as DStv has an advantage in that aspect, some people enjoy watching just one sport, Formula 1, for example. They can easily subscribe to just to access one channel on their online streaming platform and pay a minimal amount, rather than subscribing to other channels on DStv they do not watch.

OTT live sports streaming is creating new norms for accessing and curating sports media, marking a historic shift in the global marketplace for sports coverage rights (Xu et al., 2023). Streaming services like Amazon Prime are reshaping the distribution and consumption of live sporting events. These streaming technologies allow users to view live sports seamlessly on various devices, which enhances user experience, unlike traditional television, which forces one to sit only in front of a TV, allowing only one programme to be viewed at a time (Hagelgans, 2022). Technology giants like Amazon Prime have come up with new models of monetising live sporting events, making it less expensive and more appealing to consumers. Their platforms allow consumers to watch on multiple screens simultaneously, giving them interactive elements and providing live statistics (Hutchins et al., 2019).

People who were born in the digital era and display high levels of engagement with modern-day technologies are referred to as Digital Natives (Hutchins et al., 2019). Streaming companies are competing to attract Digital Natives due to their high content consumption (Friederich et al., 2023). Digital Natives are motivated by a variety of factors such as perceived enjoyment, control given by streaming platforms, immersion and curiosity. This has come as a major threat to legacy media as the newer generations seem to be more attracted to newer technologies compared to traditional television. Currently, the existence of traditional television is sustained by the older generations who are attached to television. Still, as they become older, traditional TV may cease to exist if they do not come up with strategies to attract Digital Natives.

Some traditional broadcasters are slowly adopting streaming technologies as well, but they have not yet fully accepted that their scheduled programmes are becoming outdated. Hence, they stream these scheduled programmes (Lim et al., 2023). DStv, for example, now has a streaming platform for its television programmes. However, they still do not give their consumers control over their time and programmes, which is unattractive to many since streaming services are still programmed, just like watching on a decoder. They have also not changed their business model. People feel forced to pay for many channels they do not watch. This model works against the providers because people now have alternatives that perfectly suit their needs at a fair price.

According to the Los Angeles Times (2025), streaming services have overtaken traditional TV overall in the United States as of June 2025. Streaming services attracted 44.8% of viewership in May, against 44.2% for cable and broadcast networks. This dynamic is also seen in South Africa as reported by Businesstech (2024), that MultiChoice lost almost 1.2 million subscribers in the last year.

### 2.2.2 Regulatory framework

Traditional media is controlled under strict regulation internationally to ensure that the information distributed is accurate, decent and acceptable to society (Dagnino, 2018). This is a sharp contrast to streaming technologies that operate across borders and are rapidly changing, making it difficult for governments to regulate them. According to Sky News (2022), a man called Andrew Tate was banned from social media sites like Facebook and Instagram in August 2022 for violating their policies on “dangerous individuals”. He was also banned from YouTube and TikTok for violating hate speech rules. Irrespective of these restrictions, his videos were shared on various social media sites and reached many people across the world. This shows how difficult it is to control content on streaming platforms. In 2017, he was also banned on Twitter for his misogynistic views and hate speech. The same also happened to Donald Trump, the US president, after he completed his first term in office. His Twitter account was permanently suspended in 2021 on allegations of incitement of violence. However, when Elon Musk took over Twitter, Trump was reinstated after a social media poll in which the majority of the voters said he must be reinstated. This shows different perspectives of what people perceive as dangerous or not. Unlike traditional television, with streaming, content regulation policies can vary significantly depending on public opinion and leadership. It is therefore challenging to come up with consistent policies on how to regulate streaming content.

Intellectual Property (IP) refers to creations of the mind (Drahos, 2016). Digital content, created and uploaded on a day-to-day basis, is IP that must be protected. However, with the speed at which technology is evolving, it is easy for people to copy and share content that is not theirs for financial benefit. This is a violation of IP laws, as most of the content can easily be used by other people without the consent of the original owners of the content. Robust mechanisms are required for copyright enforcement and protection. However, with the speed at which technology is evolving, it is challenging to keep up with creating new laws now and again. It has been observed that some consumers are streaming content that is unauthorised, which is posing a significant challenge to the entertainment sector’s traditional business model (Liang, 2020).

Streaming services collect vast amounts of personal data about their consumers. This data are mainly used for personalised recommendations and targeted advertising. However, this has also raised concerns about personal privacy and data security (Ng et al., 2012). In Europe, for example, they have established regulations like the General Data Protection Regulation (GDPR). However, these regulations apply only for Europe, but streaming platforms operate globally, which is a challenge, as there is still a need for global laws that apply to all countries on the planet (Sinha & Naeem, 2023).

According to Rimock (2013), traditional Canadian broadcasters are worried about the competition being posed by OTT service providers. Service providers such as Netflix have acquired a significant subscriber base quickly, cutting down the revenue of traditional broadcasters. The Canadian Radio-television and Telecommunications Commission (CRTC) finds it difficult to regulate these OTT service providers because of their distinct nature compared to traditional broadcasters. On the other hand, Canadian traditional broadcasters are regulated and face stringent financial obligations, such as contributing to the Canada Media Fund. This gives OTT service providers a relative advantage as they are not subject to these regulations. This disparity disadvantages traditional broadcasters as it creates an uneven playing field since OTT service providers have lower operating costs and fewer restrictions on content (Rimock, 2013). This also applies to South Africa. The Independent Communications Authority of South Africa (ICASA) has also faced similar challenges. In South Africa, traditional broadcasters must possess a licence to operate legally. Broadcasters like DStv and SABC are heavily regulated, offering a major advantage to streaming service providers like Netflix, which are not obliged to pay these licenses. According to the Broadcasting Act 4 of 1999, Traditional broadcasters are also required by law to allocate a certain percentage of their airtime to local content, such as films, shows and music that reflect the country's culture and heritage. This is a limitation to the content they can create. The fact that their content can only be aired live on television once means the time factor is key. Even if they create vast quantities of content, they will not have enough slots to broadcast it all, unlike streaming, whereby viewers can revisit the content that has been shared even after 20 years.

Broadcasters are not only concerned about losing their customers to streaming services like Netflix, but also that the licensing fees of international content will increase as the number of competitors fighting for the same broadcasting rights increases (Rimock, 2013). In the event that streaming service providers who broadcast live sports start operating in South Africa, the traditional broadcasters will be further affected since sports broadcasting is one of the main pillars sustaining their business. According to the Broadcasting Act 4 of 1999, "broadcaster, means any legal or natural person who composes or packages or distributes television or radio programme services for reception by the public or sections of the public or subscribers to such a service, irrespective of the technology used. Broadcasting licence means a licence granted and issued by the Authority in terms of this Act to a person for the purpose of providing a defined category of broadcasting service or deemed by this Act to have been so granted and issued".

The South African Broadcasting Act 4 of 1999 aims to promote democracy, provide entertainment and news that is accurate, and ensure the cultural, political, social and economic

enrichment of South Africa. However, with the rise of streaming services, it is almost impossible to control who broadcasts what and who views what because the internet allows everyone to use it without boundaries. It has affected the broadcasting industry in that fake news can easily be distributed, and this can have unexpected consequences. With everyone having a smartphone and a YouTube channel, biased content that can be undesirable and toxic is being created daily, and it is extremely difficult to hold people accountable since most use fake accounts or are outside South Africa (Robb & Hawthorne, 2019). In other countries, like Zimbabwe, they have the Censorship Act, making viewing and sharing adult films illegal. However, due to the rise of streaming services, adult websites have become very popular, and people can view illegal content without any consequences, as it is difficult to control them. The same applies to South Africa. Underaged children can now easily access illegal content that goes against the principles of Broadcasting Act 4 of 1999, like ensuring cultural enrichment (le Roux, 2010).

### 2.2.3 Economic impact

The South African law requires all broadcasters to be licensed by the Independent Communications Authority of South Africa (ICASA) to be able to operate. However, streaming technologies have posed a threatening challenge to the government as they are difficult to regulate and can operate without a license with no consequences. This gives streaming service providers a great advantage over legacy media, as there are no fixed laws that can guide how streaming service providers must act and behave (Darji et al., 2016). The situation has discouraged local producers from creating content as they struggle to reap the benefits (Udoakpan & Tengeh, 2020).

Streaming service providers are closely associated with target marketing because of the AI algorithms they use for various aspects, such as personalised recommendations. This has attracted many advertisers at the expense of broadcast advertising, which has, therefore, affected the revenues of legacy media (Kim & Balachander, 2023). OTT services have also disrupted traditional television's rigid programmed schedule model, reducing the effectiveness of advertising timeslots tied to specific programmes (Yim et al., 2021).

### 2.2.4 Technological infrastructure and consumer behaviour

Digital colonialism refers to the use of digital technology for economic, cultural and political control of a foreign territory or nation (Kwet & Law, 2019). Most of the technology giants are American and European companies, dominating the world. Unfortunately, Africa is trailing behind technologically, and it relies heavily on Western technology. The media streaming industry relies on technology such as cloud computing for storage space and computing power.

Companies like Netflix ride on the infrastructure of Amazon Web Services (AWS) and other cloud providers, most of which are from the West. This domination of the digital space can lead to economic and cultural dilution as Africans are constantly exposed to Western content.

Internet streaming technology is a competitive alternative to satellite and cable television content (Ojo et al., 2020). However, web-based services are affected by factors such as bandwidth constraints and network traffic, among others (Brindha et al., 2020). A number of streaming protocols have been developed to address these challenges. HTTP Live Streaming (HLS) is an excellent example of a popular streaming protocol used by streaming giants like Netflix (Liang et al., 2023). Other streaming protocols, like Real Time Streaming Protocol (RTSP) and Real Time Messaging Protocol (RTMP), are designed for real-time streaming with lower latency compared to HTTP-based solutions (Viola et al., 2020). The emergence of cloud computing also plays a crucial role in enabling video streaming. Technology giants can now test and run their buffering and caching algorithms, which manage the flow and storage of data on the cloud (Komathi et al., 2023).

Reliable and consistent network performance is a critical factor for media streaming services, especially when reaching a large audience. As the media content quality improves, so does the demand for network performance, which makes it increasingly challenging to meet. The 5G network architecture plays a critical role in monitoring media streaming services and boosting their performance in real-time, thus enhancing the quality of experience (QoE) (Kao & Wu, 2023). The continuous improvement of mobile networks has made it easier for users to access the internet on the go. This facilitates enhanced use of various services like mobile banking, social networking, and media streaming on smartphones (Teodorescu et al., 2023).

On the other hand, technological devices have greatly improved in terms of processing speed, network connectivity and storage over the past decade, changing the dynamics of media distribution as anyone with a mobile phone can create content and distribute it over the internet. This has become a considerable challenge for the traditional television broadcasters who used to have a monopoly in the broadcasting industry. People, especially the younger generation, prefer the use of smartphones and other devices for streaming as they have more control over what, when and where to watch content (Shaji et al., 2023).

In short, the interplay between the advanced technological infrastructure and consumer behaviour has led to a paradigm shift in media consumption. Although these streaming platforms offer unprecedented media access and diversity, they also raise concerns about the potential marginalisation of local content and digital colonialism. The rapid advancements in

technology, particularly in device and network capabilities, further complicate the landscape, posing both opportunities and challenges for traditional and digital media alike.

### 2.2.5 Cultural and social implications

The rise of streaming services came about with several cultural and social implications affecting traditional television in particular. Streaming services have altered television viewing habits as traditional TV schedules are being replaced by on-demand viewing, which is popular with the millennial generation. This has affected the shared experience of watching TV as a family during specific times, which used to be the norm (Baker et al., 2023).

Streaming services have also developed with the emergence of new cultural trends. The emergence of streaming services has democratised the creation of content, providing opportunities for diverse stories that would not typically be aired on traditional TV. This has led to the exploration of new cultural perspectives, narratives and themes that were previously not covered by the mainstream media (Sutrisno, 2023). Boundaries or regional preferences do not restrict streaming platforms as they have a global audience. This global reach enhances the blending of various cultural practices, thereby diluting the cultures into hybrid cultural trends (Sundet & Lüders, 2023). Algorithms used by streaming platforms to analyse viewer preferences help promote content that can easily resonate deeply with specific audiences. This can result in some cultural trends and genres gaining popularity quickly and organically (Teef & Nassisid, 2024).

Hate speech has become rampant on streaming platforms like YouTube and TikTok. Unlike in the traditional broadcasting industry, where governments regulate what can and cannot be said to the public, it is challenging to control what happens on streaming platforms and social media (Pookpanich & Siriborvornratanakul, 2024). This can be in sports, politics or any other area. In politics, for example, the South African Broadcasting Corporation (SABC) adheres to its broadcasting code of conduct, which is enforced by ICASA. This code enforces accuracy, fairness and impartiality in news reporting to ensure that diverse viewpoints are represented and that news is presented in a balanced manner (South African Government, 2024). Streaming services are disrupting this setup, as various groups and individuals can air their views via streaming platforms that are not regulated. Rapid technological advancement has overtaken governments and existing laws, making it difficult for lawmakers to keep up as new technologies arise every day (Babikian, 2023).

## 2.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM) by Fred Davis (1989) answers the questions, “Why do people accept or reject a technology, and what is the impact of a system’s design features

on user acceptance?" This means TAM is a theoretical framework that explains and predicts how users decide to accept or reject a technology. Two main factors, namely perceived usefulness (PU) and perceived ease of use (PEOU), determine why users accept or reject a technology. PEOU has a causal effect on perceived usefulness (Davis & Bagozzi, 1989). System design has a direct influence on PEOU and PU. On the other hand, "system design features indirectly affect attitude towards using and the actual usage behaviour through their direct effect on perceived ease of use and perceived usefulness" (Davis & Bagozzi, 1989; Kamal et al., 2020), as illustrated in the diagram below.

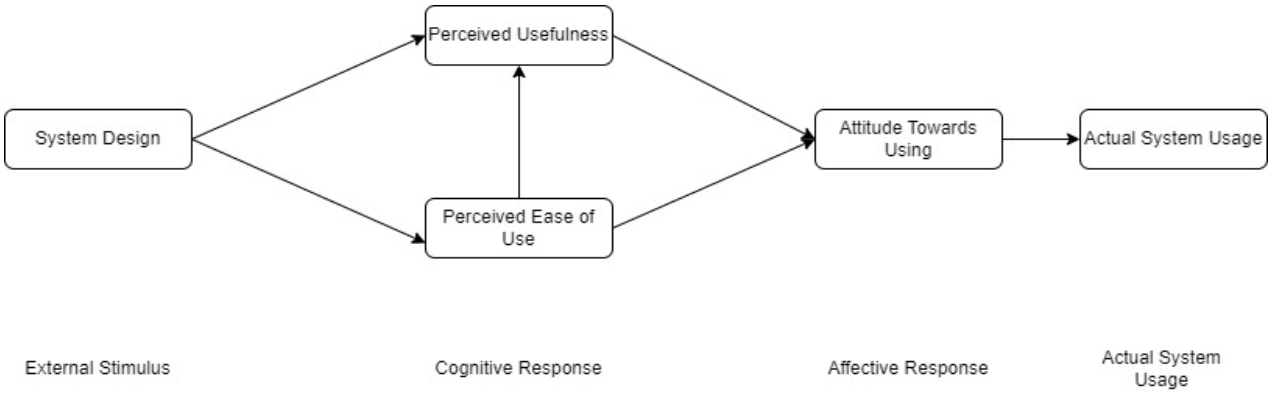



**Figure 2.1: Technology Acceptance Model (Source: Davis & Bagozzi, 1989)**

### 2.3.1 Attitude-usage relationship

Perceived usefulness is the extent to which one believes using a particular system would improve their job performance; in our case, getting the best experience from streaming technology (Davis & Bagozzi, 1989). PEOU is the extent to which one believes using a particular system would be free of physical and mental effort (Davis & Bagozzi, 1989). PEOU is hypothesised to have a significant direct effect on PU. Given two systems that perform the same functions, an end-user must choose the easiest one to use as more useful. The Attitude theory offers a justification for the flow of causality from system design features through perceptions to attitude and, ultimately, usage. Attitude is defined as a fixed perspective or feeling regarding something, often demonstrated in a person's behaviour or disposition. It encompasses a person's beliefs, mental state and feelings towards a particular person, situation, object or concept, which can influence their actions and reactions (Ajzen and Fishbein's (1980) in Al-Suqri & Al-Kharusi (2015); Davis & Bagozzi, 1989). TAM posits that whether a technology is actually useful or not, is not a matter of the technology itself but a matter of people's perceptions.

### 2.3.2 Limitations of the Technology Acceptance Model

Inasmuch as TAM is a valuable tool for understanding technology adoption, it is also associated with limitations. TAM assumes that people plan their behaviour and are rational in their actions. In actual fact, people are not entirely rational in their decision-making and behaviour (Ajibade, 2018). TAM also assumes that perceptions of usefulness and ease of use are static and do not change over time. Still, they can evolve as people become familiar with the technology or as the technology itself evolves. It does not directly consider that the acceptance or rejection of technology can also be influenced by subjective norms (Ajibade, 2018; Taherdoost, 2018). Subjective norms are perceived social pressures to act or not act against a particular behaviour (Ajzen and Fishbein's (1980) in Al-Suqri & Al-Kharusi (2015)). This is influenced by one's belief about whether close people, such as family, friends and society, think they should adopt a particular behaviour. This research has therefore included variables such as *social influence* and *trust* to gain enhanced insight into users' perceptions.

## 2.4 Conclusion and future outlook

The predominance of media streaming has revolutionised traditional television by reshaping how content is created, distributed and consumed across the globe (Lim et al., 2023). Media streaming platforms like Netflix, Hulu, Amazon Prime and YouTube, offering accessible content that is personalised, have disrupted traditional television models, which is a considerable challenge to broadcast channels and cable networks (Tengeh & Udoakpan, 2021). As highlighted in this literature review, streaming services give viewers unprecedented control over how, when and what they watch, thereby challenging the fixed schedules of traditional television. This has redirected viewer attention and advertising revenue away from traditional broadcasters, prompting adaptations in content creation and distribution strategies (Kim & Balachander, 2023). Furthermore, technological advancements supporting streaming, enhanced by cloud computing and advanced mobile networks, have empowered consumers further while posing challenges to regulatory frameworks designed for traditional media. The impact of streaming technologies on traditional television is expected to continue evolving. As competition continues to intensify, the distinction between traditional television and streaming platforms may further blur. This convergence has created concerns over market consolidation, regulatory oversight and content diversity (Babikian, 2023). TAM has been used as a lens to unpack insights into how streaming technologies have affected traditional television.

# CHAPTER 3: RESEARCH METHODOLOGY

## 3.1 Introduction

Research methodology is the general logic and conceptual framework of a study (Long, 2014; Wahyuni, 2012). In qualitative studies, it is assumed that there is a social reality that exists independent of the knower, and knowledge is personal and subjective (Long, 2014). This chapter presents the research approach, methods, and design employed in the study. The data collection and analysis techniques and the corresponding ethical considerations applied in the study are also discussed.

## 3.2 Research approach

There are three research approaches to developing a theory in research: inductive, deductive and abductive.

### 3.2.1 Inductive approach

The inductive approach involves building/formulating a theory (Saunders et al., 2019). For this reason, it can also be referred to as the bottom-up reasoning approach. When using the inductive reasoning approach, the researcher is part of the research process, unlike the deductive reasoning approach (Melnikovas, 2018). The inductive reasoning approach is used to collect qualitative data, and there is less generalisation in this approach (Melnikovas, 2018; Saunders et al., 2019).

### 3.2.2 Deductive approach

The deductive approach involves deducing a hypothesis from an existing theory. In this approach, the researcher attempts to verify a theory by returning to the first step (Saunders et al., 2019). For this reason, it can be referred to as a top-down reasoning approach. The deductive reasoning approach is associated with the collection of quantitative data. In this approach, the research is independent of what is being researched, unlike the inductive approach. Samples of sufficient size are collected to generalise conclusions (Barrett & Younas, 2024; Saunders et al., 2019).

### 3.2.3 Abductive approach

The abductive reasoning approach makes use of an intelligent guess or surprising fact and uses both inductive and deductive reasoning to find the most likely explanation (Melnikovas, 2018; Saunders et al., 2019). It starts with observing clues like signs, which provide a foundational basis for further research. The abductive reasoning approach aims to identify connections, contexts, structures and constraints, and it involves the use of cognitive

argumentation (Saunders et al., 2019). Abductive research is mainly used in mixed methods, which involve both quantitative and qualitative research methods (Melnikovas, 2018).

After considering the three approaches discussed above, the inductive reasoning approach was used in this study because of its ability to develop theories/come to conclusions based on specific observations and patterns emerging from the data rather than exploring explanations through abduction or testing pre-existing theories through deduction.

### 3.3 Research method

It is fundamental to make use of appropriate research methods to ensure that the findings of a research study are reliable, credible and relevant to the research question. This section outlines the research method used in the study. A research method is a set of tools, procedures and techniques used to gather and analyse data (Wahyuni, 2012:72). There are three types of research methods applied in research studies: qualitative, quantitative and mixed method approaches (Melnikovas, 2018; Wahyuni, 2012). After carefully considering the complexities of the research question, it became clear that having deeper insights from individual perspectives and experiences was essential. The study examined the experiences of participants subjectively by making use of non-quantifiable data. It is against this backdrop that the qualitative approach was applied to gain deep insights into the themes and patterns that emerged from the responses of the participants.

#### 3.3.1 Qualitative approach

According to Melnikovas (2018), qualitative methods involve the collection of vast amounts of descriptive data. It focuses on understanding phenomena from a subjective, in-depth perspective. In qualitative research, it is assumed that “there is a social reality independent of the knower and knowledge is subjective and personal” (Long, 2014). Qualitative methods can be divided into mono-methods and multi-methods. The employment of a single data collection technique and its associated analysis is referred to as the mono-method. In contrast, a multi-method employs more than one technique of collecting data and a corresponding analysis procedure to answer the research question. This study made use of the multi-method (Interviews and document analysis). Participants were interviewed to gain deeper insights into their experiences with the streaming technologies. To understand how traditional TV was being affected by the emergence of streaming technologies, document analysis was used.

#### 3.3.2 Multi-method qualitative approach

Multi-method qualitative research integrates two or more qualitative techniques to gather data. This study combined interviewing subscribers and analysing publicly available industry reports and annual reports for a richer interpretive depth. Interviews were used to capture first-hand

consumer experiences of PEOU and EU under TAM, while document analysis was used to investigate complex phenomena like media disruption by emerging technologies. The most important thing with qualitative data is “experiences, behaviour and attitudes” (Bell, 2010).

### 3.4 Research strategy

A research strategy is a plan used by a researcher to answer the research question (Saunders et al., 2019). This works as a roadmap for the entire study. It is used to guide the researcher in selecting the methods, procedures and techniques for collecting and analysing data (Chege & Otieno, 2020; Melnikovas, 2018; Saunders et al., 2019). Research strategy can include case study, ethnography, grounded theory, narrative research and action research, among others (Saunders et al., 2019:180). This study employed the case study strategy to answer the research questions. The need to have a deep understanding of the impact of streaming services on the stakeholders has led to multiple case studies of Netflix and DStv (MultiChoice) being used. The experiences of both Netflix and DStv were examined, and relevant documents were analysed to contextualise these experiences and understand the company’s strategy. Yin (2018) posits that the case study is more appropriate when the researcher seeks to have a deeper understanding of a real-life phenomenon. Yin further argues that case studies are ideal for answering the ‘how’ and ‘why’ questions, which makes them best for exploratory and explanatory research. The key to choosing a research strategy is achieving an acceptable level of coherence throughout the research design, allowing the researcher to answer the research questions and meet the objectives (Saunders et al., 2019).

#### 3.4.1 Case study

A case study can be referred to as an in-depth investigation of a phenomenon within real life (Saunders et al., 2019; Yin, 2018). The word “case” in a case study could be a group, person, organisation, association, event, etc. (Ridder, 2017; Saunders et al., 2019:196). A case study can yield insights from an intensive and in-depth investigation into the study of a phenomenon in its real-life context, which can enable the development of a theory (Saunders et al., 2019; Yin, 2018). Saunders et al. (2019) argue that a case study can be structured to examine what is happening and the reasons behind it, understand the consequences of the situation, and assess the implications of taking action. Case study research often uses a combination of interviews, focus groups, archival records, documentation and questionnaires, among others (Saunders et al., 2019). According to Yin (2018), a case study strategy can incorporate more than one case. This study focused on participants in the Western Cape province only. It is therefore important to note that people from other provinces, especially in rural areas, did not participate in this study.

### 3.5 Data collection

There are two forms of data collection, namely primary and secondary data collection. Semi-structured interviews are usually used to collect primary data (Wahyuni, 2012).To collect secondary data, researchers use publicly available data and internal publications provided by the participants (Wahyuni, 2012). To enhance the robustness of findings, researchers use a technique called triangulation to cross-check the consistency of their information. To address the research questions, this study employed a combination of semi-structured interviews and document analysis. Nineteen (19) consumers of Netflix were interviewed telephonically to gain an in-depth understanding of their experiences, opinions and preferences of the streaming Netflix platforms, and publicly available documents about MultiChoice were analysed in this study. The telephone interviews were recorded. Soon after every call, the recording was transferred to the researcher's laptop and a copy uploaded to his Google Drive, which is password-protected, as a backup in case of technical issues surfacing. Informed consent to record the calls was granted prior to each interview, which ensured that the participants were fully aware of the recording and their rights. After every interview, the recording was transcribed verbatim to capture the participant's responses in detail. Automated transcription software was used to generate the transcripts, which were later reviewed manually to correct errors and ensure accuracy.

Semi-structured interviews gave the researcher a chance to explore new topics as they arose and to understand not only what the consumers think but also why they think so. The researcher focused on interviewing consumers above the age of 18 for a variety of reasons. Consumers above the age of 18 are more likely to make independent decisions regarding the choices of the streaming services that they subscribe to, unlike minors, who rely on the decisions and choices of family members. This study did not focus on specific behaviours tied to age; hence, segmenting the research by age does not add significant value to this study. It simplified data collection to fully understand the general trend in the adoption of streaming services with no age-related variations/limitations. Finally, interviewing individuals over the age of 18 minimised the complexities and ethical concerns regarding consent and participation in the research. Minors lack the legal capacity to choose whether to participate in research or not. This study employed purposive sampling to select participants who could provide rich insights into OTT adoption, aligned with the inductive qualitative approach. The research started to see no new themes after the 17th interview, meaning a point of saturation had been reached, hence the 19 interviews were conducted consistent with qualitative guidelines for in-depth case studies.

To understand industry-wide trends, this research avoided internal perspectives to ensure the findings could be generalised to other industries facing similar disruptive challenges. Embarking on internal interviews would narrow down the focus of the study to company-specific strategies and tactics, which was not the goal. Consumers were prioritised as the primary adopters influencing the disruption in the broadcasting industry which provided bottom up insights into TAM amid access barriers to corporate stuff. Time constraints and corporate non-disclosure agreements (NDA) made it difficult to interview Multichoice and Netflix employees. Furthermore, this study focused on understanding how consumers of OTT services perceive and adopt these services. Concentrating on internal perspectives could lead to bias towards corporate strategies, while the study focused on the real-world impact of OTT services on consumers.

To address the corporate aspect, the research relied on publicly accessible documents, industry reports and market analyses to offer a balanced insight into the competitive dynamics between OTT and traditional broadcasters. Table 3.1 contains information about the documents that were used.

**Table 3.1: Documents reviewed**

| Document type | Description | Page | URL |
|---|---|---|---|
| Annual financial statements | **MultiChoice Group Limited** Integrated Annual Reports for the year ended 31 March 2023 | 94 | https://investors.multichoice.com/integrated-annual-reports.php |
| Consolidated annual financial statements | **MultiChoice Group Limited** Integrated Annual Reports for the year ended 31 March 2024 | 104 | https://investors.multichoice.com/integrated-annual-reports.php |
| Annual financial statements | **MultiChoice Group Limited** Integrated Annual Reports for the year ended 31 March 2024 | 36 | https://investors.multichoice.com/integrated-annual-reports.php |
| Annual report | Segmental review for the year ended 31 March 2024 | 72 | https://investors.multichoice.com/integrated-annual-reports.php |
| Integrated Annual Report | Integrated Annual Report 2024 For the year ended 31 March 2024 | 130 | https://investors.multichoice.com/integrated-annual-reports.php |
| Integrated annual report | **MultiChoice Group Limited** King IV Application Report 2024 | 14 | https://investors.multichoice.com/integrated-annual-reports.php |
| Integrated annual report | **MultiChoice Group Limited** Integrated Annual Report for the year ended 31 March 2024 | 4 | https://investors.multichoice.com/integrated-annual-reports.php |
| Integrated annual report | MultiChoice Group ESG Report 2024 | 39 | https://investors.multichoice.com/integrated-annual-reports.php |
| Newspaper article | “DSTV loses 900,000 subscribers as Netflix and other streamers ramp up competition” | 3 | https://www.iol.co.za/entertainment/streaming/DSTV-loses-900000-subscribers-as-netflix-and-other-streamers-ramp-up-competition-7ae5eeba-1536-4eac-a7dd-837b5d25d5e8#google_vignette |

| Document type | Description | Page | URL |
|---|---|---|---|
| Newspaper article | “South Africans dumping DSTV” | | https://mybroadband.co.za/news/broadcasting/515199-death-by-half-a-million-cuts-south-africans-kiss-DSTV-goodbye.html |
| Newspaper article | “MultiChoice loses billions: Why SA viewers are dumping DSTV” | 2 | https://www.thesouthafrican.com/lifestyle/breaking-multichoice-loses-subscribers-DSTV-packages-price-steraming-latest-15-june-2023/ |
| Newspaper article | “MultiChoice’s record loss of subscribers: just as much to gain for Showmax relaunch?” | 4 | https://www.itedgenews.africa/multichoices-record-loss-of-subscribers-just-as-much-to-gain-for-showmax-relaunch/ |
| Newspaper article | “DSTV’s growth before and after Netflix launched in South Africa” | 4 | https://mybroadband.co.za/news/broadcasting/524312-DSTVs-growth-before-and-after-netflix-launched-in-south-africa.html#:~:text=In%20fact%2C%20MultiChoice’s%20biggest%20growth,aligned%20with%20the%20previous%20years |
| Newspaper article | “Netflix killing DSTV in South Africa” | 5 | https://mybroadband.co.za/news/broadcasting/543871-netflix-killing-DSTV-in-south-africa.html |
| Newspaper article | “Under pressure, MultiChoice wants streaming parity” | 2 | https://www.itweb.co.za/article/under-pressure-multichoice-wants-streaming-parity/nWJadMbNjlKMbjO1 |

### 3.6 Data analysis

The last section of the research methodology process is data analysis. Data analysis is the methodological procedure of examining, cleaning, and transforming data to uncover valuable insights and support decision-making. The interpretivism approach to thematic analysis was employed in this study to understand how consumers in South Africa perceive OTT services.

Thematic analysis is a technique employed to examine, analyse, organise, describe and report themes found within a data set (Nowell et al., 2017). Thematic analysis gives the researcher theoretical freedom, which results in a highly flexible approach that can be modified to meet the needs of many studies (Nowell et al., 2017). Thematic analysis involves familiarisation with the data, generating the initial codes, searching for themes, reviewing the themes, defining and naming the themes, and finally, writing the findings. The following steps were followed:

i. Familiarising with data – I immersed myself with the raw data by reading the transcripts and the documents repeatedly, jotting down notes of initial patterns. The process was done to understand the data as a whole. No codes were formulated at this phase. This process lasted for a week.
ii. Generating Initial codes – Initial codes were generated by labelling meaningful data units. The codes were generally descriptive and interpretive. The codes were then clustered provisionally.

iii. Searching for themes – The codes were then collated into potential themes, for example, grouping "ad interruptions," "scheduling frustration," and "download ease" under "Consumer-Centric Disruption". The initial themes were tested against the dataset for coherence.

iv. Reviewing Themes - The themes were carefully refined to ensure that they genuinely represent the participants' ideas and that they connect to the overall research objectives and theoretical framework. Themes that didn't link back to ease of use and usefulness were discarded.

v. Naming the themes – All the themes were clearly defined individually with a narrative, then mapped to research questions. Simple and concise names were used.

The Interpretation of the findings of this study was guided by the Technology Acceptance Model (TAM). The primary factors influencing the adoption of technology in TAM are perceived ease of use (PEOU) and perceived usefulness (PU). These two constructs of TAM were therefore used to guide the thematic analysis of data and how they manifest in the South African broadcasting industry. TAM was used as a lens to understand the process through which users accept and use streaming technologies.

The analysis helped to understand how OTT services are disrupting the South African broadcasting industry. It revealed how PEOU and PU influence the adoption of OTT services, assessed its impact on traditional broadcasters, and provided actionable recommendations for both OTT providers and traditional broadcasters.

### 3.7 Ethical considerations

Research that involves human beings is typically sensitive in terms of ethical aspects and norms to safeguard the rights of participants, ensure integrity and prevent harm (Fotrousi et al., 2017). Ethical considerations are essential in research to prevent harm, avoid deception and uphold the credibility of the findings (Fotrousi et al., 2017). Ethical clearance for this study was granted by the Faculty of Informatics and Design Research Ethics Committee with all the measures to minimise risk and voluntary, informed participation.

In this research, the participants were asked to sign a consent form which guaranteed them the following ethical considerations:

- Voluntary, informed participation – All the participants of this study participated voluntarily. Informed consent from the participants was obtained before data collection started to ensure that the participants understood the purpose of the study, the procedure to be used, the expected duration of the interview, the risks that may be

associated with the process, their rights and the benefits associated with the study. An information sheet explaining the research aims and the rights of the participants (e.g to withdraw at any time). A written consent was obtained through a signed form (Appendix A) before the interviews, and a verbal reaffirmation was given at the start of the interview. No incentives were offered, and participants were not coerced to avoid undue influence. All 19 participants signed the consent forms, and they were securely stored.

- Confidentiality – Participants were assured that all the information they shared would remain strictly confidential and their identities were protected from unauthorised disclosure. The following steps were taken to ensure this:
    i. Alphanumeric codes were used instead of names during data collection and analysis
    ii. Interviews were transcribed verbatim, but identifiable details were redacted
    iii. Raw data collected was securely stored on the Google Drive. The data was password-protected. Only the researcher and the supervisor had access to the encrypted repository.
    iv. The findings were aggregated in reporting to prevent re-identification. Direct quotes were anonymised.
- Privacy – The researcher protected the privacy of the participants by limiting data collection to non-intrusive methods and adhering to the Protection of Personal Information Act (POPIA) principles of accountability and purpose limitation. Only necessary personal data, like one's subscription status, was collected via anonymous surveys pre-interview. The interviews were conducted privately through end-to-end encrypted telephone and Zoom calls. Recording of the calls was done with consent, and the audio files were deleted immediately after transcription was done.
- Conservation of data – The data collected will be kept secure. Only the researcher will have access to it, and it will be stored for one year after the research in a controlled environment.

It is also important to note that no data were collected from minors. Only respondents above the age of 18 were interviewed. All the documents that were analysed are publicly available and were used solely for this study.

### 3.8 Conclusion

To explore consumers' experiences with streaming technologies, the inductive approach was applied within a qualitative framework. The study adopted the case study design and focused on Netflix and DStv. Semi-structured interviews and document analysis were used to provide a comprehensive view of the impact of streaming on traditional broadcasters. This multi-

method approach ensured a deep understanding of both consumer perspectives and industry dynamics. The interpretivist approach was used for thematic data analysis. Lastly, this chapter discussed the ethical considerations of the study.

# CHAPTER 4: RESULTS

## 4.1 Introduction

This study investigated the impact of internet streaming technologies on South Africa's television broadcasting industry. This chapter presents the findings of the study after examining the disruptive nature of the emerging streaming technologies in the traditional broadcasting industry. These results are organised in accordance with the research questions stated in Chapter 1. Documents were analysed, and 19 people were interviewed to understand their perceptions of the landscape of the broadcasting industry in South Africa. The responses were analysed using thematic analysis. Key themes derived from the participants' responses are presented below, guided by the research questions. The focus is mainly on how streaming technologies enhance user experience, and how it has contributed to the decline of traditional broadcasters like MultiChoice DStv. This, in turn, has affected the revenues of traditional broadcasters and government policies in terms of regulation. Table 4.1 summarises the findings, which will be further expressed in relation to the research questions.

**Table 4.1: Summary of findings**

| Theme | Key insights | Sample quotes |
|---|---|---|
| Technical challenges | Traditional broadcasters rely heavily on physical hardware components like decoders and satellite dishes. | "DSTV setup with decoders and satellite dishes is cumbersome; with Netflix, you just open the app and start watching". |
| Content variety | OTT platforms have vast amounts of content compared to traditional TV. | "Netflix caters to everyone in the house—my kids for cartoons, my wife for her movies, and me for documentaries". |
| Convenience and accessibility of streaming technologies | OTT services are convenient and can be accessed on the go. | "I like that I can watch Netflix on my phone, TV, or laptop, and it syncs across devices. With DStv, I'm tied to one screen".<br>"I can watch my favourite shows while commuting". |
| Simplicity and cost-effectiveness of streaming services | Streaming services are easy to set up and lower in cost compared to the setup of traditional television sets. | "DStv setup with decoders and satellite dishes is cumbersome; with Netflix, you just open the app and start watching". |
| Technological advancement | The booming of technological gadgets and fast internet has improved the quality of experience when using OTT platforms. | "The quality never drops on Netflix, and there's no buffering, which I always experienced with traditional live broadcasts". |
| Regulatory challenges | The rapid changes in technology development make it difficult to regulate OTT platforms. | "I think it is quite difficult to regulate OTT service providers".<br>"The rise of international streaming platforms like Netflix makes it harder for governments to promote or regulate local cultural content". |

| Theme | Key insights | Sample quotes |
|---|---|---|
| Seamless synchronisation | OTT services can be viewed on many devices without any challenges, unlike legacy TV, which forces one to be in a particular room in front of a TV. | "I like that I can watch Netflix on my phone, TV, or laptop, and it syncs across devices. With traditional TV, you're stuck in one place". |
| Piracy | The rapid advancement of technology enables easy piracy, which affects both OTT service providers and legacy media. | "Or there's another one. I do not know if you know Plixi. It offers, I think, all of DStv channels. But it is suspicious, man". |
| Control and flexibility in viewing experience | OTT services are consumer-centric, unlike the rigid schedules used in the traditional broadcasting industry. Viewers can manage their time properly. | "The fact that Netflix has no fixed broadcasting schedule allows me to watch whatever I want whenever I want".<br>"Netflix allows me to watch content on my phone, in bed, or even when I'm travelling".<br>"With Netflix, I watch what I want, when I want, instead of being forced to follow a fixed schedule". |
| Cultural dilution | OTT platforms let people consume content from various countries and end up adopting their cultures, which can be both negative and positive. | "The variety on Netflix is impressive, but it often lacks representation of South African or African culture".<br>"Netflix's variety includes some content that might not align with local cultural values, especially regarding language and explicit scenes". |
| Disruptive financial model | OTT platforms allow people to pay for what they watch only, unlike legacy media, which bundles everything. | "DSTV's packages are expensive, and you are forced to pay for channels you do not watch. Netflix is much more affordable".<br>"I think Netflix's affordability is one of the main reasons why it is disrupting traditional TV providers like DStv".<br>"Netflix's model allows multiple users on one account, which makes it even more cost-effective for families".<br>"With Netflix, I only pay for what I use, unlike DStv, where I pay for a full package with many channels I do not watch". |

### 4.2 Main research question

**RQ:** What is the state of diffusion of internet streaming technologies as an instance of disruptive innovation in the television broadcasting industry in South Africa?

This study found that internet streaming technologies have become widely adopted in South Africa. A huge population has adopted streaming services, which are driven by the technological advancements that have taken place in recent years and continue to grow. These streaming platforms are all consumer-centric. Some of the technologies that have enabled this diffusion of innovation include device flexibility, adaptive streaming technology, and advanced content personalisation algorithms. To have a deeper understanding, this research explored the technical aspects that facilitate the adoption of such services. Most of the participants praised Netflix for its lack of buffering. This is attributed to adaptive bitrate streaming protocols

such as HSL (HTTP Live Streaming). HSL is a technology that adjusts video quality dynamically based on the network conditions. This study also revealed that MultiChoice DStv's proprietary satellite infrastructure is affected by latency in live broadcasts, which is unlike online streaming, which runs on 4G networks. With the 5G network currently being implemented, especially in urban areas, the quality of experience is greatly enhanced through the reduction of data packet loss. These technical aspects strengthen this study's focus on technological innovation while highlighting the disruptive effect of OTT services.

### 4.2.1 Theme 1: Convenience and accessibility of streaming technologies

Unlike the traditional television setup, which requires a fixed TV set, streaming technologies are compatible with multiple devices such as smartphones, laptops, tablets and smart TVs, among others. There is no need for specialised hardware or professional technicians to set up for the viewer. This can be supported by one respondent who said, *"I like that I can watch Netflix on my phone, TV, or laptop, and it syncs across devices. With DSTV, I'm tied to one screen."*

### 4.2.2 Theme 2: Technological advancements enhancing streaming experience

The study revealed that consumers are attracted to streaming technologies because of the high-quality viewing experience, which is enabled by low latency and great technological improvements taking place. This revelation can be corroborated by the following response from one of the interviewees, *"The quality never drops on Netflix, and there's no buffering, which I always experienced with traditional live broadcasts."* Another participant also said, *"Netflix seems to be able to continue with its service even under harsh conditions, unlike the DStv satellite platform."*

### 4.2.3 Theme 3: Advanced content personalisation algorithms

Most participants revealed that they were fascinated by the suggestions they get from streaming platforms, which makes it easy to find content that they like as illustrated buy one interviewee who said, "Netflix suggests movies based on what I've watched, so I find things I like without searching much, which I can't get from traditional TV.

### 4.2.4 Theme 4: Control and flexibility in the viewing experience

QoE emerged as a major contributor to the adoption of OTT services. Streaming platforms allow consumers to access content on the go on any device and at any time, unlike the traditional TV broadcaster's programmed schedules that force people to watch their content at a specific time of the day. One interviewee explained, "*The fact that Netflix has no fixed broadcasting schedule allows me to watch whatever I want whenever I want."*

Participants also mentioned that streaming content is more enjoyable because there are no adverts interrupting their viewing experience, like what happens with traditional television, e.g., DStv as one participant said, *"With Netflix, there are no commercial breaks or interruptions so that I can enjoy a movie all the way through."*

## 4.3 Research sub-question 1

**RSQ 1:** How do broadcasting service providers operate in the television broadcasting industry in South Africa?

The South African traditional broadcaster is still largely dominated by old satellite-based models requiring physical hardware such as decoders and satellite dishes. These physical hardware resources are associated with a number of challenges that push consumers away. Their business model has also been criticised for a number of reasons, which are outlined below.

### 4.3.1 Theme 1: Simplicity and cost-effectiveness of streaming services

The traditional broadcaster, which relies heavily on physical hardware components like decoders and satellite dishes, has been criticised by many respondents, saying that the setup process is complex, incurs huge costs and is prone to latency, especially in harsh weather. One participant highlighted that, *"DStv setup with decoders and satellite dishes is cumbersome; with Netflix, you just open the app and start watching."* Another respondent also said, *"In terms of costs, you will notice that Netflix is more of a pull-out-of-the-box. So, comparing the two, you see that setting up and going with Netflix is a much shorter and simpler way than doing the same thing with the DStv service."*

### 4.3.2 Theme 2: Lack of personalisation and consumer control in traditional broadcasting

This study revealed that traditional broadcasters lack innovativeness as they use fixed schedules and bundle the programmes together, which reduces the user's ability to select specific content, as one participant said, "*DStv doesn't allow for profiles or personalised suggestions. It is not flexible or tailored to individual tastes."*

Another participant said, "*So, I would want to suggest to them (traditional broadcasters) that we first give more control to the consumer, implement advanced data analytics, know your customers and serve what the customer wants, not what you have.*

The same participant also said, *"Very many reasons pushed me away from the public broadcaster. Firstly, there is an apparent dictatorship. They're deciding what I should watch at*

*a given point in time. I believe in being free to choose what I want to watch and also when I want to watch it."*

### 4.3.3 Theme 3: Reduced latency in streaming services

Some participants raised issues that traditional broadcasters are highly affected by latency during live events because of the time required for signal transmission via satellite. One participant captured this issue, noting, "*With streaming, even live events are smoother; you're not waiting for the satellite to catch up.*

### 4.3.4 Theme 4: Revenue models in traditional broadcasting

DStv was found to be the dominant broadcaster in South Africa, as supported by one respondent who said, "By traditional television, I assume you are referring to DStv."

One of the participants indicated that their primary source of revenue is the monthly subscription fees from their customers. They bundle their packages into DStv Premium, DStv Compact Plus, DStv Compact, DStv Family and DStv Access, and DStv EasyView, with DStv Premium being the most expensive, offering a comprehensive range of channels, and DStv Family and DStv Access being least expensive ones offering a smaller selection of channels and content but still provide access to essential TV entertainment and local programming. DStv EasyView is free and offers a handful of free-to-air channels. Some participants also mentioned that DStv has a streaming platform called DStv Now, which offers the same packages as above. They also have another streaming platform that is independent from the main subscription. This service offers a flexible, lower-cost alternative to traditional satellite TV. Advertising is a major revenue earner for DStv. It sells advertising slots to various companies during commercial breaks of live sporting events, news and general entertainment.

### 4.3.5 Theme 5: Declining revenue for broadcasters in the age of digital disruption

From the 16 publicly available documents that were analysed, including newspaper articles and MultiChoice Financial Statements, it was found that DStv has been losing its subscribers ever since the emergence of internet streaming. According to MultiChoice's (the parent company of DStv) financial statement for the year 2024, it lost 900,000 subscribers, reducing its active base to 26.4 million from 27.3 million. According to the financial statement for the previous year (2023), they had also lost nearly 500,000 subscribers in South Africa, reducing the subscriber base from 9.115 million to 8.629 million. In an interview with Jimmy Moyaha, the Chief Financial Officer of MultiChoice confirmed that the company was facing challenges during the 2024 fiscal year. He confirmed that these losses were largely due to the competing streaming services. Still, he also argued that some of the customers were cutting their

connections due to economic hardships, such as inflation rates exceeding 30% in some markets.

According to a newspaper article by Hanno Labuschagne, between 2022 and 2023, DStv lost about 17,000 subscribers, which continued to increase until now. The article says that before then, DStv was adding subscribers every year. According to the same writer, DStv's Premium subscriber growth has struggled since Netflix launched in South Africa in 2016. The extract below is a graph that shows the Netflix effect on DStv.

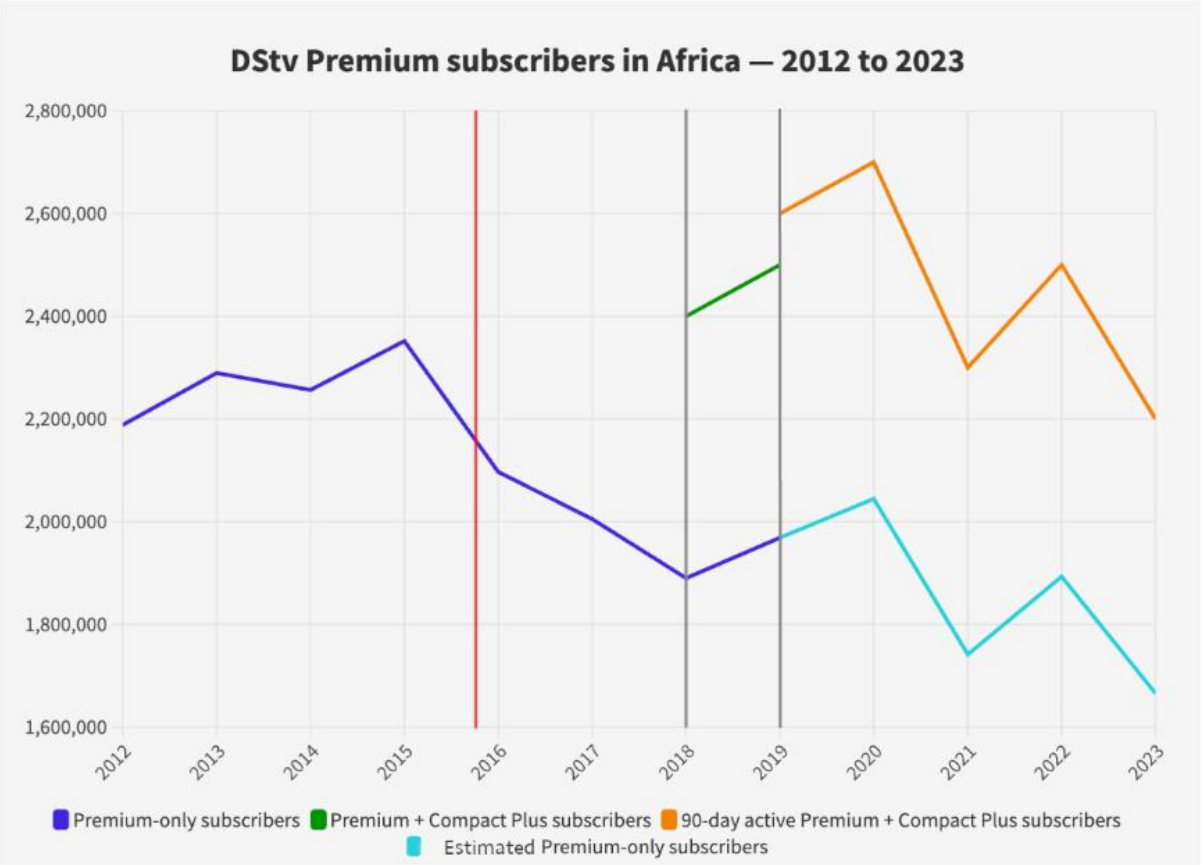



**Figure 4.1: DStv Premium Subscribers in Africa**

According to the newspaper article titled "Netflix Killing DStv in South Africa" by Hanno Labuschagne, before the official launch of Netflix in South Africa in 2016, South Africa was one of the 130 countries that were accessing Netflix through Virtual Private Networks (VPNs).

## 4.4 Research sub-question 2

**RSQ 2:** What is the influence of OTT services as an instance of disruptive innovation in the television broadcasting industry in South Africa?

### 4.4.1 Theme 1: Technological advancement

The study revealed that the boom of the internet in the fourth industrial revolution (4IR) has enabled many people to access content on various devices, which have also become affordable for various reasons. However, irrespective of accessing content on-demand, many participants highlighted that they did not completely abandon DStv because it offers live sport, which is not yet easily accessible on demand here in South Africa as explained by one interviewee, *"I'm currently still a DStv user. I like my DStv. But only for sport. To watch live sport."*

Another interviewee said, *"Sport is the reason why I keep DStv. I only use DStv for soccer, so Netflix is for series and movies that are not yet on DStv."*

However, another participant said, *"We do have Netflix and DStv. So, we keep the DStv full package because the children watch sports. So, they watch Formula 1 and soccer and all of that."*

### 4.4.2 Theme 2: Personalisation through AI

This study found that traditional television does not offer personalised content to individuals, unlike streaming platforms that keep track of user interests and personalise the content to suit each user. Many participants showed that they were attracted to this feature and that it had changed their television viewing habits (consumer behaviour) as explained by one respondent who said, *"The best thing about that is the analytics; they will actually recommend stuff we have found fascinating and quite convenient, probably the most exciting aspect of Netflix. The customer-centric view."*

### 4.4.3 Theme 3: Regulatory challenges

Participants mentioned that traditional television is heavily regulated by the Independent Communications Authority of South Africa (ICASA). These regulations include the content quotas for local productions. One of the interviewees explained that, *"I think it is quite difficult to regulate OTT service providers because recently, I think I have learned of so many, quite a number of streaming services on the internet that I do not think the government regulates. And I do not think the government has anything to do with maybe the pricing model.*"

Most participants also mentioned that they sometimes watch ad-supported content on YouTube. They said YouTube has content that suits almost everyone, as content production for YouTube is easy and not so expensive since video quality is not as important as postulated by one participant who said, *"So, I think, in my understanding, it is very hard to regulate these international streaming platforms because there's content that is coming internationally. So,*

*sometimes you can't actually stop people from viewing a certain production because people always find ways of accessing that type of content. So, for example, if it is a film that is heavy on, I'll just give you an example, on pornography, it is hard to keep that for the local audience. Even if you do not want them to watch, they're going to find ways of watching that. So, that could actually have an effect on the government, I would think, in terms of policymaking. It is hard for the broadcasting corporation of South Africa to control some of these international streaming sites because people always find ways of accessing the content.*"

Another participant also said, "*I think it is very, very much difficult to regulate because people can actually use other platforms just to hide what they are viewing. So, for the government now to really regulate it, I think it is a bit difficult because you can use VPNs and you can stream anything without anyone noticing or being able to know what you are viewing.*"

Another participant argued that, *"It is difficult for the South African government (ICASA) to regulate content on Netflix. I, assume that if I find anything controversial on Netflix, if I complain to ICASA, they might take some action, but I'm not sure how they're gonna sanction a company that is domiciled in the US so I do think that is a bit of a challenge in terms of content moderation, or, individual government across the world. I think that's the challenge that they have when it comes to Netflix or any streaming service out there. Most of the popular streaming services are based in the UK."*

### 4.4.5 Theme 4: Cultural dilution

The study unpacked that people from different backgrounds can watch content, in their own language, on streaming platforms like YouTube. This was supported by a participant who said, *"So sometimes, when you watch international content, sometimes you can't relate to what the characters are saying because maybe it is very Western. But when it comes to YouTube, sometimes you then watch something that is closer to home. You know, if you like, for example, a lot of content in Shona in my home language, you can watch that on YouTube. Whereas on Netflix, that might be hard for you to access that type of content, you know."*

The study also revealed that streaming content is not limited to a certain audience, unlike traditional TV, which often targets particular demographics based on programming schedules and regional broadcasting. People from other cultures can learn about various cultures on platforms like YouTube and Netflix, as one participant expressed concern, saying, "*What is a bit annoying for me is some of the movies or the films that they do or that are on the platform. Sometimes, I think they are promoting things that are against my culture, like, for instance, homosexuality, which is something that is looked down upon in my culture. I think that's one thing that I found a bit annoying.* "

Commenting on the censorship of words on Netflix, another participant also expressed concern, saying, *"The language is just verbose. It is just vulgar, most of this American stuff."*

## 4.5 Research sub-question 3

**RSQ 3:** What are the factors that influence the adoption of this disruptive innovation in the television broadcasting industry in South Africa?

### 4.5.1 Theme 1: Seamless synchronisation

The study revealed that streaming platforms allow users to synchronise their accounts across all their devices in just one click. Participants said this has proved to be extremely convenient for them. They also said the ability to pause and continue streaming their content from where they left off without being forced to watch it at a specific time is one of the reasons they are attracted to the use of streaming platforms. Other participants said that with traditional broadcasters, content is aired to all the consumers at once, irrespective of whether one watches it or not. Once it is aired, the viewer cannot access it anywhere else, although you would have paid for that content. This convenience was illustrated by participants who shared their experiences: "I like that I can watch Netflix on my phone, TV, or laptop, and it syncs across devices. With traditional TV, you're stuck in one place.

Another participant added, "*With Netflix, I can pause a movie and resume it later, which is something I can't do on traditional TV"*, while another noted, *"In traditional TV, you are forced to follow a fixed schedule; you can't pause or revisit the program if you miss it."*

### 4.5.2 Theme 2: AI-Driven content personalisation

The study revealed that consumers find the content recommendations given by OTT platforms attractive. This was reflected in one participant's remark, "*I enjoy Netflix's recommendations; they seem to know my taste better than I do, and it is tailored in a way traditional TV can't match."*

### 4.5.3 Theme 3: Disruptive financial model

The findings indicate that advertising has become a key disruptor of traditional television broadcasters. The main source of revenue for traditional broadcasters is advertisements and their bundled packages, which consumers dislike, as one participant explained, *"advertisements were another issue. Sitting in front of the TV in the old days, you would reach a point where you could predict if they were showing this film or between this time and that time this advert was going to come out, you end up knowing the adverts by heart as if you're acting in the advert itself. So those repeated adverts were interrupting my viewing, but I do not have that disruption when I'm on the streaming service, the Netflix service specifically."*

A key observation from the data analysis is that various streaming platforms have different approaches to adverts. Paid platforms like Netflix and Amazon Prime do not show adverts, but free platforms like YouTube generate their revenue through adverts. In contrast to traditional broadcasters, you have to pay to watch their content, and then they force you to watch the adverts. This study found it to be unattractive to consumers, resulting in them opting for commercial-free streaming services. Referring to streaming services, one participant expressed that, *"I like that it is also commercial-free. There are no advertisements."*

The findings indicate that streaming technologies have also made it possible to create new revenue models whereby they can offer consumer content for free. These models use what is known as target marketing, whereby they use machine learning algorithms to gather as much information about a consumer and force them to watch adverts that could be of interest to them, without any reason to complain, since the content is free. Platforms like YouTube do not even create the content, but let people create content and post it for free on their platform. YouTube then collect revenue from advertisers who intend to advertise on their platform, and they share the income with the content producers. This has attracted consumers to watch free content and cancel their subscriptions to DStv.

Several participants shared experiences that reflect this shift. One remarked, "I cut my DStv subscription because I found it useless to me. It was not giving me what I wanted. So, I cut it off. I cancelled the subscription. I think Netflix is cheaper. Way cheaper. There's no exclusivity." Another participant noted*, "I use a free subscription because I do not want to pay twice.*" The same participant also said, in response to the machine learning algorithms that gather consumers' personal data for revenue generation,

*"They sell that data. They mine that data, clean it, and sell it. Which is a scary thing, right, to some extent, because we give consent to what we do not know."*

Many of the participants pointed out that they used many other streaming services, including YouTube, TikTok, Spotify, X(formerly Twitter), and Facebook, among others, as one participant explained, *"TikTok is actually a major threat to TV, you know. And I would also speak on behalf of a lot of millennials and Gen Z. A lot of them are spending so much time on TikTok and social media in general, social media counting out YouTube, because YouTube is based on its own."*

### 4.5.4 Theme 4: Digital disruption through OTT services

The study's results showed that over-the-top services have challenged traditional broadcasters by giving consumers unrestricted access to on-demand content, which offers them a level of

flexibility and personalisation, which is in contrast with the traditional television model airing programmes at specific times per day as one participant observed "*OTT platforms are taking over because they're online and flexible, unlike the rigid model of traditional TV*."

Another added, "*It is a disruptive technology. It has changed the whole game. The shape of TV and the shape of entertainment have changed since the arrival of these streaming services. We are looking at the case where the customer who used to be weak and only there to accept what is being broadcast now has a choice."*

It was also revealed that consumers were not happy with the inability of traditional broadcasters to tailor packages based on user preferences. DStv was given as an example, which requires users to pay for bundled channels they do not use. This is in contrast with streaming services that allow viewers to select their content, as one interviewee remarked*, "You can't really control what you see on DStv; Netflix feels more up-to-date with technology",* while another expressed frustration with the lack of choice, stating, *"There is an apparent dictatorship (in the traditional broadcasters' model). They're deciding what I should watch at a given point in time."*

### 4.5.5 Piracy and its impact on OTT services and traditional broadcasting

The study also found that both streaming platforms and traditional broadcasters are being affected by piracy. This issue was captured by one participant who commented, "*Or there's another one. I do not know if you know Plixi. It offers, I think, all of DSTV channels. But it is suspicious, man, to answer your question about legitimacy."*

## 4.6 Conclusion

This chapter presented the findings of the interviews that were conducted. These findings include how consumers perceive traditional television, why they are abandoning it to adopt streaming services, the streaming services that are emerging and disrupting traditional television, how the government is affected by these emerging technologies, and the impact of these emerging technologies on other businesses. One participant raised an issue about a suspicious platform called Plixi (an IPTV), which could be pirating DStv content. The researcher did not investigate this issue deeper since it is not the main focus of the study. However, this research gap can be investigated in future studies. The documents that were analysed showed that DStv, a subsidiary of MultiChoice, had lost subscribers at an increasing rate since Netflix officially launched in South Africa. This has resulted in substantial losses for DStv over the years. These findings will be discussed in the next chapter to determine the causes of this drastic shift and what could be done to address the issues raised.

# CHAPTER 5: DISCUSSION

## 5.1 Introduction

This chapter critically discusses the results of the study. The main focus is on the diffusion of internet streaming technologies as a form of disruptive innovation in South Africa's television broadcasting industry. The discussion will be guided by the research objectives and the research questions stated in Chapter 1. The Technology Acceptance Model (TAM) will also be used to further evaluate the insights from the findings and the literature review.

## 5.2 Analysis of research objectives

### 5.2.1 How broadcasting service providers operate in South Africa

The primary objective of this study was to understand how broadcasting service providers operate in South Africa's television broadcasting industry. The results of this study show that traditional broadcasters like MultiChoice's DStv have historically dominated South Africa's broadcasting industry. These traditional broadcasters offer subscription-based services such as live sports, news and movies. Their content is pre-programmed such that if people are interested in a particular programme, they are forced to watch it on TV at a specific time.

In contrast, OTT service providers give people control to watch their content anytime and anywhere as long as they have an internet connection. This enables people to manage their time effectively without the need to be rushed so that they can watch a certain programme on television. Traditional television has, therefore, lost a segment of customers to OTT service providers due to this effect. Also, traditional broadcasters like MultiChoice DSTV make use of satellite technology, which requires customers to purchase and install a proprietary television set that includes a decoder and satellite dish, unlike the OTT technologies such as Netflix, which rely on internet-based delivery systems. This operational shift highlights the cost-effectiveness and flexibility of OTT platforms, which is appealing to the tech-savvy audience that seems to be growing by the day.

Although traditional broadcasters dominate the legacy market share, they are facing challenges in adopting the flexibility and consumer-centric features associated with OTT platforms like Netflix. Many consumers now view traditional television as outdated and rigid while favouring OTT platforms due to their convenience and customisability. TAM explains this disparity through perceived ease of use (PEOU) and perceived usefulness (PU).

### 5.2.2 The influence of OTT services as disruptive innovations

The emergence of OTT platforms has significantly disrupted the South African television broadcasting industry landscape. This study revealed that OTT services like Netflix are flexible and affordable, offering consumers diverse content options unlike the traditional models that provide limited flexibility and demand high subscription fees. In addition, the study revealed that OTT services enhance the quality of experience (QoE), which is a critical factor in enhancing customer loyalty. On the other hand, OTT platforms ride on internet infrastructure, which already exists without paying anything for maintenance or existence, giving them a competitive advantage over traditional broadcasters that use satellite technology and have to develop with their own proprietary hardware. This is supported by TAM's construct of PEOU since OTT platforms simplify access to content. Many users of OTT services already have unlimited internet connections for other uses, e.g., working from home. OTT services have also disrupted the traditional television subscription model that usually bundles content into a single monthly subscription, which, in most cases, forces consumers to pay for content they may not even use. A good example, revealed in the analysis and results chapter, is that of people who only subscribe to DSTV for live sports. These people end up paying for other content they are not interested in because it is bundled with the sports channels they do want.

In contrast, content bundling has been disrupted by OTT services following a pay-per-view subscription model. However, in South Africa, the pay-per-view subscription model is still lagging in terms of live sports, as most of the OTT service providers do not have licenses to cover live sports. This seems to be working in favour of DStv as sports fanatics, especially soccer fans, are forced to purchase a DStv subscription to watch live sports.

On the other hand, many companies, e.g., Formula 1, broadcast their live sport and other content on their websites for very little money. Hence, consumers prefer to pay just for that, unlike bundled content. It can also be argued that if one decides to pay for three or more live streaming services, they could end up paying more than what they pay for DStv bundled programmes. However, one does not need to be tied to a long-term contract: one can subscribe for the month they need to watch the content and skip other months. They can also watch content from anywhere in the world, unlike traditional television, which requires one to be sitting at home in the TV room to watch content. On this note, traditional broadcasters have been forced to adopt streaming as they now also stream their programmed channels. For DStv, it is called DStv Now. This can be consumed on the go, but it still lacks flexibility as the channels are programmed.

In the researcher's view, OTT service providers have developed disruptive revenue models. Traditional broadcasters like DStv will eventually have to adopt the pay-per-view model for them to survive. At present, they are surviving because of live sport, and the internet is not yet accessible in some places, e.g., rural areas and some townships.

### 5.3 Factors influencing the adoption of OTT services

In this study, several factors have been identified as driving forces for the adoption of OTT services in South Africa. These factors include:

#### 5.3.1 Technology advancements

The streaming experience has been improved and enhanced by the expansion of 4G networks and the anticipated rollout of 5G networks. These superfast networks have reduced buffering, thereby improving the quality of video. This has attracted consumers to adopt OTT services as they can now offer good-quality videos.

#### 5.3.2 Device availability and affordability

The affordability and availability of internet-enabled devices such as smartphones, smart TVs and tablets play a major role in accessing OTT platforms. Over the past year, there has been a rapid growth in the availability of these devices, which has led to their prices dropping; hence, many people can now afford to own at least one such device. However, in some remote areas, access to these devices is still a challenge, which reduces the adoption of OTT services. This also goes with technological literacy. Nowadays, information is readily available, and many people can quickly learn how to navigate digital interfaces, which has an impact on their perceived ease of use of OTT platforms.

#### 5.3.3 Convenience

OTT services allow consumers to access content on the go, which means consumers can access content anytime, anywhere and on multiple devices, resonating with modern consumer behaviour. In contrast, the traditional television setup is confined to a particular room, forcing people to be in the same spot to be able to access the content. Going on a vacation for a month, for example, the customer will have to pay for the content they won't consume.

#### 5.3.4 Affordability

Generally, OTT platforms are more cost-effective compared to traditional television. However, this position can be argued depending on the number of OTT services one is subscribed to. If subscriptions are purchased for three or more OTT platforms, the fees could be higher than that of traditional television. On the other hand, some streaming platforms like YouTube are free, and they offer a wide variety of content. This then justifies that, generally, streaming

platforms are less expensive as they can generate income through means other than subscriptions. These platforms can actually pay content creators to create content so that they (the OTT services) can advertise to consumers and generate revenue.

### 5.3.5 Content variety

The vast amount of content available on various OTT platforms and their accessibility resonate well with consumers. It is different from traditional television where e.g., only a certain number of movies can be aired at a particular time within 24 hours, and some of the movies are repeated. However, most people do not have the whole day to watch television, so in the little time they do have, they might not like the content being aired, hence adopting OTT platforms, which offers them variety and control.

### 5.3.6 Cultural preferences

Inasmuch as OTT platforms such as YouTube cater for diverse cultural preferences, there are concerns about the erosion of culture and the promotion of non-traditional values. Some barriers hinder the widespread adoption of OTT services, for example, high data costs and inconsistent internet connections. Considering that most of the respondents said they have unlimited Wi-Fi, there are people who do not have unlimited data plans. This hinders the widespread adoption of OTT services like Netflix since streaming consumes large volumes of data. In some areas, internet connections are unreliable, often resulting in buffering and low-quality streams, which, in turn, can lead to consumers having a negative user experience.

## 5.4 Technology Acceptance Model (TAM)

TAM was used as a lens to analyse the adoption of OTT services in South Africa, and the results were interpreted using the key constructs of TAM as follows:

### 5.4.1 Perceived usefulness

OTT platforms like Netflix have been widely perceived as useful in South Africa for a number of reasons, including convenience, cost-effectiveness, personalised recommendations, ad-free viewing, content variety, and availability. Unlike the rigid programming of traditional broadcasters, OTT platforms allow consumers to watch content on demand, which is appealing to them. Furthermore, OTT platforms make use of advanced recommendation algorithms that personalise content for consumers, thereby enhancing user satisfaction. It is also worth noting that consumers do not pay to view adverts. OTT platforms offer some ad-free content for premium users, unlike traditional television forcing everyone to watch adverts irrespective of whether they have paid for entertainment and news only. This aspect of OTT appeals to consumers, thereby ‘dumping’ traditional television. However, it can be argued that watching sports over the top is not yet as convenient as traditional television; hence, the usefulness of

OTT platforms depends on the type of content watched. Be that as it may, with the rate at which technologies are advancing, it is likely that sporting activities will eventually be watched conveniently over the top, which can be a huge challenge to traditional broadcasters as TV is currently their lifeline. According to TAM, if users perceive OTT platforms like Netflix as useful in fulfilling their needs, they are most likely to develop a positive attitude towards using them, which, in turn, leads to a stronger intention to use them.

### 5.4.2 Perceived ease of use

The adoption of OTT platforms by a wide range of people is partly attributed to their intuitive design. Most streaming platforms allow users to seamlessly navigate across devices, making it easy even for non-tech-savvy people to access content. Using Netflix as an example, it takes only a few minutes to create an account and make payments in the comfort of one's home or on the go. This is unlike traditional broadcasters, who often require proprietary hardware like satellite dishes and decoders to be set up by professional technicians for a fee and going to a dealer monthly to make payments. Some of the factors contributing to the perceived ease of use on OTT platforms include simple search and filtering, cross-device compatibility, easy account management, personalised profiles, offline viewing, and "help and support services". According to TAM, if a platform is easy to use and navigate, users are more likely to develop a positive attitude towards it, which in turn influences their intention to adopt and continue using the platform.

### 5.4.3 External variables

This study revealed that external factors such as internet affordability and reliability are crucial in the adoption of OTT services in the South African context. Inconsistent network quality and high data costs may constrain the adoption of OTT services, limiting their accessibility mainly to urban, higher-income demographics. Traditional broadcasters leverage this gap by offering satellite coverage, which is uniform both in urban and rural settings. Nonetheless, it is worth mentioning that companies like Starlink, which provide access to high-speed internet at low costs, are growing fast and could change this narrative in the near future. Currently, Starlink services have not yet been adopted in South Africa, attributed to government regulations.

There is also a positive social influence that increases consumers' perception that OTT platforms are useful, which is to highlight the benefits of using these platforms and create a sense of social acceptance. External variables are therefore important in shaping the adoption of OTT platforms through influencing the perceived ease of use and usefulness by the consumers. These external variables can guide OTT service providers in developing strategies that deal with the challenges.

### 5.4.4 Behavioural intention to use

The results of this study suggest that consumers are increasingly inclined to use OTT services because they are aligned with modern viewing habits. However, trust and perceived risks play a crucial role in moderating consumers' behavioural intention to use OTT platforms. A good example to explain this would be concerns over data security and recurring subscription costs, which are linked to users' bank accounts. This can deter some users from using OTT services, which may give traditional broadcasters like MultiChoice DStv an opportunity to advertise themselves as more stable, secure and reliable service providers.

### 5.4.5 Actual system use

Although many users expressed a preference for streaming services, this study highlighted disparities in actual system use. The lack of reliable and consistent live sports coverage has reduced the adoption of OTT services, which has reinforced the dominance of traditional broadcasters in this aspect. The same also applies to the inconsistent availability of reliable internet in some parts of the country, which reduces the feasibility of using streaming services. Nonetheless, not everyone's decision to use OTT platforms is influenced by sports coverage. Most of the participants who subscribe to DStv for sport said they also subscribe to OTT service providers for other content, such as movies and documentaries. It is also important for OTT service providers to address the issue of live sports coverage and infrastructural inequalities to facilitate the broader adoption of their services.

## 5.5 Ethical and policy considerations

This study uncovered several ethical and regulatory issues. Target advertising and data mining have raised privacy concerns. The issue of piracy also poses significant challenges to both streaming platforms and traditional media. Participants drew attention to the rise of unauthorised platforms like Plixi, which are thriving on piracy, thereby creating an uneven playing field. This, therefore, calls for policy interventions to balance innovation with regulation. The government needs to develop frameworks to ensure that local content is represented without flattening the growth of OTT services. In addition, stakeholders may collaborate to counter piracy and promote ethical data practices.

## 5.6 Implications for stakeholders

The results of this study uncovered that traditional broadcasters such as DStv need to innovate their service delivery models. They could implement strategies like partnering with telecom providers to offer affordable data bundles, diversifying content portfolios, and developing proprietary OTT platforms. However, some broadcasters may be deterred from investing in these innovations due to accompanying financial risks.

OTT service providers can improve the adoption rate by collaborating with ISPs to improve network reliability and reduce data costs. They can also invest in technologies and partnerships that allow them to stream live sports consistently to cater for consumers who love sports. However, these investments may increase operational costs, which could then affect subscription affordability.

The study also revealed that the government must develop regulatory frameworks to level the competitive landscape. Policymakers need to address issues of data affordability, net neutrality, and equitable access to broadcasting infrastructure. However, such policies could be resisted by stakeholders invested in maintaining the status quo.

Consumers are the major beneficiaries of increased competition and innovation. Nevertheless, there is a need for affordable internet options and awareness campaigns that empower consumers to make informed choices.

### 5.7 Comparison with literature

The findings are consistent with the assertion by Lüders (2022) that OTT platforms provide users with unparalleled flexibility, enabling them to schedule their viewing activities flexibly. The participants continuously emphasised their appeal of the control they are offered on OTT platforms. This view aligns with the literature, which identifies consumer autonomy as a major factor in the adoption of OTT services. While participants showed interest in the control given to them by OTT platforms and the recommendation algorithms, they also expressed concern about how easily these platforms can lead to addiction, which may result in them spending most of their time on entertainment rather than being productive. This echoes Lüders' observation about algorithmic control.

This study also confirmed an observation by Lim et al. (2023), who posit that traditional broadcasters are also moving towards streaming their content to stay competitive. Participants mentioned the MultiChoice DStv streaming platform called "DStv Now". It was, however, criticised for mirroring the rigid programmed model of traditional television and the bundled pricing.

This study's outcomes are consistent with the literature in terms of traditional broadcasters like DStv remaining competitive to some extent in the South African market because of their exclusive sports offerings, which are reliable compared to OTT sports offerings. Xu et al. (2023) highlight that live sports is a critical aspect appealing to consumers, and the current study's findings reaffirm this, particularly for soccer, rugby and Formula 1 enthusiasts. However, the findings also revealed a growing displeasure among niche sports viewers who favour OTT

platforms for dedicated sports as they perceive these platforms as cost-effective and tailored to their interests. This aligns with Hagelgans' (2022) assertion that OTT platforms are reshaping how live sports are being consumed, especially through their flexible and personalised viewing options.

This study furthermore revealed that live sports are critical in the perceived usefulness of OTT platforms. While internet connections have greatly improved, such that sporting events can be streamed live without any disruptions, it is important to note that one has to subscribe to various OTT platforms to be able to watch various sports. Subscribing to various OTT platforms can be expensive for sports fanatics who enjoy watching various sports. This gives traditional TV an advantage as its bundled subscription model allows viewers to access multiple sports channels through a single subscription. However, it is not a permanent advantage for traditional TV, considering the pace at which technology is advancing. Furthermore, OTT platforms are increasingly securing exclusive rights to many sporting events. Streaming companies like Amazon Prime and DAZN secured rights to broadcast the English Premier League and boxing events, which has disrupted the monopoly of traditional broadcasters. Sports events alone will not be able to sustain traditional TV for long. They need to become innovative, offering new strategies to survive the disruptions caused by OTT services.

Interestingly, the participants expressed resonance with the innovative features of OTT services, such as multi-screen sharing, which aligns with Hutchins et al.'s (2019) assertion of the same. However, it seems that consumers are taking advantage of these innovations to share accounts and pay less, thereby negatively affecting the OTT service providers in terms of revenue collection. There is thus a need for developing strategies to ensure that these innovations are used ethically.

It also emerged from this study that the government is increasingly facing challenges in regulating OTT platforms because technology is advancing at a fast pace. This supports the arguments made by Dagnino (2018), who highlights that regulating streaming platforms is still a challenge due to their cross-border accessibility and global reach. The study also confirmed that the regulation of streaming services is neither standard nor consistent. The governance of accuracy, decency and sensitivity has been relaxed, which has created a toxic environment where harmful content can spread easily. A good example is Andrew Tate's content, which was banned but continued to circulate on social media (Sky News, 2022). This underscores the difficulties faced in controlling content on such platforms.

In addition, the current study exposed how difficult it is to hold people accountable for content shared on OTT platforms like YouTube, considering the anonymity that fake accounts and

international users can provide. This is also true about the rise of illegal and harmful content, which may include adult content and fake news that are almost impossible to regulate because of their availability on the Web, accessible directly or via VPNs. The findings corroborate the literature presented by Robb and Hawthorne (2019), who underscore the challenges of OTT content regulation under the Broadcasting Act 4 of 1999.

To a greater extent, this current research aligns with existing literature, particularly on the disruptive nature of OTT platforms towards the traditional television industry. The study shed light on the limitations of traditional television, which are being exploited by modern OTT platforms through their disruptive, contemporary revenue models and flexibility.

### 5.8 Explanation of unexpected findings

The study revealed that, as much as traditional television (MultiChoice DStv) has been shaken by streaming technologies, it still has a considerable number of subscribers due to its reliable broadcasting of live sporting events. The study also revealed that with the fast advancements taking place in the technology industry, digital colonialism is becoming a reality. If not properly regulated, it can have unthinkable consequences in the future.

# CHAPTER 6: CONCLUSION

## 6.1 Introduction

This study aimed to examine the landscape of the South African broadcasting industry and how it has been impacted by the diffusion of internet streaming technologies/over-the-top (OTT) services. This investigation was guided by three objectives and corresponding research questions. The research questions are recapped below, and an explanation of how they were answered using a qualitative case study (semi-structured interviews and document analysis) follows thereafter.

### 6.1.1 Research sub-question 1

**RSQ 1:** How do broadcasting service providers operate in the television broadcasting industry in South Africa?

It was revealed that traditional broadcasters operate under a regulatory framework overseen by the Independent Communications Authority of South Africa (ICASA). Traditional broadcasters are regulated under the Broadcasting Act 4 of 1999, unlike online streaming services, which are not regulated under this act because of their international nature. This is advantageous to OTT service providers in many aspects because they can create and distribute any type of content without limitations.

The results also showed that traditional broadcasters rely heavily on satellite technology that makes use of proprietary physical infrastructure such as satellite dishes and decoders, exemplified by MultiChoice's DStv. Setting up this infrastructure is cumbersome and expensive, unlike OTT platforms, which appear as plug-and-play. Moreover, the traditional television setup is fixed in a single room, which is not appealing to many consumers as they may want to watch different content at the same time, but this setup does not allow for traditional TV watching. This framework is entirely the opposite of OTT platforms using the internet for content delivery. OTT platforms are convenient, flexible and easy to set up. These features proved to be appealing to the participants of this study.

It was also revealed that OTT services can be used seamlessly on various devices, unlike traditional television, which can be watched on one TV set only. Participants also expressed their dislike for the rigid pre-programmed schedules of DStv and the bundling of subscription packages, which often result in them paying for content they do not watch. MultiChoice's financial statements for 2023 and 2024 revealed a significant decline in subscribers due to these operational shortcomings. RSQ1 has been answered by contrasting the flexibility of OTT

services with the dependence of traditional models on proprietary hardware and their high-cost subscriptions. The research objective has therefore been met.

### 6.1.2 Research sub-question 2

**RSQ 2:** What is the influence of OTT services as an instance of disruptive innovation in the television broadcasting industry in South Africa?

It was revealed that OTT service providers, exemplified by Netflix, have challenged traditional broadcasters through offering consumer-centric features such as seamless device synchronisation, online viewing, and AI-powered personalised recommendations. Most of the participants expressed their interest in the affordability and ad-free experience associated with OTT platforms like Netflix in sharp contrast with DStv's model, which is expensive and interrupted by adverts.

The business models used by OTT service providers have destabilised those of traditional broadcasters. Consumers revealed that they resonate more with the pay-per-view models offered by OTT players, unlike the bundled models offered by traditional broadcasters, which force consumers to pay for content they do not watch. The flexibility of OTT content has also attracted many consumers. Unlike the programmed schedules used by traditional broadcasters, consumers have proved to love the control given to them by OTT service providers as they can manage their time effectively without being forced to watch their favourite programme at a pre-specified time. This has forced traditional broadcasters to experiment with models that allow consumers to revisit such programmes after their initial airing, which is a significant disruption.

OTT providers like YouTube are free. They generate revenue by advertising products on behalf of companies and individuals to their subscriber base. Target marketing has proved to be effective, and through the use of AI recommendations and data mining, many companies have opted to advertise on OTT platforms, thereby disrupting the finances of traditional broadcasters as well. These platforms then share their revenue obtained from adverts with content creators, thus incentivising and encouraging the production of more content at no direct cost to subscribers. This model provides free content to the subscribers, prompting a significant segment of the audience to withdraw from traditional broadcasters due to advantages such as zero cost and greater convenience.

This study confirmed that OTT service providers ride for free on ISP infrastructure, giving them a competitive advantage in terms of reduced operational costs, which challenges the revenue streams of traditional broadcasters. The loss of subscribers by MultiChoice, as documented,

reveals the disruptive nature of OTT services, which answers RSQ 2 question, confirming the transformative impact of OTT services on consumer preferences and market dynamics.

### 6.1.3 Research sub-question 3

**RSQ 3:** What are the factors that influence the adoption of this disruptive innovation in the television broadcasting industry in South Africa?

The study revealed the key factors influencing the adoption of OTT services as affordability, convenience, technological advancements, content variety, and device accessibility. Participants expressed their attraction to Netflix's ease of use. They revealed that Netflix only requires an application and internet connection, unlike DStv, which is cumbersome to set up. DStv requires a satellite dish, decoder and cables to connect a television set. This setup, which can only be done by a specialised technician, only works on a television that is fixed in a single room. It proves the point that OTT services are easier to use, convenient, affordable and flexible as they are wireless and can be accessed on the go. An entire family can access various OTT services simultaneously on different devices such as mobile phones, laptops and smart TVs, making the service more convenient. OTT services are also consumed on a pay-per-view model, which means consumers do not pay for content they do not want to view. It was furthermore revealed that many free OTT platforms like YouTube are available. These platforms offer a variety of content, including films, documentaries and news, among others. Some consumers revealed that they do not see the need to pay huge amounts to DStv when they can access free content of great quality. These findings were framed by TAM. Perceived ease of Use (PEOU) was tied to minimal setup and an intuitive interface, while perceived usefulness (PU) was linked to personalisation, free content and flexibility. External variables such as social influence and data costs also emerged as moderators. RSQ 3 has been answered by identifying the key drivers of OTT adoption, thereby addressing the objective corresponding to this research question. Thematic analysis of the interview data was used to support this revelation.

## 6.2 Summary of findings

The findings of this study illuminate the profound impact of internet streaming technologies on the South African broadcasting industry, mainly around the widespread diffusion of OTT services. Internet streaming has been adopted widely, especially in the urban areas of South Africa. This adoption has been driven by consumer demand for flexibility and 4IR technological advancements. Participants praised OTT services' accessibility of content across devices and the absence of fixed schedules, which sharply contrasts with the rigid schedules of traditional broadcasters, with DStv as the main example.

It was furthermore revealed that traditional broadcasters like DStv rely on proprietary satellite infrastructure and bundled subscriptions, which have become a liability to consumers. Participants cited the complex setup of satellite dishes requiring specialised technicians, high costs and latency issues as the major deterrents. The document analysis revealed a consistent decline of DStv's subscriber base since the launch of Netflix in South Africa in 2016, notably, a 900,000 subscriber drop in 2024, signalling a market shift.

The findings unearthed the disruptive influence of streaming technologies. OTT services have disrupted content affordability (e.g., the flexibility of Netflix's pricing vs. the bundled packages of DStv), an ad-free experience, and AI-driven personalised recommendations. These benefits have shifted consumer loyalty irrespective of DStv retaining a niche in live sports, a domain which has not yet been fully penetrated by OTT in South Africa.

Collectively, the findings prove that streaming technologies are not a mere alternative but a disruptive force reshaping the industry's competitive landscape. Table 6.1 summarises the major findings of the study.

**Table 6.1: The evolving broadcasting industry of South Africa**

| Stakeholders | Current Status | Emerging Dynamics | Future Imperatives |
|---|---|---|---|
| Traditional Broadcasting (e.g., DStv) | Rigid models and a declining market share. | Adapting at a slow pace (adopting OTT features). | Need for innovation, i.e., adopt hybrid models, flexible pricing, AI recommendations, etc. |
| OTT services (e.g., Netflix) | Rapid growth. | Dominating in towns and cities. | Promote equitable access for urban and rural markets. |
| Policymakers and regulators | Traditional media being heavily regulated. | Difficult to regulate because of the fast pace of innovation. | Create a level playing field by developing a hybrid framework. |
| Consumers | Using both OTT services and traditional media. | Favouring flexibility and personalisation through a consumer-centric approach. | Use competition as leverage for affordable, ethical and culturally decent content. |
| ISPs | Passive role in the distribution of media. | Used by OTT platforms for free. | Create partnerships with OTT service providers to share costs and attract more customers. |
| Advertisers | Abandoning traditional broadcasters for OTT and digital platforms. | Adopting the target marketing of digital platforms. | Balance target marketing and ethical usage of data (personal privacy). |

In summary, there is a shift in the media landscape, causing traditional broadcasters like DStv to lose customers due to their rigid scheduled programming and slow adaptation to emerging technologies. For these broadcasters to survive, innovation is needed. Streaming service providers like Netflix are thriving in the urban setup, but they are still facing challenges in dealing with the rural market due to internet connectivity issues. Policymakers are still

outpaced by the rapid changes taking place technology-wise and they need to develop a dynamic hybrid framework. Consumers are attracted to the consumer-centric nature of OTT platforms, hence exchanging traditional broadcasters for modern technologies that resonate well with them. Advertisers have seen target advertising becoming more effective than broadcasts on traditional TV; hence, they started diverting their budgets increasingly towards the digital space, thereby affecting the revenue generation of traditional broadcasters even further.

## 6.3 Contributions to the field

This study contributes to the field of information technology (IT) across various domains, including digital media transformation, streaming technologies, cybersecurity, and IT policymaking. Below are the three main categories of contributions.

### 6.3.1 Theoretical contribution

The application of TAM in the digital streaming context extends this study's relevance beyond traditional IT contexts, integrating modern technologies such as AI-driven recommendation systems, cybersecurity and cloud computing. The research shows that *perceived ease of use* and *perceived usefulness* are not the only factors that determine the adoption of technology; factors such as digital trust, regulatory compliance, data privacy, and content accessibility also play a significant role. Collectively, it provides a broader view of digital trust, also playing a pivotal role in adopting technologies.

### 6.3.2 Practical contribution

This study offers actionable insights to stakeholders (policy makers, streaming service providers, internet service providers, traditional broadcasters, IT professionals and society in general). The research unearths the growing concerns in terms of personal privacy associated with digital streaming. Streaming companies collect personal data in various ways to enhance their recommendation algorithms and targeted advertising. The findings of this study prompt discussion on how government policymakers can implement stricter compliance mechanisms to ensure that OTT service providers meet international data protection standards. The findings also reveal new business models that can be implemented by traditional broadcasters to keep up with 4IR expansion. In addition, the study examined the dominance of technology giants in the digital space, leading to technology colonialism, and how it can be countered. Issues of media addiction have been addressed. For South Africans as a community, this study has revealed the benefits of OTT services, such as affordability and convenience, which empower citizens to make informed decisions in terms of subscriptions. Finally, ethical concerns such as piracy and privacy, which urge awareness and advocacy, are highlighted.

### 6.3.3 Methodological contribution

This study employed a multi-method qualitative approach. It integrated semi-structured interviews with document analysis to explore the adoption of OTT services. Thematic analysis was used to unpack data that were collected through semi-structured interviews. The use of a multiple case study, with Netflix and Multichoice DStv as the cases, provides a structured framework to analyse digital disruption in the South African context, which other emerging markets can also adapt. Netflix and MultiChoice DStv were chosen because of their contrasting business models and their market influence in South Africa. Lastly, this study enhances the Technology Acceptance Model (TAM) with contextual data (infrastructure challenges, regulatory constraints and business strategies) for a refined framework that can merge user perceptions with operational realities to analyse the adoption of technology. These contributions provide other researchers with comprehensive, flexible tools for studying IT-driven transformations.

## 6.4 Practical implications

The findings of this study present practical implications for various stakeholders, including MultiChoice DStv (traditional broadcasters), Netflix (streaming service providers), policymakers (the government of South Africa) and the ordinary residents of South Africa.

### 6.4.1 Traditional broadcasters

To counter subscriber decline, traditional broadcasters like DStv can adopt the pay-per-view model for its DStv Now platform and discard the rigid television schedules to let users control when they can watch what they want. Many participants revealed that they get free time to watch TV at different times each day, so they prefer a situation where traditional broadcasters cannot force them to watch TV at a specific time, which could be against their plans. To retain these customers, traditional broadcasters are recommended to let go of the rigid programmed model and adopt the flexible anytime viewing, which is favoured by consumers.

### 6.4.2 Streaming service providers

Streaming service providers can partner with internet service providers to subsidise data bundles and caching in a bid to address rural connectivity challenges. OTT providers like Netflix can make deals with ISPs to sell data bundles specifically for Netflix viewing at a more affordable price so that they can cater for people without Wi-Fi connectivity. Less privileged people, like those in rural areas, may not be able to afford data bundles to consume OTT content; hence, partnering with ISPs can help them break into a new market that benefits both the ISP and OTT providers as well as the consumers.

### 6.4.3 Policy makers

To balance competition, policymakers like ICASA need to develop a hybrid regulatory framework that enforces Digital Rights Management (DRM) to combat piracy from platforms like Plixi, as mentioned earlier. As technology continues to evolve, the laws governing these technologies continue to struggle to keep pace; hence, this study, which is intended to be continual, can contribute towards developing policies that maintain parity with the emerging challenges of cyberlaw. ISPs can leverage the traffic surge from OTT services for revenue-sharing deals to enhance network capacity.

### 6.4.4 Consumers

Ordinary residents who consume content can leverage adoption factors such as cost and personalisation to demand affordable and ethical services. The more service providers enter the market, the more choices consumers have, which gives them the power to demand what they want, including favourable pricing of content, ethical considerations and controlled privacy settings through their spending decisions. If consumers have a larger choice of platforms, it places pressure not only on service providers to listen to the demands of the people, even beyond pricing, but also on concerns about exploitative behaviour and unfair compensation for content creators.

### 6.4.5 Advertisers

Although advertisers still use traditional TV to reach their potential customers, many now prefer paying for targeted advertising, enabled through the use of AI in most digital spaces such as streaming platforms and social media. This has created a unique business model whereby content creators generate content for free and share it on digital platforms like YouTube. These platforms then engage with advertisers to monetise the content, sharing a portion of the revenue with the content creators, which incentivises them to continue creating content. AI recommendation systems are used to track the likes of potential customers to analyse preferences and deliver more targeted advertisements, which is more effective than broadcasting on TV. The implications show the real-world impact of the study, as illustrated in Figure 4.2.

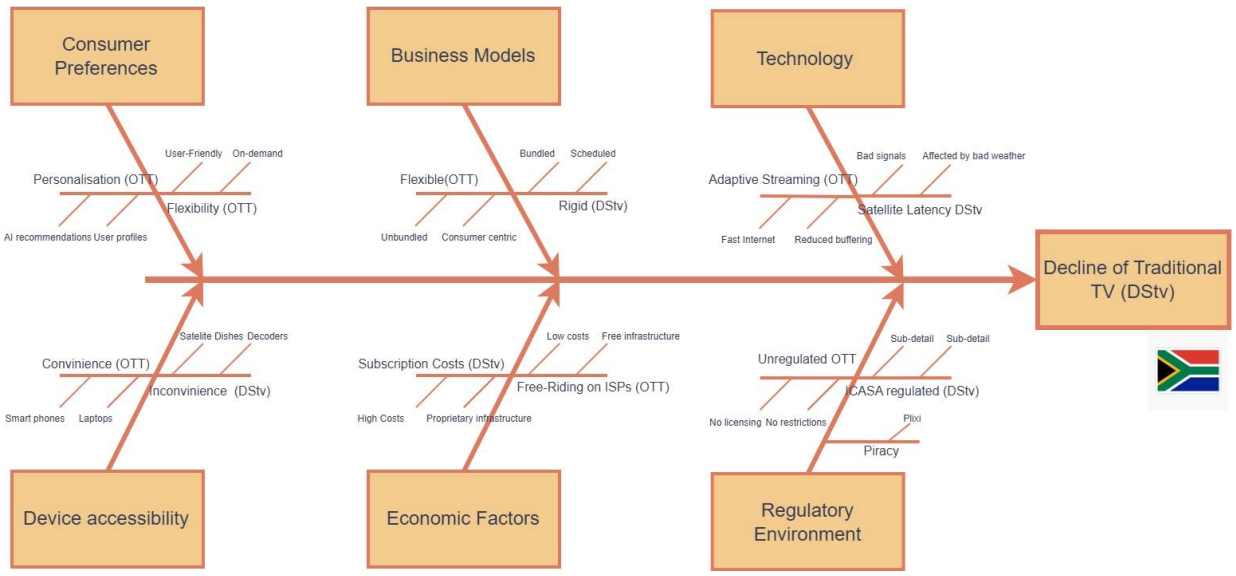



**Figure 4.2: Impact of OTT services on traditional TV stakeholders**

The diagram above shows that the market share of traditional broadcasters like DSTV is declining because of OTT platforms, which are dominating the urban market. However, OTT service providers are still struggling to establish a presence in rural areas. Policymakers find it difficult to keep up with regulating the ever-changing media space that is enabled by fast-paced technological developments. Consumers are favouring OTT platforms for various reasons, including affordability and flexibility.

## 6.5 Limitations of the study

Inasmuch as this study provides valuable insights into how OTT services have affected the South African television broadcasting industry, it is important to acknowledge certain limitations to ensure transparency and contextual understanding. Firstly, the sample size, which included Netflix subscribers in Cape Town, may not be an accurate representation of the entire country since internet connections are generally more reliable in urban settings compared to rural settings All the study participants were living in Cape Town, meaning the views of people living in rural areas were not included; hence, this may have influenced the results.

The second challenge involves limited access to specific industry data. The exclusion of internal people from MultiChoice DSTV limits information about strategic decisions that could have been valuable. Interviewing people who are in the industry could have unearthed insights that were not accessible through the document analysis and consumer interviews. Lastly, the rapid pace of technological advancements, particularly in streaming services, means that some trends identified in this study (e.g., live sports coverage) may shift over time, which may necessitate continuous research on this subject. Technologies such as AI and 5G are influencing how content is delivered, and this trend will continue as more technologies are

expected to emerge. It is therefore unpredictable to know how future technologies may reshape the media and entertainment. Hence, this study cannot be a one-off research; it should be continuous to ensure that the insights and strategies in use remain relevant and up-to-date.

### 6.6 Future research directions

This study did not explore in depth the role of AI in accelerating the adoption of OTT services; hence, it is an area worth investigating in the future. Participants in this study repeatedly mentioned the usefulness of personalised AI recommendations provided by OTT platforms like Netflix, which contrasts with the rigidly scheduled programming used in traditional television, e.g., DStv. Exploring this area further could help traditional broadcasters understand how best they can leverage AI to remain relevant in the media industry. Platforms such as DStv Now can benefit from such research, as it may enhance their competitiveness. It will also offer OTT service providers further insights into how they can improve their platforms and attract even more consumers. Future research may also explore the ethical aspects of AI, such as data privacy, and how the government can develop policies that protect citizens who use these platforms. Considering how technology companies collect vast amounts of data, it is imperative to study the implications for ordinary people and the effectiveness of existing data protection regulations.

Future research could also be done on the concept of Digital Colonialism to understand the long-term impact of online streaming technologies in South Africa. The dominance of Netflix, as revealed in this study, raises concerns over the dependence on foreign platforms, which can lead to cultural erosion and economic dependency. The technical advantages of OTT services enable them to ride freely on local ISPs while making profits offshore, thereby leaving ISPs to bear all the costs. Research in this area could reveal the potential effects of digital colonialism and countermeasures that can be put in place to guarantee South Africa’s media sovereignty. This study could also be done on a regional basis to determine how Africa as a continent is being affected by digital colonialism and how its effects can be dealt with.

### 6.7 Conclusion

This study has illuminated that online streaming services are not a mere complementary alternative in the media space but a strong force that has caused severe disruption to the broadcasting industry of South Africa. The results showed that the media landscape is shifting rapidly as consumers are opting for OTT services, which are consumer-centric, i.e., flexible, affordable and convenient in many ways. However, this rapid shift has exposed some structural inequalities, like those between the rural and urban populations and the challenges of creating an equal playing field, considering that it is not easy to regulate streaming companies that

operate globally. Academically, this study reveals how theoretical frameworks such as the Technology Acceptance Model (TAM) can be adjusted to address the regulation of evolving technologies and account for infrastructural and sociocultural dynamics in South Africa and other emerging economies. In the South African context, this study unearthed the need for the broadcasting industry, policymakers and regulators to devise solutions or ideas that preserve the cultural identity of South Africa, create a level playing field in terms of competition, and promote equitable distribution and access to digital content for all. As technology evolves rapidly and disrupts the traditional broadcasting industry, this study contributes to monitoring current disruptions and highlights the need for continuous research into evolving technologies and their continued influence on the future of the South African broadcasting industry.

In summary, this study uncovered aspects that can be further researched, such as digital colonialism, where technology giants' dominance may threaten the sovereignty of local media. Considering South Africa's current broadcasting landscape, traditional broadcasters need to be innovative, or else they may become obsolete in the near future; policymakers must protect their economic and cultural sovereignty; and online streaming service providers will have to take active steps towards bridging digital access disparities. Finally, this study not only focused on the current landscape but also created the opportunity for ongoing exploration to understand the industry as technologies continue to evolve.

# REFERENCES


Ajibade, P. 2018. Technology Acceptance Model limitations and criticisms: Exploring the practical applications and use in technology-related studies, mixed-method, and qualitative researches. *Library Philosophy and Practice (e-journal).* http://digitalcommons.unl.edu/libphilprac/1941.

Alforova, Z., Marchenko, S., Kot, H., Medvedieva, A. & Moussienko, O. 2021. Impact of digital technologies on the development of modern film production and television. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 13(4):1–11.

Allcott, H. & Gentzkow, M. 2017. Social media and fake news in the 2016 election. *Journal of economic perspectives*, 31(2):211–236.

Allwood, C.M. 2012. The distinction between qualitative and quantitative research methods is problematic. *Quality and quantity*, 46(5):1417–1429.

Almeida, A., Brás, S., Sargento, S. & Pinto, F.C. 2023. Time series Big Data: A survey on data stream frameworks, analysis and algorithms. *Journal of Big Data*, 10(1):83.

Al-Suqri, M. N., & Al-Kharusi, R. M. (2015). Ajzen and Fishbein's Theory ofReasoned Action (TRA) (1980). In I. R. M. A. (Ed.), Information Seeking Behaviour and Technology Adoption: Theories and Trends (pp. 188-204). IGI Global. https://doi.org/10.4018/978-1-4666-8156-9.ch012

Amaratunga, D., Baldry, D., Sarshar, M. & Newton, R. 2002. Quantitative and qualitative research in the built environment: application of "mixed" research approach. *Work Study*, 51(1):17–31.

Arthurs, J., Drakopoulou, S. & Gandini, A. 2018. Researching YouTube. *Convergence: The International Journal of Research into New Media Technologies*, 24(1):3–15.

Avella, J.R. 2016. Delphi panels: Research design, procedures, advantages, and challenges. *International Journal of Doctoral Studies*, 11:305–321.

Babikian, J. 2023. Navigating legal frontiers: Exploring emerging issues in cyber law. *Revista Española de documentacion cientifica*, 17(2):95–109.

Baker, D., Sandars, D. & Balanzategui, J. 2023. *Netflix, dark fantastic genres and intergenerational viewing*. London: Routledge.

Barrett, D. & Younas, A. 2024. Induction, deduction and abduction. *Evidence-based nursing*, 27(1):6–7.

Baxter, G. & Sommerville, I. 2011. Socio-technical systems: From design methods to systems engineering. *Interacting with Computers*, *23*(1):4–17.

Baxter, P.E. & Jack, S.M. 2008. Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report,* 13(4):544–559.

Bell, J. 2010. *Doing your research project: A guide for first-time researchers in education, health and social science*. McGraw-Hill Open University Press.

Berglund, K. & Johansson, A.W. 2007. Constructions of entrepreneurship: A discourse analysis of academic publications. *Journal of enterprising communities: People and places in the global economy*, 1(1):77–102.

Bowen, G.A. 2009. Document analysis as a qualitative research method. *Qualitative research journal*, 9(2):27–40.

Brindha, N., Deepa, S. & Balamurugan, S. 2020. Security protocol for multimedia streaming. In Goyal, D., Balamurugan, S., Peng, S.-L. & Verma, O.P. (eds*.), Design and analysis of security protocol for communication*. Scrivener.

Budzinski, O., Gaenssle, S. & Lindstädt-Dreusicke, N. 2021. The battle of YouTube, TV and Netflix: An empirical analysis of competition in audiovisual media markets. *SN Business & Economics*, 1(9):1–26.

Burney, S.M. & Saleem, H. 2008. Inductive & deductive research approach. *Conference presentation,* University of Karachi, Pakistan, 6 March 2008. https://doi.org/10.13140/RG.2.2.20028.90249.

BusinessTech. 2024, June 11. *South Africans are dumping DStv.* https://businesstech.co.za/news/business/827818/south-africans-are-dumping-dstv-2/ (Accessed: 23 June 2025).

Chalaby, J.K. 2024. The streaming industry and the platform economy: An analysis. *Media, Culture and Society*, 46(3):552–571.

Chalaby, J.K. & Plunkett, S. 2021. Standing on the shoulders of tech giants: Media delivery, streaming television and the rise of global suppliers. *New Media & Society*, 23(11):3206–3228.

Chege, K.A. & Otieno, O.C. 2020. Research philosophy design and methodologies: A systematic review of research paradigms in information technology. *Global Scientific Journals (GSJ)*, 8(5):33–38.

Cozzolino, A., Verona, G. & Rothaermel, F.T. 2018. Unpacking the disruption process: New technology, business models, and incumbent adaptation. *Journal of management studies*, 55(7):1166–1202.

Dagnino, G. 2018. Regulation and co-regulation of product placement for OTT SVODs: The case of Netflix. *International journal of digital television*, 9(3):203–218.

Daria, K. 2024. Video marketing in 2024: Trends and statistics you can't afford to ignore. *personify*. https://personifycorp.com/blog/video-marketing-in-2024-trends-and-statistics-you-cant-afford-to-ignore/ (Accessed: 20 June 2025).

Darji, R., Mkwanazi, S. & Njisane, Y. 2016. *Disruptive technologies in telecommunications, broadcasting and transport sectors.* Working Paper. IHSN. http://www.compcom.co.za/wp-content/uploads/2016/11/CC201604-Darji-R-Mkwanazi-S-and-Njisane-Y-2016-Disruptive-technologies-in-Telecommunications-Broadcasting-and-Transport-sectors.pdf (Accessed: 20 June 2025).

Da Silva Klehm, V., de Souza Braga, R. & De Lucena, V.F. 2022. A survey of digital television interactivity technologies. *Sensors*, 22(17):6542.

Davis, F.D. 1989. Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly,* 13(3):319–340.

Davis, F.D. & Bagozzi, R.P. 1989. User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8):982–1003.

Davis, F.D. & Granić, A. 2024. *The Technology Acceptance Model*. Cham: Springer International.

Denzin, N.K. 2012. Triangulation 2.0*. *Journal of Mixed Methods Research*, 6(2):80–88.

Drahos, P. 2016. *A philosophy of intellectual property*. ANU eTEXT. http://doi.org/10.22459/PIP.06.2016

Eslami, S.P., Ghasemaghaei, M. & Hassanein, K. 2022. Understanding consumer engagement in social media: The role of product lifecycle. *Decision Support Systems*, 162:113707.

Fotrousi, F., Seyff, N. & Börstler, J. 2017. Ethical considerations in research on user feedback. *Proceedings of the 2017 IEEE 25th International Requirements Engineering Conference Workshops (REW 2017)*. Institute of Electrical and Electronics Engineers, 194–198.

Fowora, D., Awodele, O., Olayinka, O. & Aduragbemi, O. 2018. The impact of OTT services in Nigeria. *American Journal of Computer Engineering*, 1(1):1–10. http://dx.doi.org/10.28933/ajce-2018-03-0101

Francke, E. & Alexander, B. 2017. Entrepreneurial development in South Africa through innovation: A model for poverty alleviation. *Acta Commercii*, 19(1):1–11. https://doi.org/10.4102/ac.v19i1.631

Friederich, F., Palau-Saumell, R., Matute, J. & Meyer, J.H. 2024. Digital natives and streaming TV platforms: An integrated perspective to explain continuance usage of over-the-top services. *Online Information Review*, 48(1):1–21.

Fruits, E. (2025, March 5). Media-ownership regulations in a streaming world: Time to change the channel*. Truth on the Market.* https://truthonthemarket.com/2025/03/05/media-ownership-regulations-in-a-streaming-world-time-to-change-the-channel/ (Accessed: 15 June 2025).

Gill, P., Stewart, K., Treasure, E. & Chadwick, B. 2008. Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal*, 204(6):291–295.

González-Neira, A., Vázquez-Herrero, J. & Quintas-Froufe, N. 2022. Convergence of linear television and digital platforms: An analysis of YouTube offer and consumption. *European Journal of Communication*, 37(4):426–442.

Gunawan, C.M., Rahmania, L. & Kenang, I.H. 2023. The influence of social influence and peer influence on intention to purchase in e-commerce. *Review of Management and Entrepreneurship*, 7(1):61–84.

Guo, J., Pan, J., Guo, J., Gu, F. & Kuusisto, J. 2019. Measurement framework for assessing disruptive innovations. *Technological Forecasting & Social Change,* 139:250–265.

Hagelgans, M. 2022. *The impact of digitalization on sports broadcasting*. Wiesbaden: Springer.

Hang, C.C., Chen, J. & Yu, D. 2011. An assessment framework for disruptive innovation. *Foresight*, 13(5):4–13.

Harrison, H., Birks, M., Franklin, R. & Mills, J. 2017. Case study research: Foundations and methodological orientations. *Forum: Qualitative Social Research*, 18(1). doi:10.17169/fqs-18.1.2655.

Harvey, S. 2020. Industry broadcasting in the age of Netflix: When the market is master. In Wasko, J. & Meehan, E.R. (eds.), *A companion to television* (2nd ed.). Wiley, 105–127.

Hox, J.J. & Boeije, H.R. 2004. Data collection, primary vs. secondary. In *Encyclopedia of Social Measurement.* Amsterdam: Elsevier, 593–599.

Hunziker, S. & Blankenagel, M. 2024. Multiple case research design. In *Research design in business and management: A practical guide for students and researchers* (2nd ed.). Wiesbaden: Springer Fachmedien Wiesbaden, 171–186.

Hutchins, B., Li, B. & Rowe, D. 2019. Over-the-top sport: Live streaming services, changing coverage rights markets and the growth of media sport portals. *Media, Culture and Society*, 41(7):975–994.

Jarrahi, M.H. & Sawyer, S. 2013. Social technologies, informal knowledge practices, and the enterprise. *Journal of Organisational Computing and Electronic Commerce*, 23(1–2), 110–137. https://doi.org/10.1080/10919392.2013.748613

Jebreen, I. 2012. Using inductive approach as research strategy in requirements engineering. *International Journal of Computer and Information Technology*, 1(2):162–173.

Kamal, S.A., Shafiq, M. & Kakria, P. 2020. Investigating acceptance of telemedicine services through an extended technology acceptance model (TAM). *Technology in Society*, 60:101212. https://doi.org/10.1016/j.techsoc.2019.101212

Kao, H.W. & Wu, E.H.K. 2023. QoE sustainability on 5G and beyond 5G networks. *IEEE Wireless Communications*, 30(1):118–125.

Kaplan, B. & Maxwell, J.A. (2005). Qualitative research methods for evaluating computer information systems. In Anderson, J.G. & Aydin, C.E. (eds.), *Evaluating the organisational impact of healthcare information systems.* New York, NY: Springer. https://doi.org/10.1007/0-387-30329-4_2

Kim, A.J. & Balachander, S. 2023. Coordinating traditional media advertising and online advertising in brand marketing. *Production and Operations Management*, 32(6):1865–1879.

Kilkki, K., Mäntylä, M., Karhu, K., Hämmäinen, H. & Ailisto, H. 2018. A disruption framework. *Technological Forecasting & Social Change*, 129:275–284. https://doi.org/10.1016/j.techfore.2017.09.034

Komathi, A., Lenin, J., Asha, S., Suresh, A., Suguna, M., Srinivasan, C. 2023. Cloud computing's effect on video games streaming. *2023 2nd International Conference on Automation, Computing and Renewable Systems (ICACRS),* 23 December, Pudukkottai, India, 401–406.

Kwet, M. & Law, Y. 2019. Digital colonialism and infrastructure-as-debt. *University of Bayreuth African Studies Online*, 65–77.

Labuschagne, H. 2024. South Africans dumping DSTV. *MyBroadband*. https://mybroadband.co.za/news/broadcasting/537203-south-africans-dumping-dstv-2.html. (Accessed: 20 June 2025).

Leal, R.P., Marco, J.N., Diego, F. & Martinez, H. 2017. Analysis of the technologies enabling the broadcast convergence. *2017 56th FITCE Congress, Madrid, Spain.* IEEE, 50–55, https://doi.org/10.1109/FITCE.2017.8093007

Legris, P., Ingham, J. & Collerette, P. 2003. Why do people use information technology ? A critical review of the technology acceptance model. *Information & Management,* 40(3):191–204. http://dx.doi.org/10.1016/S0378-7206(01)00143-4

Leliopoulos, P. & Drigas, A. 2022. The evolution of wireless mobile networks and the future 5G mobile technology for sustainability. *Technium Sustainability*, 2(2):28–43. http://dx.doi.org/10.47577/sustainability.v2i4.7346

Le Roux, E. (2010). Pornography: Human right or human rights violation? *HTS Teologiese Studies/Theological Studies*, 66(2), 1–9. https://doi.org/10.4102/hts.v66i2.124

Liang, M. 2020. Copyright issues related to reproduction rights arising from streaming. *Journal of World Intellectual Property*, 23(5–6):798–814.

Liang, T., Huang, W., Ma, X., Zhang, W., Zhang, Y. & Zhang, B. 2023. PCLive: Bringing named data networking to internet livestreaming. *Proceedings of the 2023 10th ACM Conference on Information-Centric Networking (ICN 2023)*. Association for Computing Machinery, 36–45.

Lim, T., Lim, B.C., Leong, C., Phang, I.G. & Foong, W.H. 2023. Consumer adoption of on-demand digital platforms: An integrated model. *Global Business and Organizational Excellence*, 42(6):75–88.

Li, W., Wu, J., Cao, J., Chen, N., Zhang, Q. & Buyya, R. 2021. Blockchain-based trust management in cloud computing systems: A taxonomy, review and future directions. *Journal of Cloud Computing*, 10(1):35.

Li, Y.-F., Jia, C., Ye, J. & Xu, B. 2021. On the reliability of 4G/5G Mobile telecommunication networks from the perspective of operation & maintenance. *2021 Annual Reliability and Maintainability Symposium (RAMS)*. IEEE: 1–7.

Long, H. 2014. An empirical review of research methodologies and methods in creativity studies (2003–2012). *Creativity Research Journal*, 26(4):427–438.

Los Angeles Times. 2025. *TV milestone: Streaming is now bigger than cable and broadcast combined.* https://www.latimes.com/entertainment-arts/business/story/2025-06-

17/nielsen-report-streaming-surpasses-television-in-viewership (Accessed:23 June 2025).

Lubis, F.G., Miralaksmi, A. & Christian, N. & Hendijani, R.B. 2023. Intention to use Netflix in Indonesia: A Modified Technology Acceptance Model. *International Journal of Innovative Research and Advanced Studies (IJIRAS)*, 10(10):19–28.

Lüders, M. 2022. Self-determined or controlled, seeking pleasure, or meaning? Identifying what makes viewers enjoy watching television on streaming services. *Poetics*, 92:101639-101639.

Martinsuo, M. & Huemann, M. 2021. Designing case study research. *International Journal of Project Management*, 39(5):417–421.

Marvin, R. 2020. *Peacock ? HBO Max ? The new streaming giants explained.* https://www.pcmag.com/news/disney-plus-hbo-max-the-new-streaming-giants-explained (Accessed: 23 June 2025).

Melnikovas, A. 2018. Towards an explicit research methodology: Adapting research onion model for futures studies. *Journal of Futures Studies*, 23(2):29–44.

National Association of Broadcasters (NAB). *Broadcasting in South Africa.* https://www.nab.org.za/content/page/broadcast-industry (Accessed: 23 June 2025).

Netflix. 2024. *Netflix Q4 2024 Earnings Report*. https://brokstock.co.za/analytics/reviews/netflix-q4-2024-earnings-report/ (Accessed: 23 June 2025).

Ng, W.S., Wu, H., Wu, W., Xiang, S. & Tan, K.-L. 2012. Privacy preservation in streaming data collection. *2012 IEEE 18th International Conference on Parallel and Distributed Systems*. IEEE, 810–815.

Nowell, L.S., Norris, J.M., White, D.E. & Moules, N.J. 2017. Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1):1-13.

Ojo, O.E., Oluwatope, A.O. & Ajadi, S.O. 2020. Formal verification of a peer-to-peer streaming protocol. *Journal of King Saud University – Computer and Information Sciences*, 32(6):730–740.

Pilcher, N. & Cortazzi, M. 2024. 'Qualitative' and 'quantitative' methods and approaches across subject fields: Implications for research values, assumptions, and practices. *Quality and Quantity*, 58(3):2357–2387.

Pookpanich, P. & Siriborvornratanakul, T. 2024. Offensive language and hate speech detection using deep learning in football news live streaming chat on YouTube in Thailand. *Social Network Analysis and Mining*, 14(1):18.

Pope, C., Ziebland, S. & Mays, N. 2000. Analysing qualitative data. *British Medical Journal*, 320(7227):114–116.

Ramasoota, P. & Kitikamdhorn, A. 2021. "The Netflix effect" in Thailand: Industry and regulatory implications. *Telecommunications Policy*, 45(7):102156.

Ren, J., Dong, H., Popovic, A., Sabnis, G. & Nickerson, J. 2024. Digital platforms in the news industry: How social media platforms impact traditional media news viewership. *European Journal of Information Systems*, 33(1):1–18.

Ridder, H. 2017. The theory contribution of case study research designs. *Business Research,* 10:281–305. https://doi.org/10.1007/s40685-017-0045-z

Rimock, M. 2013. Regulatory issues concerning new media alternatives to television. *Canadian Journal of Law and Technology,* 11(2):335-342.

Robb, G. & Hawthorne, R. 2019. Net neutrality and market power: The case of South Africa. *Telecommunications Policy*, 43(9):1–13.

Sandhu, A.K. 2022. Big Data with cloud computing: Discussions and challenges. *Big Data Mining and Analytics*, 5(1):32–40.

Satyam, S. 2023. How Netflix uses AWS to deliver a personalised and interactive viewing experience. *Cloudthat*. https://www.cloudthat.com/resources/blog/how-netflix-uses-aws-to-deliver-a-personalized-and-interactive-viewing-experience (Accessed: 23 June 2025).

Saunders, M.N.K., Lewis, P. & Thornhill, A. 2019. *Research methods for business students.* (8th ed.). Pearson Education, 1–872.

Shaji, G.A., Hovan, G.A.S. & Baskar, T. 2023. The death of analogue: Assessing the impacts of ubiquitous mobile technology. *Partners Universal Innovative Research Publication,* 1(2):15–33. https://doi.org/10.5281/zenodo.10115301

Shao, J. 2024. The evolution of film technology in the streaming media era: A comparative analysis of traditional movies and internet TV series. *Lecture Notes in Education Psychology and Public Media*, 37(1):89–93. https://doi.org/10.54254/2753-7048/37/20240509.

Shin, S. Il, Han, S., Lee, K.Y. & Chang, Y. 2024. Exploring the impact of paid over-the-top service and mobile network profiles in watching TV content on mobile devices. *Internet Research*. https://research.nottingham.edu.cn/en/publications/exploring-the-impact-of-paid-over-the-top-service-and-mobile-netw (Accessed 23 June 2025).

Sinha, R. & Naeem, M.A. 2023. Privacy-preserving data (stream) mining techniques and their impact on data mining accuracy: a systematic literature review. *Artificial Intelligence Review,* 56:10427–10464.

Sky News. 2022. *Andrew Tate: Controversial influencer banned from Facebook and Instagram.* https://news.sky.com/story/controversial-influencer-andrew-tate-banned-from-facebook-and-instagram-12676862 (Accessed: 23 June 2025).

Soares da Silva, J.M. & de Andrade Lima, R.C. 2022. Is Netflix a threat to the cable TV industry? Evidence from Brazil. *Telecommunications Policy*, 46(3):102274.

Sundet, V.S. & Lüders, M. 2023. “Young people are on YouTube”: industry notions on streaming and youth as a new media generation. *Journal of Media Business Studies*, 20(3):223–240.

Sutrisno, S. 2023. Changes in media consumption patterns and their implications for people's cultural identity. *Technology and Society Perspectives (TACIT)*, 1(1):18–25.

Taherdoost, H. 2018. A review of technology acceptance and adoption models and theories. *Procedia Manufacturing*, 22:960–967.

Teef, D. & Nassisid, G. 2024. Capturing the moment: The evolution and impact of short video streaming. *TechRxiv*. June 24, 2024.

Tengeh, R.K. & Udoakpan, N. 2021. Over-the-top television services and changes in consumer viewing patterns in South Africa. *Management Dynamics in the Knowledge Economy*, 9(2):257–277.

Teodorescu, C.A., Ciucu Durnoi, A.-N. & Vargas, V.M. 2023. The rise of the mobile internet: Tracing the evolution of portable devices. *Proceedings of the International Conference on Business Excellence*, 17(1):1645–1654.

Tian, J. 2024. The rise and bypassing of streaming media. *Advances in Economics, Management and Political Sciences*, 57(1):189–195. https://doi.org/10.54254/2754-1169/57/20230731

Udoakpan, N. & Tengeh, R.K. 2020. The impact of over-the-top television services on pay-television subscription services in South Africa. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(4):1–28.

Viola, R., Martin, A., Mogollon, J.F., Gabilondo, A., Morgade, J., Zorrilla, M., Montalban, J. & Angueira, P. 2020. Adaptive rate control for live streaming using SRT protocol. In *2020 IEEE International Symposium on Broadband Multimedia Systems and Broadcasting (BMSB)*. IEEE, 1–6.

Wahyuni, D. 2012. The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research*, 10(1):69–80.

Warfield, D. 2005. IS/IT research: A research methodologies review. *Journal of Theoretical and Applied Information Technology*, 13(1):28-35

Xu, M., Li, B., Scott, O.K.M. & Wang, J.J. 2023. New platform and new excitement? Exploring young educated sport customers' perceptions of watching live sports on OTT services. *International Journal of Sports Marketing and Sponsorship*, 24(4):682–699.

Yang, H., Pan, H. & Ma, L. 2023. A review on software defined content delivery network: A novel combination of CDN and SDN. *IEEE Access*, 11:43822–43843.

Yim, H.J., Kim, S., Lim, B.M., Park, S.I. & Hur, N. 2021. Application-based targeted advertisement system for ATSC 3.0 UHD service. *IEEE Transactions on Broadcasting*, 67(1):56–67.

Yin, R.K. 2018. *Case study research and applications: Design and methods*. (6th ed.). Thousand Oaks, CA: Sage.

Zhang, J. 2024. Netflix evolution and strategy for future development. *Lecture Notes in Education Psychology and Public Media*, 51(1):36–40.

Zhang, L. & Liu, Z. 2018. Ethical issues in research processes: Informed consent, the role of the researcher, access to research sites and research subjects. *The 2nd International Conference on Culture, Education and Economic Development of Modern Society (ICCESE 2018). Advances in Social Science, Education and Humanities Research*, 205:505–508.

# APPENDICES

## Appendix A: Consent Form

Cape Peninsula
University of Technology

FID/REC/ICv0.1

**FACULTY OF INFORMATICS AND DESIGN**

**Individual Consent for Research Participation**

**Title of the study:** **The Impact of Internet Streaming Technologies on The Television Broadcasting Industry in South Africa**

**Name of researcher:** Tendai Stephen Samusodza

**Contact details:** email: samusodzah@gmail.com phone: 0605892371

**Purpose of the Study:** This study aims to examine the diffusion of disruptive innovation by way of Internet Streaming Technologies in the television broadcasting industry in South Africa.

**Participation:** My participation will consist essentially of the interviewee.

**Confidentiality:** I have received assurance from the researcher that the information I will share will remain strictly confidential unless noted below. I understand that the contents will be used only for a thesis and that my confidentiality will be protected by use of pseudonyms. I understand that all information provided is treated as confidential and will not be released by the researchers to a third party unless required to do so by law.

**Anonymity** will be protected in the following manner (unless noted below). Participant names will not be mentioned, and if the study requires reference to a particular respondent, it shall merely be referred to as “respondent 1”, etc.

**Conservation of data:** The data collected will be kept securely and will be stored in a dedicated file for this research project. It will be stored in a lockable office cupboard during the time that it is not being used. Only the researchers shall have access to it, and it will be conserved for one year after the project in a controlled environment.

**Voluntary Participation**: I am under no obligation to participate, and if I choose to participate, I can withdraw from the study at any time and/or refuse to answer any questions, without suffering any negative consequences. If I choose to withdraw, all data gathered until the time of withdrawal will be destroyed.

**Additional consent:** I make the following stipulations (please tick as appropriate):

| | In thesis | In research publications | Both | Neither |
|---|---|---|---|---|
| My image may be used: | | | | |
| My name may be used: | | | | |
| My exact words may be used: | | | | |
| Any other (stipulate): | | | | |

**Acceptance:** I, (print name)_____
agree to participate in the above research study conducted by Tendai Samusodza, a student in the Faculty of Informatics and Design Department of IT at the Cape Peninsula University of Technology.

If I have any questions about the study, I may contact the researcher. If I have any questions regarding the ethical conduct of this study, I may contact the secretary of the Faculty Research Ethics Committee at 021 469 1012, or email NdedeM@cput.ac.za.

**Participant's signature:** _____ **Date:** _____

**Researcher's signature:** Tendai S Samusodza **Date:** 18/06/2024

# Appendix B: Survey Instrument

**The impact of Internet Streaming Technologies on The Television Broadcasting Industry in South Africa**

**Semi-structured Interview Questions**

**Technical Compatibility**

- Why did you choose to use Netflix?
- How did your previous experiences with traditional TV influence your decision to try Netflix? Do you still subscribe to DSTV?
- How important are factors like sports and news in your decision to choose between Netflix and DSTV? How often do you watch sports?
- How do DSTV's packages compare to Netflix's subscription model in terms of value for money? Do you subscribe to Showmax?
- Can you explain how the rise of Netflix has affected the government in terms of policy making and regulation of content?

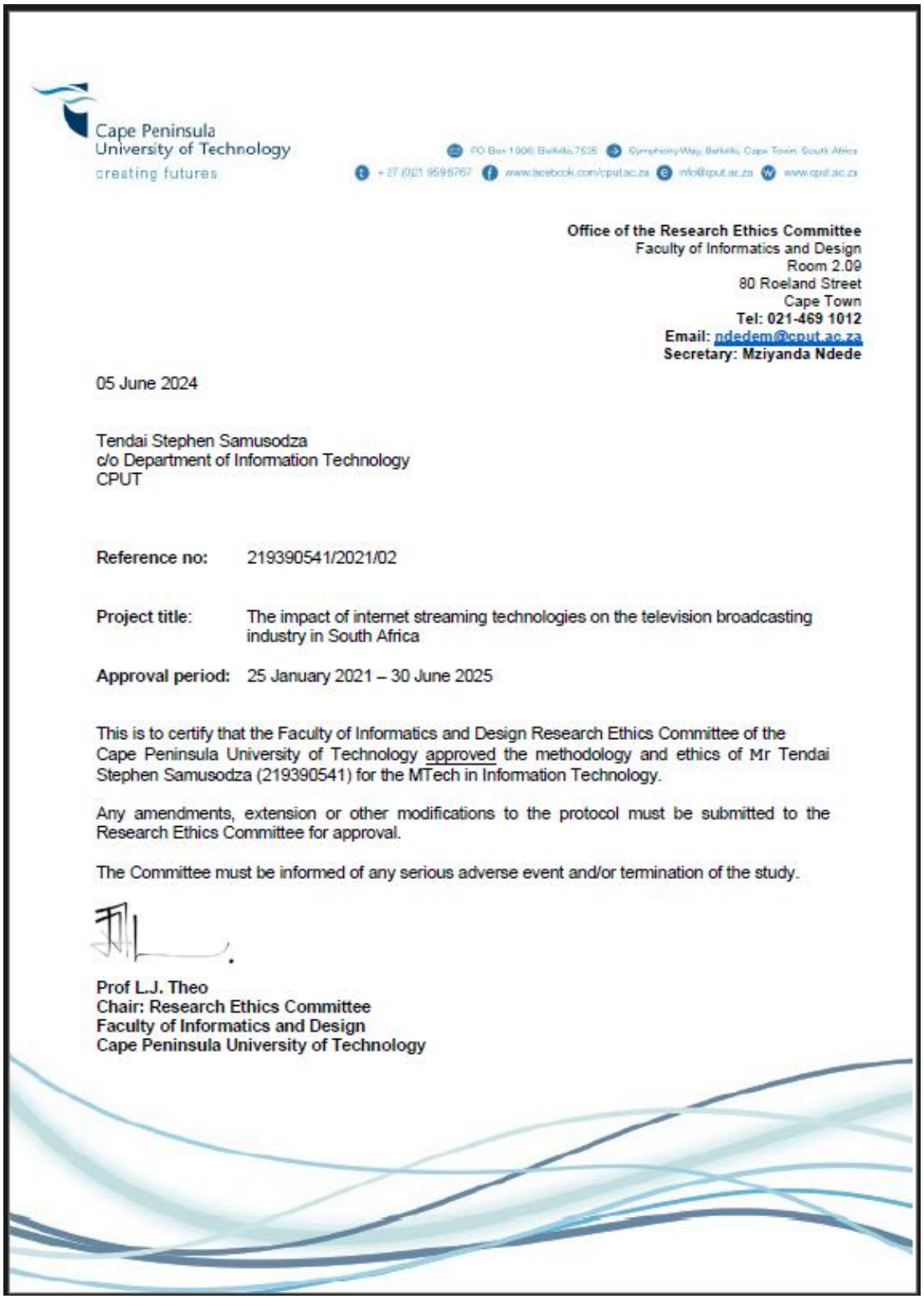
**Technical Complexity**

- What aspects of Netflix do you find most user-friendly?
- How significant are factors like data costs and subscription fees in your decision to use Netflix over DSTV?
- What are your views on the impact of Netflix on traditional TV in South Africa?
- How has subscribing to Netflix changed your television viewing habits?

**Relative Advantage**

- What recommendations would you give to traditional TV broadcasters to remain competitive with streaming services like Netflix?
- Can you tell me the major differences between Netflix and DSTV in terms of ease of use and the setup process?
- Since you started using Netflix, to now some things have obviously changed. What do you find most satisfying or annoying as Netflix has evolved?
- To what extent does Netflix cater for your viewing needs? What other streaming services do you use to watch content that Netflix does not provide?

# Appendix C: Ethics Approval Certificate



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05 June 2024

Tendai Stephen Samusodza
c/o Department of Information Technology
CPUT

**Reference no:** 219390541/2021/02

**Project title:** The impact of internet streaming technologies on the television broadcasting industry in South Africa

**Approval period:** 25 January 2021 – 30 June 2025

This is to certify that the Faculty of Informatics and Design Research Ethics Committee of the Cape Peninsula University of Technology approved the methodology and ethics of Mr Tendai Stephen Samusodza (219390541) for the MTech in Information Technology.

Any amendments, extension or other modifications to the protocol must be submitted to the Research Ethics Committee for approval.

The Committee must be informed of any serious adverse event and/or termination of the study.

**Prof L.J. Theo**
**Chair: Research Ethics Committee**
**Faculty of Informatics and Design**
**Cape Peninsula University of Technology**

# Appendix D: Sample Interview Transcript

**Good day Steve. How are you?**

I'm well, thanks. How are you doing?

**Fine. Thank you. You are speaking to Tendai with regards to the interview that we scheduled.**

Oh, yeah. I remember seeing the note and agreeing.

**Oh, yeah. So, yeah. I'm going to give you a very brief background. I'm sure you've seen some of the things in the request that I'll send you later. Then I'll go ahead and ask some questions.**

No, it is so good.

**Okay. So, I'm doing a Master's in Information Technology at CPUT and as part of my research on the impact of internet streaming technologies on the television broadcasting industry in South Africa. I would like to do some data collection using interviews. Yeah, that's what we're going to do. Netflix will be our case study.**

It is all good times.

**Okay. So, my first question would be, why did you choose to use Netflix?**

I'm assuming you are, we are comparing it with the other options, which are largely public broadcasters. Now, I chose Netflix specifically because of the choice, the variety that I have available. There are so many categories there, which I do not easily access on the public broadcaster. The categories, I can control even what my child watches. Maybe I'm being too broad. I'm answering your question in general. And further to that. I have the option of posing and continuing, which is not so easy to do with the public broadcaster. And whenever I'm travelling, because I often do long-distance travel, I have the luxury of downloading to my device, then as I'm travelling, I can just play back. So, such points made me prefer Netflix to public broadcasting.

**Okay. Yeah, thank you for that. So, that leads me to the second question. How did your previous experiences with traditional TV influence your decision to try Netflix?**

Very many reasons pushed me away from the public broadcaster. Firstly, there is an apparent dictatorship, if I may, I do not have a better way to use it right now. Them deciding what I should watch at a given point in time. Between six and seven, I have to be watching this between that and that and if you're watching something else, that's it is own frustrated me. The programming. It is as if they've a theme that they will be pursuing from this hour to that hour we show such stuff, that hour to that hour we show such stuff. But I do not necessarily subscribe to that. I believe in being free to choose what I want to watch and also when I want to watch it. Advertisements were another issue. Sitting in front of the TV in the old days, you would reach a point where you can predict if they are showing this film or between this time and that time, this advert is going to come out, you end up knowing the adverts by heart as if

you're acting in the advert itself. So those repeated adverts were interrupting my viewing, but I do not have that disruption when I'm on the streaming service, the Netflix service specifically.

**Okay, that's interesting. So yeah, the next question, how important are factors like sports, news and local content in your decision to choose Netflix over DSTV?**

Well, it may look as if I'm going around in circles. I'm interested in sports, both local sports and international sports. I follow a local team, just as I also follow some of these global teams. However, the fact that I cannot choose on the public broadcaster, which match to watch when pushes someone away to consider using streaming services via the internet. You reach a point where you prefer to pay more but to get what you want is the choice that pushed me away from the public broadcast.

**Okay, so there other streaming platforms that you can watch sports and news**.

Well, news these days, it is not so difficult to access. Here in South Africa, there is, EWN for instance, you can get that directly on the internet. You use newspapers, you can also subscribe to these online newspapers. And if I want international news, there are the options again, Aljazeera's are there, the Sky news are there. So, I am in a position where I can choose what I want to know and learn about, unlike the public broadcast news, which revolves around political parties, around crime, around failures of the state and such things. It is if someone is playing the game of politics, then we are forced to be the audience. But if I have those other options on my plate, I can always choose what I want.

**Okay, thank you. So next question, how does DSTV's channel package structure compare with Netflix subscription model in terms of value for money?**

Well, DSTV gets a plus only when you look at the fact that you can freely access more sports. However, when it comes to value for money, I have indicated already, I suggested that when it is in News, I'm willing to read from online newspaper. So, I believe as far as I'm concerned, I use streaming for entertainment. And if you compare now the Netflix platform and the multi-choice DSTV, you will observe that whereas the multi-choice DSTV is more repetitive than Netflix, we will still obtain better quality and higher-grade movies on Netflix compared to the multi-choice DSTV. DSTV still carries some old movies, they broadcast and re-broadcast, I do not know what they call it, they keep repeating the same stuff over and over. Then some of the movies are not even up to scratch, some are even under 10 ADP. But if you look at Netflix now, you get 2K, 4K movies, and you can get very latest movies. And if you look at those pieces which they repeat, they repeat only the classics. I may be biased in that the categories, they call them categories on Netflix. The categories that I look at are largely documentaries and crime investigation. You see that its selected repetition, and the selected petition is on the classics, whereas DSTV I can hang out and say that it is almost everything that they have.

**Okay, so going on to the next question, can you explain how the rise of Netflix and other streaming services affect the regulation of content?**

I'm not sure how it goes in the background when they choose what to put up on their channels, because I do not know what happens in the background. But you will observe now, that as far as regulation of content takes place on the customer side, it is easy for you to have different profiles on your Netflix. And those different access points, when you call them that, you can use them to control what your kids have access to, for example. My kids cannot access my

profile. They have all their content already packaged in the kids' category, where we have restricted age limits preset right there. I'm not sure the extent to which DSTV multi-choice can actually achieve the same, even open internet access. Some would ask you for the age, anyone can lie, there is no validation, nothing of this sort. But with these very secure, I'm pretty using that, with very secure platforms like Netflix, there is a higher degree of control over what my children and other clients can access. I'm not sure about the laws that they have to comply with on the production side.

**Okay, thank you. The next question, what aspects of Netflix do you find most user friendly**?

The categories. They are very, they are very, very good. Those categories won't to mislead you. If they say this is made in, South Africa for sure, it should be made in South Africa. If they put those restrictions, the PGA, the age restrictions, and so on, I need to find myself at conflict with those. I have already spoken about the picture and the sound quality. Most of the materials that you find on Netflix would be minimum 5.1 on the job scale, which means you get premium sound, you also get high quality visuals, which I believe is what we are looking for or what I look for when I look for a streaming service. So, it is the quality that has to be foremost.

**Okay, so how significant are aspects like internet data costs, and subscription fees in your decision to use Netflix over DSTV.**

Well, I've been using fibre in such services for a very long time. And if I look at the value that I gain, even though I'll be carrying extra cost for internet, I still find myself in a better position. If you look at it this way, you pay, I'm going to shoot from The hip, you know, these figures are not accurate. But roughly you pay 500 for the internet carrier service, 500 to maybe 700 in the Worst case. Then you're going to pay another 300 or so for your Netflix family package. The package, you know, that package allows two or so screens to be operational at any given point intime. The total that you will get to that will match or closely resemble the cost that you have to pay for the DSTV premium service. However, while the costs are similar, if not the same, you will observe now that if your point of focus is the quality of the product that you are buying in terms of the movies, whatever the material is being broadcast, and the freedom to choose that you have, the continuity that will be afforded, the minimum interruptions that are there, I would still vote for the Netflix streaming service. It is a better service, much better and much higher value for money.

**Okay, so you just raised the point on sharing screens on Netflix. Can you explain that to me?**

Okay, with Netflix, I also say the same thing about DSTV is just to make the comparison fair. When you buy the Netflix package, you have an option. At entry level allows you to have only one screen active at any given point in time, meaning to say if you have two TVs, maybe one in your bedroom, one in your lounge, you cannot stream on both TVs at the same time via the Netflix account. But you can up it and it costs less than double the initial subscription. I used to have one screen, but for me to have two screens, it costs me less than doubling the initial fee. So, it means now you get the chance to have someone in a bedroom, watching a completely different thing to those people who will be sitting in the lounge. You have that on the Netflix package. I'm aware that DSTV offers a similar service where you use my DSTV app, but you need to have Android compliance or internet ready devices to do that, which means now you can have one person using a decoder. And I'm not sure how many other

people accessing the same account, but via the internet, which suggests again that as far as sharing is concerned, there is some fair competition right there, but DSTV will still be beaten in the variety that they will offer. There may be so many of you, but you're going to be watching more or less the same stuff.

**Okay. Then what are your views on the impact of Netflix on the traditional TV in South Africa?**

Disruptive. It is a disruptive technology. It has changed the whole game. The shape of TV, the shape of entertainment has changed since the arrival of these streaming services. We are looking at the case where the customer who used to be weak, and only there to except what is being broadcast now has choice. And something I may have forgotten to mention all along. If you are living in a, as we have here, in the Western Cape, we have a lot of high winds, and we often get unpredictable weather pattern. DSTV is affected to a larger extent than Netflix. Netflix seems to be able to continue with its service even under harsh conditions unlike the DSTV satellite platform. So, we are going back to your question which reflects on the impact of Netflix on this traditional TV system. I would say it is a positive as far as the clients are concerned. We get to use state-of-the-art devices in the home, and we use them to full effects. It will be a big effect, big extent even compared to DSTV. DSTV will broadcast fair and fine, via the decoder, fair and fine, which is a digital device. But remember I spoke about picture quality and your own. Netflix will still win. So, it is a good, good, good development. And recently, here in South Africa, they discontinued terrestrial TV broadcasting when they migrated from analogue broadcasting to full digital broadcasting. So, while that opens options again for the consumer, we still have the problem of those situations and those times when the weather is not so favourable. DSTV, I think that the service is called open view. Those options work very well when the weather is also available. And unlike Netflix, Netflix, I spoke about downloading and watching away from home. DSTV, I will not show you the offer such a service. But I would guess that if the such a service, you can you save on your device like a cell phone, I doubt that. But Netflix allows that. Even when you do not have data, and you save something on your phone while you still in a data zone. You can watch it, even when you're in the remote places.

**Okay, that's interesting. So going on to the next question, how has subscribing to Netflix change your television viewing habits?**

It has made me more disciplined and more capable of planning and dividing my time. In the old days, it would be vice versa, where the TV time would force me to adjust my program, my plans, they were dictated by the TV time. I want to watch that movie, which is starting at 6.30. I need to plan my activities around that time peg, for 6.30. But now, we now have Netflix. I can do all my planning, even putting aside the movie that I want to watch, do the important things first, the time critical things first, then whatever time I get free, I can still go and I will suffer no loss. I do not need you to wait for it to be rerun or replayed like what they do on the other option. Even though they claim to have services like a catch-up where you can watch what was watched when you couldn't watch it. The level of control is still higher when you're using Netflix rather than when you're using these are the DSTV options and including OpenView. Not all of them can even record.

**Okay, that's very interesting. Going on to the next question, what recommendations would you give to the traditional TV broadcasters to remain competitive with streaming services like Netflix?**

There will be so many things to say, but the important one which will probably lead to the rest is that they should give more control to the consumer rather than keep holding on to the control. By that I'm saying, let the consumer choose what they want to watch when they want to watch it. And from there, they should also improve their data analytics. On Netflix we get with their recommendation. Based on your watch history and also the categories that you frequently visit or frequently pick from. Netflix can even suggest what is upcoming. They can give you notice of what is coming soon. Then they give you thumbnails and previews of what is upcoming. Things that you probably lack on the other platforms. So, I would want to suggest to them, first give more control to the consumer. Implement advanced data analytics, know your customers and serve what the customer wants, not what you have. I think that summarizes a lot of the things I would want to suggest today. The customer is in control, and they are able to choose and they are showing an interest in the customer by analyzing customer patterns and making recommendations to the appropriate customers based on their taste. They will deliver a better service.

**Okay. Can you tell me the major differences between Netflix and the DSTV in terms of ease of use and the setup process?**

Well, if the DSTV now has two options, in the old days you would need to have a satellite dish suspended somewhere connecting you via cable to a decoder. Then you connect your TV again via cable to that decoder, cable cable cable. In IT we talk about the signal attenuation signal loss with an increase in distance largely caused by the resistance of the carrying wire. DSTV when you set it up the traditional way you have a satellite dish strategically positioned somewhere then from there an LNB connecting to your decoder and the decoder connecting to your TV. That does not guarantee high quality sound high quality signals visual signals. So setting up that requires the dish the cable, the decoder, and the LnB. And on the TV end you just need a simple a simple TV as long as it has the wire cables and or an HDMI cable you can easily connect to that. Setting up and configuring for Netflix is different. Netflix is an internet carried service and as such what you need is access to the internet. Most people access that through home Wi-Fi systems which are small routers and small domestic router and internet access is provided by career services. In South Africa we talk about Vox, there is rain, MWeb and so forth. Those give access to the internet, and you tap onto the internet via an internet router which you'll be having in your home. You do not necessarily need to have any cable from your route to the TV especially if you're using a smart TV. So, observe there is less cabling involved right there. Very modern internet service providers actually not even having to drill and put any hardware in your home. The internet is now more portable where they just you just subscribe they are given a completely wireless router which only requires wire to keep it on to power it and from there if you have a smart TV you connect wirelessly to the router and you are set up to go just like that. In terms of costs you will notice that Netflix is more of a pull out of the box. You can pull all your hardware out of the box and within minutes you will be set up and ready to start watching. The same cannot be said about the DSTV. DSTV you'd need to buy those things that are spoken about the dish, the L&B, the cabling and you also need someone who is a signal finder strategically position the dish and L&B so that you can start receiving the signal in your household. So comparing the two you see that setting up and going with the Netflix is a much shorter in the simpler way than doing the same thing with the DSTV service.

**Okay that's very interesting. So going on to the next question. Since you started using Netflix to now some things have obviously changed. What do you find most satisfying or annoying is Netflix evolved?**

I'll start with the thing that I found to be almost annoying. The language control is not as strict as I would have wanted it to be. I'm not saying that the DSTV offers higher language control than Netflix but you know the Netflix is showing very material. Crystal sounds crystal picture but there are times when you want to control the language you know people swear for instance you want to mute the parts where they do that. Netflix does not have the level of control that I would want. So, if they can push the gear upwards and provide more control and they have the muting happen at the right time rather than right on time where part of the way they've already been ahead. I'm sure that would be a very good improvement.

**Would I be correct to say that has also maybe part of regulation that Netflix is not heavily regulated like DSTV?**

It is a possibility. The language is just verbose. It is just vulgar, most of this American stuff. But the thing that got me really excited is the freedom to choose. Netflix has categories, I've spoken about those already. Netflix gives you previews and even prompts you that one day they're going to be releasing that episode you're going to be releasing that. It gives you short summaries which are very very convenient and useful. Even when someone is trying to catch up I find that feature really really exciting. They really do take care of the needs of their clients. They are more outreaching. They are more analytical and they allow you to indicate what you think about the film. The thumbs up, the thumbs down thing. The best thing about that is the analytics; they will actually recommend stuff we have found fascinating and quite convenient, probably the most exciting aspect of Netflix. The customer-centric view.

**Okay, so this is going to be our last question. So to what extent does Netflix cater for your viewing needs?**

Save for sports, I think Netflix is doing a superb job. And I say the save-for-sports they do not have as much capacity for sports as DSTV. To the extent that when some tournaments are being played, you'll be kept in the dark if you are strictly Netflix.

**Okay so what other services do you use to watch content that is not provided by Netflix?**

In some cases, one would be forced to go back to the weaker. So, I use that to the other alternative teams. For instance, the government's broadcasting service on most occasions has broadcasting rights for major matches and major tournaments. But those matches and tournaments are not selected by me as the customer. They are selected by the broadcaster. To make it worse some of the major tournaments when they are being broadcast the language may not be English. Especially when South African teams are involved. The public career services may broadcast the match in one of the vernacular languages which while it serves its own purpose is some way, disadvantage us foreign nationals and those people who are not conversant in whatever language is chosen with that particular broadcast. But answering your question when you do not get it on Netflix you are forced to either look for a streaming service like 808, 48 or 820 internet which broadcast some of these matches free. If you have access, you can also watch some of these rarely streamed matches even on the YouTube.

**Okay that was our last question, and I would like to thank you for participating in this interview.**

I'm thankful for the opportunity. You made me explore things that I took for granted.

**Okay thank you so much.**

It is been my pleasure.
**Bye.**
Bye bye.

# Appendix E: Editor's Certificate

15 July 2025

**TENDAI STEPHEN SAMUSODZA**
Faculty of Informatics and Design
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**CERTIFICATE – EDITING OF MASTER'S THESIS**

I, the undersigned, herewith confirm that the Master's thesis of TENDAI SAMUSODZA titled, *"THE IMPACT OF INTERNET STREAMING TECHNOLOGIES ON THE TELEVISION BROADCASTING INDUSTRY IN SOUTH AFRICA"*, has been completed.

The final thesis and editing certificate have been submitted to Mr. Samusodza and cc'd to Dr. Errol Francke on 15 July 2025.

**Sincerely**

A Jordaan

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