



Towards a model for digital distribution and value capture in the South African music industry

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A research project submitted to the Gordon Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master of Business Administration.

7 November 2012

Abstract

New digital distribution and value capture models have emerged on the global music industry scene in the last ten years. These models are highly dependent on a strong underlying communications and broadband internet infrastructure which is largely present in most developed markets. South Africa, however, is a developing country whose broadband infrastructure is still nascent and not as widely available or accessible. Due to the permeation of mobile technology, most broadband internet access is likely to occur through the mobile networks in most developing markets. This stands in stark contrast to developed markets where broadband internet access occurs primarily via fixed line infrastructure with mobile as a secondary option.

This research set out to investigate whether digital value distribution and value capture models which succeeded in developed countries would be suitable for the South African music industry given the broadband infrastructure constraints and the different internet access methodologies prevalent in this developing market. This research employed an exploratory research methodology in order to investigate this question and found that a mixture of value distribution and value capture models would address the entire market requirement, with mobile-centric digital distribution models being most suitable for mass market deployment.

Keywords:

Digital markets, digital distribution, value capture, music industry, South Africa, broadband internet, iTunes, Spotify, download model, ownership model, access model, streaming model, mobile broadband

Declaration

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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Acknowledgements

First of all, I would like to give thanks to the One who began a good work in me by setting me on this MBA journey and has been faithful to see me through to completion! All praise to Him!

My deepest gratitude to Shadreck and Barbara Nkala, Mama loBaba, you have always been so supportive in all my academic endeavours. This time has been no different. Thank you for the emotional, spiritual, financial and physical support. Words cannot express how grateful I am.

To my supervisor, Dr Dinesh Kumar, thank you for your keen insights and your guidance. Thank you for making time in your busy schedule to go give me your thoughts.

Siphilie and Auntie MaSiziba, you guys are my daily support structure. I wouldn't have been able to do the last two years without you. Thank you!

To my best friends and prayer partners – Barbs and Vim – thanks for keeping it real guys. I really appreciate you. Don't know what I would do without you. Thanks for your constant encouragement and support... you keep me sane!

To Tawanda and Sharon Bwanya , Ndaba and Tendy Nkala, Paul and Tracy Nyamuda , Tendy Nyeke, Thoko Unyolo and Arona Sarr – thank you guys for your love and affirmation always! I really appreciate you!

Finally to Thando, Sipho and Langa and all the 2013 'buns' ... you guys are the reason we do what we do! May your generation do greater things for the Kingdom than we have ever done!

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Chapter 1

1. Introduction and Background

1.1. Research Introduction

The advent of digital technologies and broadband internet have fundamentally changed the way in which consumers access and consume recorded music, both legally and illegally, on the global stage. As a result of the proliferation of these technologies, the number and diversity of internet-based platforms or models for the distribution and payment (value capture) of recorded music have also grown phenomenally (Rogers & Sparviero, 2011). iTunes, the most successful digital music distribution and value capture platform, has grown to account for at least 25% of global recorded music revenues according to the 2010 statistics produced by the International Federation of Recording Industries (IFPI) (Goldstuck, 2010; Rogers & Sparviero, 2011). These models are predicated upon a developed market with a well-developed communications infrastructure. This infrastructure includes broadband services that are sufficiently reliable and speedy. It also assumes sophisticated customers with personal computers and laptops as well as multiple other network ready devices in their homes and workplaces through which they access the internet and services on the internet.

While digital music business models, such as iTunes and Spotify, have continued to grow and succeed in developed markets, these models require a solid communications infrastructure with broadband internet access (Premkumar, 2003). This is not widely the case in a developing market such as South Africa.

The situation in South Africa, a developing market, differs significantly from developed markets and therefore brings into question the large-scale relevance of digital music distribution and value capture models such as iTunes. Three key aspects - technological, cultural and behavioural - seem to differentiate South Africa from the rest of the developed world. These are:

1. Mobile internet presents the largest opportunity for internet growth in South Africa as there are more mobile internet connections in the country than PC-based internet connection. This is in contrast to the developed world where fixed broadband internet is available largely via cable or other terrestrial infrastructure and mobile is utilised as a supplementary access mechanism. The PC and mobile handset are neither exclusively complements nor substitutes and may not lead to the same internet experience. One of the reasons is because browsing on a 2.5" screen is very different from browsing on a full PC monitor (Donner & Gitau, 2009). The mass of internet users in the developing world will continue to be mobile-centric, while many music distribution platforms in the developed world tend to be primarily PC-centric (Donner & Gitau, 2009) with mobile as an additional application.
2. South Africa's broadband internet access lags behind the world at only 10% of the population with many challenges, including sporadic access, affordability concerns and limited feature functionality on most mobile handsets in the hands of consumers (Chetty, Banks, Brush, Donner, & Grinter, 2012; Donner, Gitau, & Marsden, 2011; Goldstuck, 2010).
3. Pricing models that involve bandwidth capping and expensive, usage-based data access are utilised extensively in mobile broadband networks and studies have shown that users alter their behaviour in relation to capped versus unlimited data pricing. Users also adjust their internet access behaviours depending on the costs of access (Chetty et al., 2012).
4. Finally, Goldstuck (2010) further posits that the market for paid digital content may not yet exist in South Africa since a suitable micro-payment model does not seem to exist currently and a culture of free downloads strongly exists among youth and young adults.

These factors and a few others bring into question whether the digital distribution and value capture models utilised in the developed world are suitable for developing markets such as South Africa, given the underlying infrastructural and potential behavioural and educational differences. There is a scarcity of research in the area of mobile-centric internet usage (Donner et al., 2011), let alone in the area of digital music distribution and value capture models based on the mobile internet. This research intends to go some way towards bridging this gap by exploring the suitability of music distribution and value capture models which have been extensively utilised in the developed world for a developing market such as South Africa.

1.2. Research Background

The global music industry value chain is undergoing a massive transformation which is related to the emergence of disruptive technologies (Fridey, Cybulski, & Nguyen, 2011; Lawrence, 2010; Premkumar, 2003). The Internet and related software applications and hardware devices are at the heart of this transformation (Bhattacharjee, Gopal, Marsden, & Sankaranarayanan, 2011; Lawrence, 2010; Premkumar, 2003). These disruptive technologies have catalysed the transmutation of the physical music product (i.e. recorded music on a fixed medium such as CD or DVD), into a digital product (Bhattacharjee, Gopal, Marsden, & Sankaranarayanan, 2009; Bhattacharjee et al., 2011; Hughes & Lang, 2006; Lawrence, 2010).

Nowhere is this impact more evident than in the distribution and value capture aspects of the music industry value chain, as music is increasingly distributed in digital format, through the internet, both legally and illegally (Graham, Burnes, Lewis, & Langer, 2004). As consumers migrate from traditional music consumption towards new digital consumption methods, the traditional value allocation mechanisms in the industry are being severely challenged and have effectively resulted in a significant decline in the retail value of recorded music sales (Rogers & Sparviero, 2011). The global music industry has experienced a 40% loss in value by the industry's traditional players between 2003 and 2012 (Berman, Battino, & Feldman, 2011).

Not only are these disruptive digital technologies altering the structure of the product and the industry, but they are also re-shaping the power and relational dynamics among existing players in the industry - introducing new "actors" into the industry while totally excluding and dis-intermediating others (Bhattacharjee et al., 2011; Graham et al., 2004). Increased industry fragmentation has resulted in more intense industry competition from aggregators, device manufacturers and other new entrants – all of whom are competing for the customer's attention and wallet share (Berman et al., 2011).

Despite the overall decline in the value of sales of recorded music, there has been a subsequent and phenomenal growth in global digital (non-physical) sales, particularly in developed markets. By 2010, four hundred (400) legal online music services existed worldwide with an excess of 13 million tracks being licensed to the major services (Rogers & Sparviero, 2011).

However, in order to succeed, any digital music distribution and value capture strategy is predicated upon the existence or the presence of a solid communications infrastructure (Premkumar, 2003). More specifically, the proliferation of telecommunications technologies and the increased rate of broadband internet access which drives the expansion of digital goods such as the increased consumption of digital music (Bhattacharjee et al., 2011; Fridey et al., 2011).

In South Africa there are more mobile internet connections than traditional PC internet connections. South African mobile internet access tends to be sporadic, easily lost, and expensive. In addition, the majority of handsets on the networks have limited features and functionality (Donner & Gitau, 2009). The bulk of internet users in the developing world will eventually be mobile centric (Donner & Gitau, 2009). Donner (2009) argues however that PCs and mobile handsets are neither exclusively substitutes nor complements; in fact they may not lead to the same internet experience. Goldstuck (2010) further argues that while mobile is the big opportunity, the sale of digital content such as music is dependent on a micro-payment model towards which the consumer base is not well disposed. As a result of the factors mentioned above, the development of a paid digital music model in South Africa is likely to differ significantly from the established models (such as iTunes) in developed markets.

1.3. Research Problem

While, digital technologies are fundamentally re-shaping elements of the value chain associated with the value distribution, consumption and consequently value capture of recorded music (Bhattacharjee et al., 2011; Graham et al., 2004; Lawrence, 2010), the major challenge remains the fact that current digital revenue models tend to be less certain than traditional revenue models (Berman et al., 2011; Berman et al., 2011). It has actually been found that revenues decrease significantly where digital downloading becomes more prevalent (Elberse, 2010). Nowhere is this more evident than in the developing world music industries where infrastructure is less well developed and where bandwidth is more expensive (Oestreicher & Kuzma, 2009).

While some business models have begun to emerge in more developed markets, these are highly dependent on well-developed broadband internet infrastructures, whereas South Africa remains a developing market with clear broadband internet infrastructure challenges (Goldstuck, 2010; Oestreicher & Kuzma, 2009). Therefore, the replacement of declining traditional revenues with equivalent value from digital media sales demands that South African media companies involved in the music industry understand how to leverage and optimise value across the new digital value distribution and value capture platforms (Berman et al., 2011). They also need to become proficient at addressing the specific challenges posed by Southern Africa's poorly developed broadband internet infrastructure (Donner & Gitau, 2009; Goldstuck, 2010). Therefore, this research sets out to explore key elements that lead to a suitable digital distribution and value capture model suitable for the South African music industry.

1.4. Research Objectives

This research paper seeks to investigate the state of the current South African music industry value distribution and value capture models, given Southern Africa's broadband infrastructure penetration levels and constraints. The objective is to ascertain whether digital value distribution and value capture models formed for developed music industry

markets are suitable for the South African music industry context. It finally intends to propose a Southern African digital music value distribution model, identifying the major elements that make such a model possible.

Chapter 2 Literature Review

2. Introduction

Digital technology has radically disrupted and re-shaped the structure of the traditional music industry globally, most especially in the developed world. In the process, it has re-assigned the roles of the traditional industry players, especially the major record labels, who have historically controlled the recorded music value chain (Lawrence, 2010; Swatman, Krueger, & Van Der Beek, 2006, Fridey et al., 2011). The major disruptive forces that are changing the landscape are attributable to broadband internet, its related hardware and software developments as well as improved audio compression formats, particularly the MP3 standard (Rogers & Sparviero, 2011). These technologies collectively comprise the digital technology contemplated within this research paper. The ever increasing rate of internet broadband access is rapidly driving the expansion of digital goods and services, thereby catalysing the global music industry's transformation process (Bhattacharjee et al., 2011; Graham et al., 2004; Lawrence, 2010).

Although the music industry has dealt with market-shifting technological change over the last one hundred years - from sheet music to vinyls, to cassette tapes and then CDs and DVDs - there are two crucial trends that seem to characterise the current landscape (Bhattacharjee et al., 2009). These trends are (a) the rapid decline in album sales and (b) the rapid turnover in hit songs or albums (Berman et al., 2011; Bhattacharjee et al., 2009; Sharma, Pereira, Ramasubbu, Tan, & Tschang, 2010). This rapid decline in revenues derived from traditional music industry processes has led to a desperate search for innovative business models that can successfully harness these novel technologies and the changes they are bringing for the benefit of the industry and its participants (Bhattacharjee et al., 2009).

This literature review intends to explore in detail the literature, theory and frameworks underlying the emerging changes, challenges and business models driven by digital technologies, primarily in developed nations. Firstly the background of the traditional music industry will be laid out briefly. Then some general theory around digital markets, methods of

value distribution and value capture and how these have evolved are presented thereafter. Two examples of prevalent digital music value distribution and value capture models (iTunes and Spotify) are then explored in detail. A growing body of evidence that customers' perceptions of value have changed significantly, especially when they are transacting in digital markets will be explored. This has an impact on what they are willing to pay for in terms of goods or services in the digital realm. The Technology Adoption Model and its variants will be used as a basis for the consumer related theories of value, particularly as it applies to the developing world and South Africa in particular whose consumers face different circumstances than their counterparts in the developed world. Finally a theoretical frame, devised by Simon (2004), pertaining to the technical and societal critical success factors in electronic commerce for developing markets such as South Africa will be explored in detail. This framework makes a strong linkage between a well-developed technical and societal infrastructure and the capability to roll out successful digital business models. This framework will ultimately be utilised to evaluate the data received during the data gathering phase of the research report.

2.1. Transformation of the Music Industry Value Chain

2.1.1. The Traditional Music Industry Value Chain

The traditional music value chain is characterised by a series of industry players (“actors”) that are linked together in a linear process, where the inter-relationships are geared towards achieving a common goal – i.e. profitability from the sale of recorded music (Berry, 2011; Buxmann, Strube, & Pohl, 2007; Graham et al., 2004).

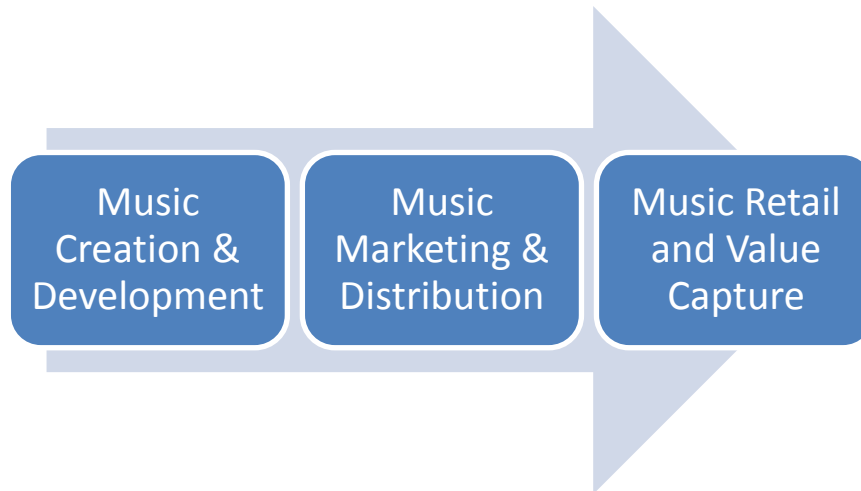


Figure 1: Music Value Chain

Figure 1 above illustrates this linear chain, which is designed to involve multiple players. Value is created by the upstream provider who supplies the input to downstream intermediaries, who in their turn add value to the inputs, with the terminating point in the chain being the end-user or consumer of the product (Buxmann et al., 2007; Evens & De Marez, 2010; Graham et al., 2004). The music industry value chain is comprised of three major categories of “actors” or players: firstly content creators (songwriters, artists and producers) who feed into content promoters and distributors (the record labels), who ultimately supply content retailers (e.g. music stores / portals) who in turn deliver the final product to the consumer (Premkumar, 2003; Rogers & Sparviero, 2011).

In the traditional music value chain, the succeeding processes are strictly interdependent on the prior process being successfully performed and completed before the next process can be performed and completed (Buxmann et al., 2007; Graham et al., 2004; Rogers & Sparviero, 2011). The traditional product in a music value chain is recorded music which is captured on a physical medium of some sort such as a vinyl, tape or CD which can then be packaged, promoted, distributed and sold (Graham et al., 2004).

Globally the music industry value chain had, until recently, been dominated by the five major record labels – EMI, Universal, Sony, BMG and Warner (Graham et al., 2004; Premkumar, 2003; Swatman, Krueger, & Van Der Beek, 2006). Industry consolidations resulted in a recorded music industry that acted oligopolistically and where 85 to 90% of profits were dominated by the major record labels (Graham et al., 2004; Oestreicher & Kuzma, 2009; Swatman et al., 2006). To the extent that the physical recorded music product still exists, these record companies still wield considerable power in the *traditional* supply chain. It is very important to note that the extent to which they can continue to retain dominance over the industry is the extent to which they can **enforce** the protection of their **intellectual property** (copyrights in the songs and recordings) as well as the extent to which they control the **value distribution** and **value capture** channels (Lewis, Graham, & Hardaker, 2005; Premkumar, 2003).

Traditionally, significant investments were required in order to carry out elaborate marketing plans as well as to establish the broad distribution system required to disseminate the physical music product. It is for this reason that the traditional music industry was characterised by high entry costs and scarcity in the number of distribution channels (Graham et al., 2004; Lewis et al., 2005). The traditional production, promotion and distribution channels were controlled by the five major record labels (Graham et al., 2004). In this context, the channels of distribution and purchase remained stable, with the choice of content presented to the consumer being static or fixed, and unalterable with regard to individual taste (Oestreicher & Kuzma, 2009). The majors (record labels) profited immensely from their monopolistic ownership of copyrights as well as from the control of the distribution channels through which these physical recorded music products were distributed.

The traditional majors in the industry have therefore fought hard in order to maintain the status quo, since they have the most to lose in physical CD sales as a result of the disruption brought about by technological innovations (Oestreicher & Kuzma, 2009). Digital technology has radically affected the exchange of goods, services and information, particularly impacting the level of ownership control of intellectual

property as well as the distribution channels and the vertical organisation of content industries such as the music industry (Evens & De Marez, 2010; Evens, 2010).

2.1.2. The Disruptive Impact of Digital Technology on the Traditional Music Industry Value Chain

Just as digital technologies have transformed the recorded music product, from a primarily physical to an intangible digital product, they have had an equally profound impact on the structure of the recorded music industry itself (Bhattacharjee et al., 2011). Technological advancements in the music industry have presented both benefits and challenges to the value chain and its existing stakeholders, influencing the re-design of the traditional value chain, while also disrupting the traditional ecosystem (Evens & De Marez, 2010; Fridey et al., 2011). Where partners in the chain were traditionally firmly established, the chain tended to be fairly static with the intermediaries between the creators and the consumers being very well established (Graham et al., 2004). The digitisation of music has created massive opportunities to re-engineer the supply chain and improve its efficiencies (Premkumar, 2003).

Battarcharjee et. al (2011) suggest that digitisation greatly simplifies the value chain as previous intermediaries are displaced and vertical supply chain integration takes place. In other words musical content creators and producers are able to interact and transact directly with music content consumers.

Rogers and Sparviero (2011), on the other hand, argue that the digital system becomes even more complex as a result of the introduction of new digital products, services, activities and institutions. This is in line with Graham et. al (2004) who propose that when the partners in the chain vary from one market opportunity to another, the chain is very dynamic, resulting in greater complexity. This is the case in the digital music value chain.

Whether the value system becomes simpler or more complex, it is clear that digital technology has become a disruptive innovation, creating a discontinuous environment, shifting the way firms engage in business activities and presenting a constantly changing environment (Frیده et al., 2011; Oestreicher & Kuzma, 2009). This technology is simultaneously creating new opportunities as well as significant challenges for traditional industry players and new industry players, making it harder to capture value from the ownership of copyrights and the control of value distribution channels (Berry, 2011; Frیده et al., 2011; Premkumar, 2003).

Many stakeholders are being forced to reassess their role in the revised value chain and they have found that they need to re-configure their value-adding functions (Frیده et al., 2011). Record labels, which have traditionally added value through their roles of talent acquisition, record production, promotion and distribution, are finding these roles greatly diminished as technological advances permit artists to interact directly with their consumers via websites, blogs, social media sites, and other online mechanisms (Bhattacharjee et al., 2011). The intermediating function between consumers and producers is increasingly being eliminated as a result of digital networks (Evens & De Marez, 2010). This may mean that a good number of incumbents may be unable to survive the new environment (Oestreicher & Kuzma, 2009).

Given the impact of digital technology on the traditional music industry value chain, it is clear that the traditional sequential music industry value chains may have become inappropriate to the competitive reality of the digitally networked economy and therefore a new digital value system is emerging (Evens & De Marez, 2010).

2.1.3. The Emerging Music Industry Value Network

In contrast to the traditional supply chain which is largely dominated by the big five record labels, the online music sector involves a multiplicity of players – a greater variety of potential partners and relationships, not just a single dominant company in the production and distribution of music to the end customer (Buxmann et al., 2007; Buxmann et al., 2007; Fridey et al., 2011; Graham et al., 2004). The physical means of distribution have effectively been replaced by computerised networks and telecommunications companies (Bhattacharjee et al., 2011). This has resulted in various market intermediaries being displaced (such as brick and mortar retailers and physical distribution systems), while new business entities (online music retailers for instance) and opportunities emerge (Bhattacharjee et al., 2011; Premkumar, 2003). The internet is creating linkages between industry players in new ways and establishing value webs where the nature of the interactions are far more cooperative than in the traditional supply chain (Swatman et al., 2006). It is through a cooperative approach to pricing that profit maximisation is achieved for the entire online music industry (Buxmann et al., 2007).

The new value system consists of many different players because the entry barriers of the music industry have been significantly lowered with decreasing transaction and production costs (Buxmann et al., 2007; Graham et al., 2004). Graham et al. (2004) discuss the evolving value network as a series of processes owned by various enterprises through the construction of what has become a virtual organisation. This virtual organisation may be a network of companies that come together quickly in order to exploit fast changing opportunities (Bockstedt, Kauffman, & Riggins, 2005; Clemons & Lang, 2003; Graham et al., 2004).

Value activities in the new digital music industry seem to be more dis-intermediated, fragmented, and networked. This is in opposition to a more structured, sequenced, static traditional physical music industry structure (Graham et al., 2004). In fact, the process of disintermediation has fuelled the fragmentation of music markets

(Oestreicher & Kuzma, 2009). Fragmented markets are developing a new form of intermediation which is based on specialisation on certain core competencies and then leveraging those competencies in strategic relationships (Evens & De Marez, 2010). A value network in the digital music industry realm, therefore, can be understood as a set of autonomous business units that are managed independently but cooperate on the basis of common principles and service level agreements as interconnected nodes and complementary partners (Evens & De Marez, 2010).

In the digital economy, value is co-created by a series of partnerships and relationships in a value network in which different stakeholders, partners, allies and even consumers work together and co-produce value (Evens & De Marez, 2010). The internet has effectively facilitated the restructuring of the traditional music supply chain by decreasing costs, increasing speed and convenience, providing greater information depth, and making a greater range of products and services accessible to the consumer (Graham et al., 2004; Granados, Gupta, & Kauffman, 2005; Regner, Barria, Pitt, & Neville, 2009).

The nature of the transforming global music industry is therefore increasingly separate, **such that the online value network is seen as distinctly different from the traditional music value chain** (Swatman et al., 2006).

2.2. Digital Markets and the Global Music Industry

2.2.1. *Characteristics of Digital Markets*

The internet has become the new location for the trading, buying and selling of disembodied products and services, termed digital products. These products include information and entertainment content of all types including books, music, film, radio, broadcast television, news and so on. Although the virtual marketplace has become widely accepted as the venue for such commercial activities, it is still unclear whether the traditional physical marketplace will disappear altogether or not (Graham et al., 2004).

Internet markets are characterised by their capability to allow content producers and content consumers to connect with each other internationally, thereby permitting them to more easily gain access to a wide range of music content (Fridey et al., 2011).

Digital technologies have resulted in previously embodied products with physical properties such as CDs or cassettes being transformed into disembodied digital products which can be distributed at low variable costs with the potential for higher gross margins in the digital marketplace (Bhattacharjee et al., 2011; Maltz & Chiappetta, 2002). These digital products are capable of being re-arranged, re-configured and innovated in unprecedented ways, resulting in new sub-categories, content and functionality customised towards the consumers tastes (Bhattacharjee et al., 2011; Berthon, 2007; Docters, Tilstone, Bednarczyk, & Gieskes, 2011). Essentially, the digitisation of music has permitted the unbundling of albums and consumers are able to download individual singles increasingly (Doerr, Benlian, Vetter, & Hess, 2010)

Digital goods have a number of unique characteristics which impact their ultimate cost structure. These include their durability, replicability at near zero cost, and their consumption is non-rival – in other words their consumption by one person does not preclude their consumption by another person (Bhattacharjee et al., 2011). The production of the first copy of a digital product may be quite high, but replication of subsequent copies is negligible, impacting the cost structure and therefore the ultimate pricing structure (Bhattacharjee et al., 2011; Buxmann et al., 2007; Rogers & Sparviero, 2011; Jordan & Bolton, 2004). Since the production of the initial product involves the incurring of high costs initially, the key to a viable business model, therefore, is generating sufficient unit sales to cover the initial investment (Maltz & Chiappetta, 2002). In the digital realm unlike the physical value chain, creating copies is no longer a viable business niche as there is no longer any profit to be had in this market space (Jordan & Bolton, 2004).

The risks of the above-mentioned properties of digital goods are that customers may have access to modify or alter the digital good leading to unintended consequences that can

spread worldwide to the detriment of the content creators (Bhattacharjee et al., 2011; Hughes & Lang, 2006). The capability of customisation of content has important implications for revenue growth in the music industry as middle-range products or services are being squeezed out by the two extremes of ‘no-frills’ services or alternatively premium services (Berthon, 2007).

Another key characteristic of digital markets is that they give content marketers the ability to intelligently segment the market and engage with the consumers one-on-one. Those retailers that do not take this approach are punished by the market through loss of profits (Docters et al., 2011; Kunze & Mai, 2007). Segmentation is very important when it comes to proper customisation and subsequent customer satisfaction. Segmentation also informs product pricing since pricing structures developed for the older and more traditional (physical) market will not suffice in digital markets (Docters et al., 2011).

Essentially the business model for the digital market for music is impacted greatly by the issues surrounding digital distribution and value capture which are explored in further detail below.

2.2.2. Digital Value Distribution

The new technology and its resulting business processes are fundamentally altering distribution logistics while simultaneously catalysing the expansion of global music markets (Bhattacharjee et al., 2011). The major impact of digital technology on the music industry includes the decline in importance of the physical distribution chain which is being replaced by computerised networks and telecommunications companies (Bhattacharjee et al., 2011; Graham et al., 2004). Business models that have been built on limited access to distribution channels have lost their competitive advantage as the internet has become the dominant infrastructure in the music industry for conducting business electronically (Graham et al., 2004). And this is more democratic infrastructure.

According to Swatman et al. (2006), there are three business models being developed and utilised by distributors of digital music. These are:

- Traditional distribution of music on physical media such as CDs and flash drives even if the commercial transaction takes place on line;
- Peer-to-peer (p2p) services where the files are exchanged from one consumer's device to another consumer's device, coordinated by a server on the internet which does not actually take part in the distribution of the files. These have tended to be driven by social concerns rather than commercial reasons and;
- Legal downloading or streaming services where the search, location, purchase and delivery of the music file is accomplished utilising one centralised server for a commercial consideration.

Internet Service Providers (ISPs) and telecommunications operators are crucial to the latter two models because they provide the delivery networks upon which the transactional and delivery platforms exist (Swatman et al., 2006). While most developed world consumers access the internet primarily via fixed connections using their personal computers, laptops and other devices, the bulk of internet users in the developing world will ultimately be mobile centric (Donner & Gitau, 2009).

South Africa's high penetration of mobile telephony serves is an early indicator of the way in which urban and rural populations in South Africa will approach the mobile internet for a wide range of information, educational and entertainment services (Donner et al., 2011). Mobile telephones have gone through a rapid diffusion in developing markets and are considered by many to be the information and communications technology (ICT) device that will significantly close the digital divide between the digital *haves* and *have nots*. The telecommunications operators in general, and the mobile operators in particular, play a very important role in the ecosystem for the distribution of digital music since mobile phones have supported audio playback for a long time (Papagiannidis & Berry, 2007). In addition, given the extent to which mobile operators have a largely monopolistic hold on the distribution network, is the extent to which they wield great

power in the ecosystem (Evens & De Marez, 2010). This is explored in greater detail in section 2.4.2 below.

2.2.2.1. Legal Downloading and Streaming Models

Premkumar (2003) proposes six possible digital distribution strategies, further proposing that more than one of these strategies is likely to co-exist. These strategies contemplate the methods by which digital music files are distributed to the consumer. The first five models are based around a digital download or ownership model where the digital music file is transferred in its entirety from the source to the consumer's device and resides there. The sixth method is different in that the digital music file never resides on the consumer's device but is accessible for their use 'on demand'. The distribution models contemplated are:

Digital Distribution Model 1:



Digital Distribution Model 2:



Digital Distribution Model 3:



Digital Distribution Model 4:



Digital Distribution Model 5:



Digital Distribution Model 6:



The above-mentioned distribution strategies assume that digital distribution is taking place via legal channels approved by the copyright owners or their licensees. The interface with the customer is then defined as a portal. The online music market is currently dominated by three types of online music portals: music portals initiated by traditional “bricks and mortar” retailers of music (e.g. Borders or HMV); music portals initiated by telcos’ or technology providers (e.g. Apple iTunes, MTN Loaded in South Africa and Vodafone Live); and independent music portals (e.g. Spotify, Deezer and Pandora) (Swatman et al., 2006).

A new type of player in this ecosystem is the Content Aggregator that plays an intermediary role between the content owners and the consumers, enabling owners to sell directly to their audiences through their platforms. Aggregators create a central marketplace for digital content which makes searching for it and subscribing to it much easier. Although the costs of setting up an online point of sale are less of a barrier to entry

than in the traditional value chain, the use of an aggregator is much simpler and more cost effective. Aggregators therefore benefit from the economies of scale realised in overcoming the barriers of setting up individual points of sale for each content creator or content owner (Papagiannidis & Berry, 2007).

2.2.2.2. Peer-to-Peer Sharing Models

A distribution strategy which has been a present and worrying reality from the start of the digital movement of music, and is deemed to be largely illegal, is peer-to-peer (p2p) music sharing. This is the distribution process by which digital music files are transferred from the device of one consumer to the device of another consumer enabled by a centralised peer-to-peer server which keeps track of the music available in the distributed network of sharing devices connected to it. While the activities of sharing and exchanging of music files are not new, the internet has allowed these to be taken to another level, perpetrating a wholesale theft of intellectual property which is largely tolerated by governments, society and the media in general (Rogers & Sparviero, 2011). This allows the mass reproduction and distribution of a file that was paid for only once to an audience of thousands on the internet (Jordan & Bolton, 2004). P2P sharing capabilities have a significantly different cost structure to the traditional music distribution channels (Oestreicher & Kuzma, 2009).

P2P networks have enabled the distribution of digital products quickly and cheaply without the permission of, or payment to, the content owner (Higgins, Wolfe, & Marcum, 2008). This results in a significant challenge - i.e. how to continue to be profitable, for those legal distributors of digital content, in the face of such widespread and unauthorised competition (Maltz & Chiappetta, 2002). Amberg & Schröder (2007) have found that exchange via p2p networks is many times higher than through the legal distribution models mentioned above. Wolf & Wheelock (2007) further propose that there will be an increasing number of solutions in the future which permit the transfer of content from one device to another as an increasing amount of content becomes available on the open internet and as new forms of connectivity emerge. These new systems can actually offer socially beneficial uses such as sharing for commentary or

opinions without infringing on copyright due to advances in technology (Maltz & Chiappetta, 2002).

2.2.2.3. Economics of Digital Distribution

In all of the digital distribution scenarios explored above, the costs of distribution are significantly lower than those of the traditional physical supply chain. This is partly because the consumer assumes some of the costs of distribution through the hardware and software he procures in order to access the digital material. This further implies that digital distribution via the internet reduces the market's reliance on large corporations to distribute digital content. This is an extremely concerning prospect for many traditional corporations who have up to now dominated the music industry (Jordan & Bolton, 2004).

Digital value distribution in the music industry value chain is necessarily accompanied by the concept of digital value capture in order for the industry to remain profitable and viable. Each of the above-mentioned distribution strategies has an accompanying implication when it comes to value capture which is further explored in detail below.

2.2.3. *Digital Value Capture*

In the traditional physical value chain, value capture was traditionally achieved at the retail level with the retailer collecting payment for the physical product directly from the consumer in cash or via card payments. The collected revenue was shared by all the participants and intermediaries in the value chain in defined proportions by way of structured industry agreements. This sequence was easily controlled at distribution and retail level due to strict batch, copyright, licensing and security controls exerted by the distributors (often owned by the record labels) and retailers (stores working in close cooperation with the distribution network). An attempt has been made to replicate this

sequence in the digital marketplace for music via models such as the iTunes store and other traditional music stores which have opened online portals. However, the traditional value capture model is facing significant challenges in the digital marketplace.

2.2.3.1. Pricing and Digital Value Capture

Pricing strategy, which plays an important role in the success of digital distribution and value capture, is not a simple matter (Premkumar, 2003). Consumers and industry advocates have questioned the propriety of directly transferring the cost of the physical product onto the unit cost of the digital product (Buxmann et al., 2007). The iTunes store has traditionally sold tracks at 99c per track which means that the consumer would pay the same price for a full download of twelve to fifteen tracks as they would have paid for a physical album. The market has felt that this was largely inappropriate because the cost structure for digital goods is radically different from the cost structure of the traditional physical CD and this should in turn have an impact on the pricing structure.

The cost of producing the first copy is very high, while the cost of replication, in the digital realm is almost negligible. The size of the unit sold (a song as opposed to an album) makes the recovery of even very modest development costs highly improbable especially since the natural lead times before competition kicks in from mostly illegal replicating services has been eroded in the digital environment (Buxmann et al., 2007; Maltz & Chiappetta, 2002).

Traditional players are feeling the pressure of having to replace the revenues from declining physical CD sales with digital revenues, however the constraints on increased volumes of transactions and therefore revenues in the digital realm lie in the fact that the price of the digital product is perceived to be too high. In other words turnover could be increased by lower pricing (Buxmann et al., 2007; Graham et al., 2004). In addition, pricing levels vary by country, due to income differences and some online vendors are failing to optimise prices for the local markets (Docters et al., 2011).

2.2.3.2. Payment Platforms and Value Capture

While pricing is the first consideration, the payment systems required in order to monetise these digital offers are another crucial consideration since physical currency cannot be exchanged in the digital realm. Therefore secure, widely available and acceptable virtual currency is required in order to accomplish and complete the transaction. In developed countries, this is more easily accomplished by the use of credit cards and payment gateways in online transactions. However, in a developing nation such as South Africa where the population is largely under-banked, the problem of usable and acceptable payment systems is a possible constraint (Swatman et al., 2006).

2.2.3.3. The Impact of 'Free' on Value Capture

A further trend that works against effective value capture in the digital market place is that consumers are increasingly becoming accustomed to obtaining their music for free. The phenomenon of sharing and the technology driving it have become more prevalent (Kunze & Mai, 2007; Pikas, Pikas, & Lymburner, 2011). This raises the question of whether legitimate music sites that sell music can survive in the face of widespread piracy (Graham et al., 2004). In light of entrenched consumer behaviour which may be very difficult to change in the future, many authors have proposed that the future price of distributing music will be FREE (Docters et al., 2011; Hougaard & Tvede, 2010; Pikas et al., 2011).

Managements of traditional recorded music firms have genuine concerns that digitisation seems to erode pricing because once people get used to not paying for music, this further decreases their price acceptance level and it becomes impossible to change their free consumption mentality and behaviour (Kunze & Mai, 2007; Pikas et al., 2011). Therefore if sales of music were to become totally free, the music industry would have to gain

profits through other avenues including merchandising, live performances and many other revenue streams not directly related to the sale of the recorded music file (Hougaard & Tvede, 2010; Pikas et al., 2011).

2.2.3.4. Alternative Value Capture Models

An alternative value capture model for the music industry includes the adoption of a broadcast, advertising driven model where consumers receive the content for free and revenues are generated from the associated products, services or advertising (Swatman et al., 2006). Another alternative is the offering of a utility based model to consumers, where music is paid for in the same way that electricity or water are consumed either with a fixed fee for unlimited consumption or a small element of usage based consumption (Shelley, 2012).

It has become clearer that in the digital realm, the unit of charging has to change and more innovative pricing is required in order to achieve profitability for all the entities involved in the digital music value chain (Bhattacharjee et al., 2009; Docters et al., 2011). If consumers are to be enticed away from illegal downloads, the industry will need to engage customers through inventive bundling of products, product extensions, bonus material or luxury editions for which customers are willing to pay a premium (Bhattacharjee et al., 2009; Docters et al., 2011; Oestreicher & Kuzma, 2009; Walters & Buchanan, 2001). It has become crucial to tap into customer-oriented business models that assess the customers' expectations, behaviour and accepted compensation methods (Amberg & Schröder, 2007). This will lead to segmentation via price structure where pricing and product management are intricately interwoven and where pricing is increasingly content driven rather than feature driven (Docters et al., 2011).

While digital music distribution has not yet adequately achieved the same levels of value capture that traditional physical sales did at their height, two models have showed some early signs of success in the developed world. The first is iTunes which is a

download/ownership model and the other is Spotify which is a streaming/access model. These digital value distribution and value capture models are explored in greater detail below.

2.2.4. Digital Distribution and Value Capture Models

Papagiannidis & Berry (2007) define a business model as an “architecture for products, services and information that also incorporates the various actors and the roles that they play, the benefits that they derive from the model and the descriptions of the various sources of revenue therefrom”. The challenge however in constructing these models is in identifying where customer value lies and therefore which business model is most apt to service the customers’ requirement.

There are a number of business models in the digital marketplace that may prove useful, including commission-based, advertising, mark-up, production referral, subscription and fee-for-service business models. All of the business models are currently in use and it is yet unclear which business model will dominate digital music distribution and value capture in the future (Papagiannidis & Berry, 2007).

However, legal music aggregating and distribution services, which were introduced in order to present an alternative to the illegal p2p downloading systems, have become popular, with iTunes dominating the digital downloads market and Spotify introducing a rapidly growing yet different model. These two models which seem to dominate the digital distribution landscape are explored in further detail below.

2.2.4.1. Digital Music Downloads Model – iTunes

Digital technologies have enabled non-traditional music industry participants such as Apple (a hardware manufacturer) to make an entrance into the music industry (Kunze &

Mai, 2007). Legal downloads have become a growing business since Apple introduced iTunes in 2003, with digital channels growing to account for 25% of overall recorded music revenue globally according to IFPI (Lawrence, 2010; Rogers & Sparviero, 2011). Apple's iTunes is an example of a software-based delivery mechanism (as opposed to hardware or mobile network delivery mechanism) where iTunes uses its own proprietary software and formats to deliver the music files to the customers' device(s) (Papagiannidis & Berry, 2007).

The Apple ecosystem of iTunes software and iPod devices is probably the best examples of hardware and software pairing currently available (Wolf & Wheelock, 2007). In this model the consumer accesses legally licensed content through the Apple iTunes store downloaded onto a PC or an iTunes compatible mobile device such as the iPod, iPad or iPhone. The consumer is able to purchase music tracks from the iStore by loading a voucher or, more commonly, utilising a credit card, in order to conclude the transaction and be allowed to download the music file over a decent broadband connection. However recent research has also shown that for a 'per download' service such as iTunes, a per unit fee generates a sub-optimal profit compared to a lump sum payment or a percent of profit payment scheme. Research is also showing that a mixed service model (per download fee and subscription fee) can better capture the broader market of consumers who prefer to subscribe and others who prefer to pay per unit. This mixed service model may lead to higher profit margins for the record labels and for the retailer as a whole (Bhattacharjee et al., 2009). However, currently the iTunes service is strictly a pay per unit downloaded model.

Until recently a common complaint against iTunes was that once the music track had been purchased and downloaded onto a device, it was inaccessible and unusable from the customers' other devices due to DRM (digital rights management) controls that the music industry had insisted upon before signing licensing agreements with Apple. DRM controls only allowed the music to be consumed on the single device onto which it had been downloaded after purchase. This has been the cause of some significant customer dissatisfaction as customers do not feel that they are getting "fair usage" in locking the track to a single device and not allowing transfer to the customers many other devices.

The preconditions for the success of the iTunes model, therefore, have been premised upon the range of content available in its catalogue, aggregated onto a single platform. 85% of all content worldwide is owned by the four recording majors that are signed with Apple iTunes. The other precondition to success has been the customers' ability to access sufficient broadband speeds for downloads and the accessibility of credit cards as a payment mechanism. All of these pre-conditions are sufficiently met in the developed world context.

2.2.4.2. Digital Music Streaming Model – Spotify

Spotify is a music streaming service that has been marketed towards individual consumers as a high quality alternative to music piracy and a service that allows consumers to listen to any music, at any time, in anyplace, anywhere. Spotify, similar to iTunes, has a downloadable software client which can be installed onto any Windows or Mac compatible device, as well as on Android and iOS-enabled Smartphones. The customer signs up for the service using his / her social media facebook account and is given access to up to 20 million tracks with thousands being added daily (Shelley, 2012).

The value capture method on Spotify has two alternative models. The first is a 'free' advertising supported version with limited features after six months. The other model is a premium subscription model where the user pays a fixed monthly fee in order to access and stream the music. The major difference between the Apple iTunes downloads model and the Spotify streaming model is that the former involves ownership of the track, while the latter involves licensing of the tracks rather than ownership of them. This is a debate that has been raging in the industry for a short while. The debate concerns the question of whether the licensing or the ownership models are best for the consumer, distributor and content owner (Shelley, 2012). The significant numbers, however, on other streaming services such as Pandora (80 million) for instance, seem to be proof that consumers are very supportive of the licensing approach which emulates broadcast radio quite closely. Economists claim that the licensing approach actually increases both consumer well-being,

by creating excess customer surplus, while also increasing seller profits (Bhattacharjee et al., 2009).

Spotify, however, is not primarily a radio service but allows the consumer to select any music track, at any time, create his / her own customised playlists and modify these playlists continuously. This is probably the most compelling feature of this service, as well as the responsiveness of the rapid track retrieval mechanism, which utilises a mixture of caching, peer-to-peer networking and direct server streaming.

Once again the success of this model is premised upon the accessibility and availability of sufficient and consistent broadband internet bandwidth (Shelley, 2012). It is, however, less dependent solely on the customer having a credit card or other electronic funds payment method available in order to complete the monthly fixed subscription fee, since the advertising-supported version is monetised via advertising.

Although this model is increasingly becoming very popular, there have been complaints about the use of the downloadable client rather than a web-based client for Spotify, its use of the facebook account as the primary way of registering, as well as the royalty fees that composers, artists and some record labels feel is far too small to be worthwhile (Shelley, 2012).

Given the strong role that broadband plays in both the download and streaming models, the question remains as to whether either of these models is suitable for a developing market such as South Africa. This leads us to attempting to understand how customers perceive value and thus allocate funds in the new music industry value chain.

2.3. Customer Perceptions of Value in Digital Music Markets

People are listening to music and demanding music more than ever before. While the record business is currently in decline, the music business as a whole is still growing (Oestreicher & Kuzma, 2009). In addition, audiences have become increasingly fragmented, and therefore new models have begun to evolve beyond a 'one-size-fits-all' model towards a model that has increased relevance, choice, integration and packaging options (Berman et al., 2011; Lawrence, 2010). Therefore it is imperative to recognise how perceived value in the new value network has shifted, where it is located, how this value is distributed and captured. In short, the industry has continually needed to improve the way that it understands its customers' needs and improve products and services in line with those needs (Premkumar, 2003).

2.3.1. *The Traditional Sources of Value in the Music Industry*

The predominant model in the traditional music industry value chain was demand driven, focusing on the manufacturing and sale of physical utility and consumer products like the Compact Disc (CD) (Fridey et al., 2011). In this context, the physical album was the major economic factor (Oestreicher & Kuzma, 2009). The major economic factor from the physical channel no longer exists in the digital chain. This raises the question of where the economic value lies. This question can only be answered by examining the method by which customers adopt a new technology. This process is explored in greater detail below.

2.3.2. *Technology Adoption and Diffusion Theories*

The way that new technologies are adopted by a user group is an inherently complex, social development process and those who are concerned with addressing the adoption of a new technology, such as purchasing music online, must address the cognitive, emotional and contextual concerns surrounding it (Straub, 2009; Wang & Lin, 2012). The Technology Acceptance Model (TAM) is one of the central theories in technology acceptance research due its high explanatory power, inexpensiveness, flexibility and its

parsimony across a wide variety of contexts (Plewa, Troshani, Francis, & Rampersad, 2012).

The Technology Adoption Model has two dimensions through which it explains a persons' adoption behaviour: (i) perceived usefulness, which is the degree to which the person believes that the particular system enhances his or her job performance and (ii) perceived ease of use, which is the degree to which a person believes that the technology or system is free of effort (Davis, Bagozzi, & Warshaw, 1989; Plewa et al., 2012; Wang & Lin, 2012).

While Adoption Theory describes the choices made by an individual to accept or reject a particular type of technology or innovation, it is limited in its scope because it does not account for institutional, social and other personal control factors (Plewa et al., 2012; Straub, 2009). Therefore Adoption Theory is often complemented by Diffusion Theory which explains and describes how a technological innovation spreads throughout a population, taking into consideration factors such as time and social pressures to explain the adoption or rejection of a technology in a population. Diffusion theory deeply considers social systems and behavioural processes such as complexity, observability, triability and complexity and how these affect the individuals' adoption decision (Plewa et al., 2012; Straub, 2009).

In developing countries, the road towards digital technologies, consumption and literacy levels creates a different adoption dynamic than in developed countries. One major fact is that there are more mobile internet connections than PC-based internet connections in South Africa and a large group of developing world users that will utilise the internet for the first time via a data-enabled mobile handset. This has its own technology adoption and diffusion dynamics in the mobile arena (Donner & Gitau, 2009; Donner et al., 2011). According to Donner (2009), PCs and mobile handsets may not lead to the same internet experience since internet on a 2.5" screen is far different than on a PC screen.

2.3.3. TAM in Mobile Environments

Mobile telecommunications operators are under pressure to mitigate the impact of falling voice revenues by introducing value added products and services onto their networks such as downloaded music, ringtones, ring-back tones, games and many other services in order to boost revenue growth. The rapid increase in mobile subscribers has popularised such services and has led researchers to investigate and analyse the key drivers and barriers to the adoption of Mobile Value Added Services (Wang & Lin, 2012). Wang & Lin (2012) therefore further extended the Technology Acceptance Model by expressing that in mobile environments, subscribers focus on both hedonistic and utilitarian demands when adopting and continuing to utilise mobile value added service innovations and technologies (Suki, 2011). Hedonistic qualities such as perceived playfulness, concentration, curiosity and enjoyment were salient factors in the customers' interactions with mobile value added services such as music, especially for younger people (Suki, 2011). Utilitarian considerations such as service quality, defined by usability, availability, reliability and accessibility, were also vital in assessing the success of the technology and keeping customers engaged.

In South Africa, the cost of mobile broadband internet also represents a major factor in the adoption of the mobile broadband services allow for access to entertainment content such as music (Donner & Gitau, 2009). The pricing models for bandwidth as well as the implementation of bandwidth caps, rather than unlimited internet per fixed fee models, constitute an additional dynamic that may alter user adoption and diffusion behaviour (Chetty et al., 2012). Therefore, without comprehending how mobile internet is utilised in resource constrained environments, in the developing world, it will remain difficult to understand the dynamics around digital music's adoption and diffusion in this context (Donner & Gitau, 2009).

Given the dimensions which inform and direct the adoption of new technologies above, the next section explores the literature around the perceptions surrounding customer value in digital markets.

2.3.4. Perceptions of Customer Value in Digital Markets

The very notion of the value attached to music has changed considerably, just as the value chain has also undergone significant transformation (Fridey et al., 2011). New distribution models are being leveraged by media companies to engage consumers in an on-going relationship while optimising value across distribution channels (Berman et al., 2011). New players in the broader industry are capturing value by focusing on the **customer experience** (Berman et al., 2011). Increasingly, customers are empowered to choose the way that they purchase, use and manage their media (Wolf & Wheelock, 2007). The transformed digital industry is focused on improving its understanding of customers' needs and then providing products and services that meet those needs (Premkumar, 2003).

New players in the broader music ecosystem have captured more value by focusing on novel and superior customer experiences (Berman et al., 2011). Consumers are seeking a richer, more sophisticated experience than simply buying and listening to music (Fridey et al., 2011). They are making choices on the basis of simplicity of use, integration with other devices and convenience (Berman et al., 2011). Device manufacturers and content aggregators have led in consumer experience innovations and consumers have gladly responded by allocating a greater portion of their budgets to offerings that enhance that experience (Berman et al., 2011).

One of the most significant areas of emerging consumer value, given the volume of music and media that the customers are accessing and managing, is a coherent way of storing, accessing and managing this media which is stored in different formats, on different devices and locations. The opportunities to provide such a 'friction free' experience will

ultimately provide additional opportunities for the monetisation of products by platform makers, content owners and service providers (Wolf & Wheelock, 2007).

Another important element of the new music experience is the popularity of social networking sites such as Facebook, Twitter, YouTube which allow consumers, especially younger people, and musicians to communicate directly and collaborate on various activities (Halttunen, Makkonen, Frank, & Tyrväinen, 2010). In fact many artists credit online social sites with the provision of new value that was lacking in previous value chains (Fridey et al., 2011). Shared social experiences are viewed as a significant expansion of the value system (Fridey et al., 2011). Essentially music is becoming less of a good whose value is measured through focused listening and rather as part of a total experience (Bhattacharjee et al., 2009). The rapid uptake of file sharing may actually suggest that consumers see value in accessing a wide catalogue of digital content which is cheaply priced and that can be flexibly bundled to meet their needs and where there is an option to sample before they purchase (Jordan & Bolton, 2004). In this regard, Steve Jobs is quoted as saying “you have to understand piracy and provide something better.”

The success of the earlier digital distribution strategies depended on copyright protection, appropriate communications infrastructure and relevant pricing and payment systems (Premkumar, 2003). While the latter two requirements are not in dispute, many researchers have found that consumers have found the copyright protection regimes or digital rights management (DRM) systems have diminished the consumers’ experience and enjoyment of the ownership of the music purchased from legal downloading systems. Therefore this is an area that the industry has had to re-think in order to satisfy the mandate to create and monetise value for the consumer (Hougaard & Tvede, 2010; Maltz & Chiappetta, 2002).

As there is a shift in the music industry, with players seeking new value capture models to compensate for the losses caused by declining record sales, increasingly industry players are leaving the retail model and are betting on the ad-supported broadcasting model which, could better meet the needs of consumers in the digital age (Evens & De Marez,

2010; Fox, 2002). Under this model, music represents a free service, and revenues are generated from associated products and services (Evens & De Marez, 2010; Fox, 2002).

It is clear therefore that where the traditional value chain focused on physical products and distribution systems as the primary value capture methodologies, the new value network focuses on the consumer experience and social network to derive the value. This value is not captured using the traditional retail model, but rather derived through the indirect ancillary revenues streams from associated products and services such as merchandising, live performances, and advertising although online equivalent services such as iTunes are doing an effective job of capturing basic value in the online retail value system.

The interactions between players in the new value system are driven largely by the level of power and type of power held by each player in the value system. Undoubtedly, consumers have a new found power in this value system (Swatman et al., 2006) however, there are other power shifts that have taken place in the music industry value chain that inform the efficacy of digital distribution and value capture models. This is explored in further detail in the next section.

2.4. Digital Technology Driving Music Industry Power Shifts

According to Oestreicher & Kuzma (2009), up until 1997 the music industry's major record label participants wielded firm control of the value chain's key elements of value dissemination and format. Record labels had firm control of the artists that created the value, the promotion mechanisms for recorded music such as radio airplay through a system of 'payola' (a system where radio stations and DJ's are paid to enhance the play time of company record releases), and the value distribution channels (Bhattacharjee et al., 2009). In the traditional value chain, the major record labels held the power, and therefore the competitive advantage, because they held a crucial stake in the chain of

activities which included the value creation, production, aggregation, distribution or billing (value capture) of recorded music (Evens & De Marez, 2010).

Digital technology has emerged as the most significant driver that is restructuring the power dynamic among the incumbent players, weakening their market control, although the incumbents are not conceding ground easily (Bhattacharjee et al., 2009; Premkumar, 2003). Digital technology is changing the dynamic among content creators (the artists), content developers and promoters (the record labels) and the distribution / retail channels and consumers (Premkumar, 2003).

In the new digital value network, however, power is shifting from the major record labels to both artists and consumers as artists and consumers are both seeing the power of digital technologies and dematerialised products to break their dependence on major record labels and reduce their institutional control (Bhattacharjee et al., 2009; Fridey et al., 2011). The traditional power brokers (the record labels) are faced with a situation where they have to re-negotiate their contracts with existing artists (Graham et al., 2004). They also now have little or no control over the necessary digital technology infrastructure and are being forced to cooperate with technology providers, telcos and other service providers in order to enable digital distribution of their music (Graham et al., 2004; Swatman et al., 2006). The power of the consumer is ever rising as consumer choice abounds and digitisation has made it almost cost free for consumers to make copies and distribute content independent of the formal value system (Bhattacharjee et al., 2009; Fridey et al., 2011; Swatman et al., 2006).

Premkumar (2003) and Graham et al. (2004) both agree that power or control within the music industry are determined by the ownership or control of (1) song and recorded music copyrights (intellectual property), (2) the music distribution infrastructure (value distribution) and (3) access to the appropriate pricing and payment mechanisms (value capture). Record labels are increasingly worried that they have lost their dominance in these aspects of the market and are being restricted to the ever narrowing roles of talent finder and producer as a result of the digital network migration (Swatman et al., 2006).

The impact of digital technology on each of the traditional power mechanisms wielded by the traditional power brokers is explored in greater detail below.

2.4.1. Control of Intellectual Property

Intellectual Property (IP), in the form of musical copyrights, lies at the heart of the music industry value system (Lewis et al., 2005). IP is crucial to both the creative side of the music industry as well as to the commercial activities of the record labels (Lewis et al., 2005). In the traditional value chain, typically these rights would be assigned by the artist to music industry intermediaries such as publishers and record labels and these contractual assignments would effectively form the bargaining power of music suppliers in this oligopolistically structured industry (Lewis et al., 2005). The growth and profitability of the current music industry is heavily supported by copyright laws, which in effect make the traditional copyright holders monopolists with an unusually high level of control over their products (Hougaard & Tvede, 2010). The record labels therefore erected barriers to entry in the music industry, in the form of exclusive rights and royalty deals with their artists, which gave major record companies exclusive access to markets only so long as these rights could be enforced by law and while the market lasted (Lewis et al., 2005).

Digital technology has introduced a new dynamic which is radically re-shaping the commercial viability of the industry (Halttunen et al., 2010). Unauthorised sharing (piracy) of digital music is negatively affecting the revenue and profits of the owners of copyright, which are primarily the major record labels (Bhattacharjee et al., 2011). Although there is now legal demand for digital music, it is far outpaced by illegal demand (Swatman et al., 2006). Piracy has always been present in the music industry, however, the size, scale and reach of these illegal activities enabled by peer-to-peer (P2P) networks and the global internet has reached alarming proportions threatening the survival of many industry participants (Premkumar, 2003; Warr & Goode, 2011). Record labels have attempted with limited success to enforce protection of their intellectual property through the implementation of technological controls such as Digital Rights Management systems (DRM) (Bhattacharjee et al., 2011; Brown, 2012; Brown, 2012; Lewis et al., 2005;

Saunders, M. & Lewis, P., 2012). According to Oestreicher et al. (2009), intellectual property rights are the leading cause of firms not dealing adequately with disruptive technologies, by taking a defensive legal stance and attempting to maintain the status quo.

Technological controls such as Digital Right Management systems (DRM) are proving to be increasingly ineffective and seem to dampen the enjoyment of the product for the customer by limiting its portability and transferability, thereby causing demand to decline (Bhattacharjee et al., 2011; Swatman et al., 2006). Maintaining music as an excludable good by fighting hard for legal rights may not prove to be the correct strategy for the record labels in the long run (Hougaard & Tvede, 2010). This power is shifting towards the consumer who now has multiple choices at their disposal and can choose to buy legal copyright protected material or not, as shifting societal norms are causing the legal and legitimate right to claim income from intellectual property to diminish (Lawrence, 2010; Lewis et al., 2005; Oestreicher & Kuzma, 2009; Swatman et al., 2006). This brings into question whether the business model for selling digital musical content will survive into the future and the resulting impact of digital technology on the developing world's already weak enforcement of intellectual property rights enforcement policies.

2.4.2. Control of Value Distribution Networks

In the traditional value chain, the record labels were in control of their own physical value distribution mechanisms as well as supplier selection on behalf of the artist in which they had made significant investments over the years (Graham et al., 2004; Lewis et al., 2005). In return the artist was provided with promotion, merchandising and distribution of content in commodity form (Lewis et al., 2005). It is this control of the value distribution channels and supply chain that has historically prevented artists from distributing their own material (Graham et al., 2004). Due to the disruptive influence of digital technologies, however, the record industry is unlikely to be able to maintain its control of markets, market offers and value distribution in the future (Oestreicher & Kuzma, 2009).

Mp3 technology combined with portable digital devices led to a rapid increase in the demand for music which can be downloaded over the internet (Lewis et al., 2005). The internet eliminates the need for physical distribution and retail of products allowing consumers to get involved in the making and distributing of music far more easily (Graham et al., 2004). Downloading of music which was once considered a mere nuisance is now a major threat to the industry with an estimated 53% of teenagers by 2003 relying on it as their primary means of acquiring music (Premkumar, 2003).

In the digital distribution model, internet service providers, and telecommunications companies are required for the distribution network that delivers the music (Swatman et al., 2006). Regardless of the type of online business model or music portal employed, many portal operators agree that they need the support and cooperation of the telecommunications network or the mobile operator in order to deliver digital music (Swatman et al., 2006). The traditionally dominant record labels do not own or operate digital distribution networks and therefore have lost control of another aspect that determined their power to a large extent in the more traditional supply chain (Graham et al., 2004). Therefore power and dominance are shifting away from the record labels and towards the telecommunications companies (and their associated service providers) because of their control of the digital distribution channel as well as their billing relationship with the customer (Swatman et al., 2006).

2.4.3. Control of Value Capture (Monetising and Payment) Mechanisms

Record labels traditionally collected their revenues via their distribution and retail relationships and this has been a significant source of their dominance. If they can no longer do this, the entire edifice collapses (Graham et al., 2004). A significant factor that affects the new restructuring of the digital music industry is the power dynamic that exists particularly among artists, retailers (such as iTunes) and consumers (Premkumar, 2003). This power dynamic seems to effectively exclude and potentially dis-intermediate the record labels especially for more recent content over which they may not hold the

copyrights, both in the world of peer-to-peer systems and potentially in the world of legal music retail systems (Frیده et al., 2011; Oestreicher & Kuzma, 2009).

Consumers have assumed greater control of their capability to opt for the so-called ‘illegal’ P2P services in the absence of attractively priced, easy-to-access, easy-to-use, DRM-free music products (Bhattacharjee et al., 2009). The reality of the commercial impact of the innovation around circumvention is impossible to ignore as consumers have found various peer-to-peer models in order to execute their own avoidance strategies (Oestreicher & Kuzma, 2009). Value is becoming more and more elusive to capture in this new digital value network.

Legalised download systems are a growing business since Apple introduced iTunes in 2003 (Lawrence, 2010). However in order to facilitate legal downloads, appropriate digital payment systems and methods of monetising digital music are required in order to successfully exploit this digital retail model (Swatman et al., 2006). Consumers have indicated a willingness to pay for services on mobile and other new devices presenting an opportunity for more balanced revenue models within the digital music value network (Berman et al., 2011). Interestingly, however, Lawrence (2010) contends that the movement towards legal downloads has not actually made the industry any more profitable because paid downloads still mean drastically lower revenues for record labels.

All the same, record labels, have little or no control over payments services in the new online world and need strategic partnerships with digital payment gateways adding to the complexity of the transaction. Telecommunications operators, internet service providers (ISPs) and application service providers (ASPs) however have direct billing relationships with their customers as well as distribution to the customers (Swatman et al., 2006). This further emphasises the power shift away from the record labels and towards the telecommunications players and the Service Providers connected to their value networks.

2.4.4. The Emerging Music Industry Power and Control Centres

As a result of the digital disruption of the traditional music industry value chain, there are three new power players emerging in the new value network. Digital technology has caused significant power shifts towards artists, consumers and a new type of intermediary whose value is based on their specialist capabilities to exploit their knowledge of two-sided markets which create value for both sides of the market i.e. the artist and the consumer (Evens & De Marez, 2010). The most aggressive and entrepreneurial activities in this intermediary market space have come from non-traditional players such as Microsoft and Apple, as well as converged media and telecommunications companies that have entered the online music industry (Krueger, Swatman, & Van Der Beek, 2004; Swatman et al., 2006).

While the stranglehold of the major record labels diminishes in the new value network, the future looks more positive for content creators and consumers as surplus shifts towards them (Graham et al., 2004). Consumers on the web tend to have more power over their buying decisions than they do in the real world (Swatman et al., 2006). It is perhaps, therefore, the music consumer who benefits most from the advent of the internet, mobile platforms and related digital technologies as they are able to access musical content, more easily and cheaply than ever before, with the added option of getting the content for free (Graham et al., 2004). Consumers are becoming not only the users, but also an integral part of the new music value system, their voices are louder, with their experiences and perceptions of value being more integral to co-creating the new digital music product (Fridey et al., 2011).

Digital technology has empowered the entrepreneurial aspirations of many recording artists (Fridey et al., 2011) by reducing the number of intermediaries between the artist and the consumer (Graham et al., 2004). An underlying paradox of the new value network is that while the market is shrinking for the album-driven, traditional institutional participants, digital technology presents expanding market opportunities for the creative

participants (content creators) in the industry i.e. artists and producers (Oestreicher & Kuzma, 2009). This may be as a result of the way in which consumer-to-consumer (c2c) models are easily facilitated by the technology, permitting direct interaction between content creators and consumers via online communities, sharing platforms and free exhibition platforms such as Youtube without having to go through the incumbent or established industry (Oestreicher & Kuzma, 2009).

The lowered barriers created by the technology which has democratised the creation, production, promotion and distribution of music begs the question of whether these new power brokers are in as powerful a position as the previous industry incumbents. It also begs the question of whether this power translates into sustainable opportunities for value distribution and value capture especially in a developing economy like South Africa.

The next section connects all that has been discussed above to the critical success factors that lead to viable distribution and value capture models in a developing market like South Africa.

2.5. Technical and Societal Critical Success Factors in Electronic Commerce for Developing Markets

Developing countries have been found to be at a significant disadvantage when it comes to electronic commerce when compared with more developed countries (Simon, 2004). A number of reasons have been mooted to explain the reasons for the digital divide. These reasons range from poor telecommunications and physical infrastructure, a dearth in the technical and computer skills of business and consumers as well as the failure of regulatory reforms (Simon, 2004). Simon (2004) devised a framework of critical success factors (CSFs) whose synergies, he proposed, could expedite the entrance of developing countries into the global cyber-economy. These critical success factors, comprised of technical and societal success factors are explored in detail in the following sections.

2.5.1. Technical Factors for Success

Simon (2004) defined technical success factors as those factors that define a country's readiness for electronic commerce. This is premised upon the proliferation of its network infrastructure and technology diffusion. He surmised that the growth of electronic commerce is directly proportional to the growth and strength of narrow band and broadband access and hardware investments. Simon (2004) also explained that the usage of internet is dependent on the growth of mobile applications, price reductions, service improvements, ease of use, speed and reliability. The physical infrastructure proliferation which is another important aspect should be supported by a policy environment that fosters growth and development in communications infrastructure and services (Simon, 2004).

2.5.1.1. Communications Infrastructure

Communications infrastructure is both a necessary and sufficient requirement for the entry of a developing market into the digital marketplace (Simon, 2004). Internet use is highest in those countries where the provision of telecommunications services is competitive and where the total costs of access and use are lower. Where there is a low internet penetration rate, it is as a result of low investment in telecommunications infrastructure and the availability of computers (Simon, 2004).

Mobile telephones are regarded by many policy makers and scholars as the bridge for information and communications technology that divides the technology *haves* and *have nots* (Nair, Han, Lee, Goon, & Muda, 2012). Mobile phones have a more rapid diffusion rate than fixed line communication systems and poorly developed countries have the benefit of leap-frogging more developed countries by avoiding systems that are not optimised and thereby avoiding some of the costs thereof (Nair et al., 2012; Simon, 2004). Mobile internet in most developing markets, however, is characterised by restricted bandwidth, sporadic access and pay as you go pricing (Donner et al., 2011).

The main constraints that exist in developing countries include poor physical telecommunications access, a lack of universal access at reasonable costs, poor interoperability of telecommunications networks and services as well as low access to international bandwidth. Access to international bandwidth - the high capacity connection required in order to transmit large amounts of information outside the country - is probably the severest constraint experienced by most developing economies (Simon, 2004).

South Africa's context differs from the developed world context also because the mass of broadband subscribers are and will continue to be mobile broadband subscribers (Donner et al., 2011; Goldstuck, 2010). This brings with it a variety of different constraints including sporadic internet access, slow internet speeds, affordability constraints and handsets with limited functionality (Chetty et al., 2012; Donner et al., 2011). In addition, broadband internet in South Africa tends to be priced according to a bandwidth capped model where data usage is charged on a usage basis rather than an unlimited basis at a fixed monthly cost (Chetty et al., 2012). This pricing model, which is likely to persist, has been studied and it has been found that users alter their behaviour in response to limited and unlimited internet access (Chetty et al., 2012).

Policy plays an important role in the development of national infrastructure and universal access at low costs.

2.5.1.2. Communications Policies

Developing countries need to implement policies and programmes that truly create an open sector rather than reinforcing existing inefficient monopolies or oligopolistic systems that fail to deliver the required results. These policies need to take into account contextual cultural, business and societal factors. The OECD has determined that telecommunication policy reform is a major determinant of the emergence of the new

digital economy. One of the reasons that has been regularly suggested for the unbridled success of the internet in the United States and European Community, is the unregulated nature of the medium (Simon, 2004).

2.5.2. Societal Factors for Success

2.5.2.1. Legal and Standards Issues

Electronic commerce requires legal norms and standards that cover matters such as contract enforcement, consumer protection, liability assignment, private protection and intellectual property rights. However, most developing countries have not fully examined or created policy and legal frameworks that address the issues arising from electronic commerce (Simon, 2004). Legal institutions in developing countries that ought to enforce legal rights and standards are not renowned for quick or low cost action. They remain largely unfamiliar with the complex and rapidly changing electronic technologies and they have very little experience with novel issues that are pivotal to many digital piracy cases. As a result educating these structures remains a lengthy and expensive exercise (Maltz & Chiappetta, 2002). Despite the requirement for strong legal compliance, it seems unlikely that either legal or technological measures will be able to check the use of file sharing technologies (Jordan & Bolton, 2004).

2.5.2.2. Privacy and Consumer Protection

The climate of confidence between consumers and businesses, hinges on the capability to provide privacy and consumer protection. Assurances about protection of consumer personal data and privacy are important to building a relationship of trust between electronic commerce businesses and their customers. Naturally, there is a trade-off that needs to be negotiated between ensuring consumer privacy and consumers obtaining the benefits of electronic commerce due to the capability of businesses to use personal data to customise services (Simon, 2004).

2.5.2.3. Intellectual Property Rights

Intellectual Property Rights have been crucial in providing the security and trust that permits content creators to trade in their ideas, assured that they will get a commercial return for their efforts. Yet the nature of digital content is such that it makes it very easy to circumvent most traditional controls that allowed the enforcement of intellectual property rights and some authors have claimed that copyrighting digital information is actually impractical and unenforceable (Jordan & Bolton, 2004; Simon, 2004). However, the fear is that unless the originators of content have a way of limiting access to others, they will never earn a return to justify the original investment which could have a detrimental effect on the quality of creations produced in the future (Jordan & Bolton, 2004). If countries do not or cannot actively police and prosecute copyright infringements within their borders, the basic legal provisions actually have no force. Copyright seems increasingly incapable of accomplishing its aims both domestically and internationally (Curtis, 2006). The issue of intellectual property rights is of primary concern to developed nations who are the holders, currently, of many of the legal rights. As developing countries develop, they too will come to be holders and beneficiaries of intellectual property rights and therefore it is in their best interests to find workable frameworks for addressing this matter (Simon, 2004).

2.5.2.4. Taxation

The assessment and collection of taxes on ecommerce transactions are concerns both of government and business. Governments are concerned about the potential loss of revenue and businesses are concerned about the possible impacts of government regulation. A revenue authority must have jurisdiction over either income or the tax payer in order to assess a tax. Consequently computer servers or websites may have to be included in the notion of what constitutes a permanent establishment. Problems of sales taxes or value added taxes immediately present themselves (Simon, 2004). Such goods and services can move between seller and consumer easily across a nation or

international boundaries as they can across a street in the same town. This has significant implications for jurisdictions legally, in regard to taxation, producer or seller liability, product warranty, consumer protection, financial regulation and fraud prevention (Bhattacharjee et al., 2009).

2.5.2.5. Education

Individual users and business users need to be trained, educated and encouraged to utilise the internet and adopt electronic commerce. Such education should encompass such issues as building consumer trust, credit and electronic payment options as well as training to utilise the medium for advanced applications. Education should in part lead to some fundamental cultural changes to users and the society as a whole. Given that in some developing economies, economic transactions are still largely cash based, government needs to pass laws that enable transactions and contractual agreements to be entered into electronically. In addition, consumers need to be trained to understand and accept new mediums of exchange. Consumer mechanisms need to be developed that allow consumers to feel confident to interact online with as much confidence as in the physical world (Simon, 2004).

In addition this technology is also non-intuitive, therefore the lower educational levels of the mass of South Africa leads to a training requirement as well as constant exposure which is difficult when affordability is a major constraint (Donner et al., 2011), the digital music models required for mass deployment in such a context maybe very different than those deployed in well-developed market.

2.5.2.6. Business and Government Awareness

Managers in developing countries are faced with great challenges and opportunities (Montealegre, 1996). However if managers fail to understand how to use it in accordance with their situation, it will only create new barriers and limitations (Montealegre, 1996).

Managers and government officials need to strengthen their capacity to understand the technological advances and learn how to improve the transfer and assimilation of these advances (Montealegre, 1996; Simon, 2004).

Although these technologies rapidly and seemingly effortlessly permeate the economic and production systems of the world, they are not available off the shelf opportunities. They have to be absorbed, mastered and controlled (Montealegre, 1996). Their application calls for pre-existing capabilities that are not easily available in developing countries (Montealegre, 1996; Simon, 2004). This raises an important question about the overall ability of developing countries to exploit the malleability of the internet and to implement Web applications (Montealegre, 1996). Business managers must understand the potential ramifications of the Internet and electronic commerce (Simon, 2004). Therefore managers in these developing countries must receive the training and education which makes them and their companies the best potential business partners. An interesting parallel is that of the government's managers, civil servants, like managers in the business sector, these government officials must not only encourage and support the use of Internet by business and consumers but actively use it themselves (Simon, 2004).

2.5.2.7. Change in Trust Issues

The essential challenge facing developing countries is to create a climate of trust which makes it possible for agents to conduct business online without the need for face to face contact. Factors affecting the level of trust required and provided include: where and how payment takes place, when settlement takes place, who settles, whether transaction is B2B or B2C and whether settlement can be traced. Establishing trust in the eminently impersonal environment of the internet is not straightforward. The reluctance to entrust sensitive personal information to business operating on the web remains strong (Simon, 2004).

Given the critical success factors described above, the question to be explored concerns the applicability of digital music models that have found some success in the developed world in the developing economy of South Africa and the proposal of a model or models that may best suit the South African music industry.

2.6. Connecting Research Objectives to the Literature Review

The literature review presented above serves to set a background and highlight the problem under investigation in this research study, namely how suitable developed world digital distribution models are for the South African situation. Figure 2 below summarises the major concepts presented in the literature review and the framework that will be utilised to evaluate the value distribution and value capture models that are the outcomes of this research study.

Figure 2 depicts the value process in the music industry which begins with value creation, proceeding to value distribution and finally value capture. This study is concerned only with the value distribution and value capture aspects of this process flow. The value creation aspect is presented for completeness. The three step value process is set up against the key business model factors which ensure power and control in the industry – namely the ownership or control of intellectual property, the ownership or control of delivery or distribution infrastructure and the ownership, access or control of payment platforms or mechanisms. Each process involves activities that are related to the key business model factors nominated above. This framework will be utilised to narrate and summarise the digital model(s) discussed in Chapter 6 which presents the results and analysis section of the research report.

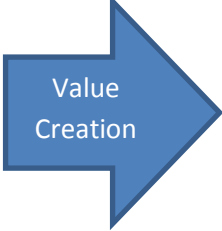
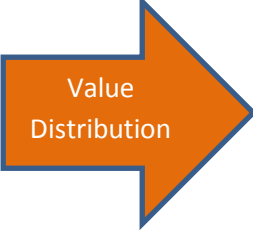
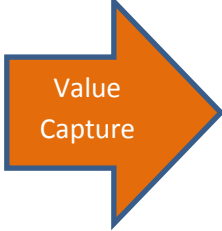
Key Business Model Factors	 Value Creation	 Value Distribution	 Value Capture
Intellectual Property	<ul style="list-style-type: none"> - Create, develop, enhance nad own Intellectual Property (compositions, songs, lyrics, artist brands) 	<ul style="list-style-type: none"> - Licensing of intellectual property - Digitising the IP - Packaging the IP - Marketing the IP 	<ul style="list-style-type: none"> - Pricing IP packages - Monetising IP packages
Delivery Infrastructure	<ul style="list-style-type: none"> - Construct communications infrastructure (fixed / mobile broadband) - Design and implement technology platform (e.g. iTunes, Spotify) 	<ul style="list-style-type: none"> - Easy, intuitive, playful and fun customer engagement through platform portal - Deliver content to customer safely, securely and reliably 	<ul style="list-style-type: none"> - Pricing infrastructure utilisation - Monetising infrastructure utilisation
Payment Infrastructure	<ul style="list-style-type: none"> - Attain licensing and regulatory approvals to operate and establish payment platforms, gateways, systems 	<ul style="list-style-type: none"> - Easy, intuitive, safe, secure, trusted transaction with guarantees 	<ul style="list-style-type: none"> - Accomplish transaction / funds exchange using payment method most suitable and comfortable for the customer (EFT, voucher, credit card, mobile money, payment gateway etc)

Figure 2: Value Process Model

Chapter 3

3. Research Propositions

This research report was directed towards further investigating the most effective model for digital distribution and monetisation of music in the South African music industry. iTunes, using the downloads model had succeeded significantly in the developed world and Spotify, a streaming model, had also been performing well in the developed world as well. However, a range of technical and societal critical success factors proposed by Simon (2004) might set South Africa apart from other countries and thereby affect the digital distribution model(s) that would need to be implemented in South Africa. Therefore, given the differences between South Africa and the developed world context within which these digital distribution models have been constructed, the researchers set out to investigate the following propositions:

3.1. Research Proposition 1

Digital technologies and networks have not yet made a significant impact on the value distribution and value capture of recorded music in the South African music industry.

3.2. Research Proposition 2

Broadband internet availability, accessibility and cost are the foremost enabling and / or constraining factors to effective digital distribution and value capture in the South African music industry.

3.3. Research Proposition 3

Digital technologies and networks have begun to impact the power and control dynamics of the distribution and monetisation in the South African Music Industry – shifting power and control away from the Record labels (the traditional incumbents) towards the Telco operators (the new players).

3.4. Research Proposition 4

The most effective digital distribution and value capture model for the South African music industry is going to be neither iTunes nor Spotify in their current developed world format.

Chapter 4

4. Research Methodology

4.1. Research Design and Scope

This research study was designed to create a greater understanding of the changing structure, power and control dynamics of the South African music industry. It examined in particular the transformation of the value distribution and value capture processes as a result of the emergence of digital technologies. It further attempted to understand whether digital value distribution and value capture models widely utilised in the developed world were likely to be most suitable and adaptable for the developing world, South African context.

This study was designed as an exploratory study, in order to uncover new insights, posing new questions and assessing the subject area in a new light which may not have been done by the research community up until now (Saunders & Lewis, 2012). Although much work had been carried out in relation to value distribution and value capture models in the developed world, little work has been conducted in South Africa, a developing nation with under-developed internet broadband infrastructure and where mobile broadband is the favoured method for internet access. Therefore, it was as yet unclear whether value distribution and value capture models designed for the developed world were suitably adaptable and applicable to the South African, developing world context. This research study sought to examine the digitally driven transformation in the South African music industry in light of the broadband internet infrastructure challenges prevalent in the developing world.

In designing this research, an exploratory, qualitative research approach was chosen in order to provide “tentative answers” to the questions and propositions set out above (Saunders & Lewis, 2012). Yin (1994) in Graham et al. (2004) argued that this type of research is ideal in answering “how and why questions” (p. 1088). In this particular research, the researchers were interested in **how** digital technology was transforming the

South African music industry given the infrastructural limitations of the local context and **why** developed world value distribution and value capture models may or may not be ideally suited to the South African context. The exploratory research study involved searching both academic and non-academic literature sources and industry reports, interviewing subject matter experts and conducting interviews with industry participants (Saunders & Lewis, 2012).

Denzin and Lincoln (1998) in (Graham et al., 2004) point to the capability of qualitative research to “capture real life events” (p. 1088) as they take place, as well as the “essence” (p. 1088) of those events as they unfold (Graham et al., 2004). The South African music industry has recently begun to experience the impact of digital technology on its value chain, and therefore this research was conducted concurrent with a number of the changes and developments in the industry.

The implication of this type of research design, and the methods employed to conduct the research, was that the focus would initially be quite broad and only grow narrower as the research continued (Saunders & Lewis, 2012). This further meant that the researchers might not have been able to draw definitive conclusions from the insights gained during the research or if the researchers did so, these conclusions would be drawn with great care (Saunders & Lewis, 2012). This research would, however, provide the basis for further research which is quantitative and more retrospective in nature, and could provide more concrete answers in the wake of this initial study (Saunders, M. & Lewis, P., 2012).

4.2. Units of Analysis

This research study into the transformation of the South African music industry considered the experts in the South African music industry as the units of analysis. These participants included content creators, content promoters, distributors and retailers. These units of analysis would be drawn from both the traditional value chain, as well as the newly transformed digital value system.

These units of analysis assisted the researchers in developing an end-to-end perspective of the changes within the music industry value chain. This could only be derived from each member of both the traditional value chain and the transformed value system. The increased fragmentation and disintermediation of the industry, as well as the introduction of new value players, meant that traditional value players could be taking on new and different roles than was traditionally expected, while new entrants were usurping the roles of certain value players in the traditional value system altogether. Therefore an analysis of the traditional and emerging roles of each stakeholder, as well as an analysis of their current perspectives on changes within the music industry, assisted to address the research propositions.

4.3. Population / Universe

The Population or Universe is the complete set of the members (Saunders, M. & Lewis, P., 2012) of the music industry. Therefore the Population or Universe for this research study included all active participants, players and supporting structures in the value creation, value distribution and value capture aspects of the South African music industry value system. These included all members from the three major categories of content and value creation, content development and promotion, content distribution and retail (Saunders, M. & Lewis, P., 2012).

Content creators included the artists, song-writers, music producers, sound engineers. Content developers and promoters included the record labels, marketing and promotion media agencies and publishers. Content distributors and retailers included physical and virtual music distribution entities, physical store and online store retailers, as well as infrastructure and platform providers such as mobile operators, content aggregators and payment platform operators.

4.4. Sampling Method and Size

In order to meet the requirements of the research design, it was necessary to select a representative sample of the research universe of all South African music industry stakeholders as it was not possible to collect data from the entire population given the time and resource constraints. As it was not possible to collect a complete list of all the numerous music industry content creators, promoters, distributors, retailers and supporting agencies, a non-probability sample was utilised for this research. This meant therefore that the total population could not be represented statistically since not all members in the music industry had an equal opportunity of being selected for the sample. These types of non-probability samples were most suited to the type of qualitative analysis the researchers intend to carry out in this research and often require smaller sample sizes (Saunders & Lewis, 2012).

A total targeted sample size of fifteen (15) industry participants were interviewed and tape recorded. These industry participants were resident mainly in Johannesburg, Pretoria and Cape Town, with one interviewee resident in the United Kingdom. It was assumed that Johannesburg is the hub of commercial activity even with relation to the music industry therefore the representative sample units could be found in the city. Another reason for the reason for this sample size was that the level of heterogeneity in the music industry among participants in the same section of the value system was unlikely to be highly varied. This sample size was likely to provide us with the data that was sufficient to answer the research propositions.

The non-probability sampling technique that was most suitable to this situation is called purposive sampling. This frequently utilised method of sampling was used in order to choose a small sample size when gathering qualitative data (Saunders & Lewis, 2012). It involved the researcher selecting those that in his / her judgement will be best able to assist in answering the research questions and meeting the research objectives. The sample method therefore involved purposively identifying and participants from each major category of the traditional and digital value system. In certain cases snowball

sampling methodology was utilised to gain access to subjects in the same category for the interviews. The three categories are comprised of (1) content creators (e.g. artists and producers), (2) content developers and promoters (e.g. publishers, record labels, digital music promotion websites) and (3) content distributors and retailers (traditional and digital). Therefore each sampling unit will be specifically selected out of one of these three categories, because they were a typical case within the category which was considered to be illustrative and representative, of the category, although they may not have been statistically representative (Saunders & Lewis, 2012). Interviews ceased when data saturation was reached i.e. when no further insights are being derived from continued interviews with research participants.

In line with the research design, purposive sampling and snowball sampling permitted us to understand what was happening in the South African music industry and draw logical generalisations from it (Premkumar, 2003).

4.5. Data Collection Process

The primary data collection method occurred by way of in-depth interviews with a purposive sample of fifteen industry experts in the music industry at all levels of the traditional and new value system. The data collection process also involved a collection and collation of data, statistics and information from a secondary data source the PriceWaterhouseCoopers South African Entertainment and Media Outlook 2nd Edition 2011-2015. These secondary data sources provided some quantitative evidence for the transformative changes within the South African music industry.

For the primary data gathering exercise, a single interview was scheduled with each selected interview participant. The selected interviewees, drawn from the various actors in both the traditional and new value system were engaged in a semi-structured interview. A semi-structured interview is an “interview whereby the interviewer asks about a set of themes using some predetermined questions, but varies the order in which

the themes are covered and questions asked” (Saunders & Lewis, 2012, p.151). In addition, certain topics and questions were omitted for some interviewees while additional questions were appropriate for other interviewees depending on their context (Saunders & Lewis, 2012). This type of interview is ideally suited to situations where there is a lack of clarity of the answers that respondents would give and this was ideal for the exploratory qualitative research that was being carried out. These interviews were mainly conducted face-to-face where possible however four interviews were conducted telephonically due to distance limitations.

The interview questions were grouped into three major themes (i) the general changes being observed in the South African music industry as a whole in the last five years; (ii) the impact of digital technology on the industry, its’ linkages and relationships and revenues; (iii) the suitability and applicability of developed world digital distribution models and value capture models for South Africa. The interview guideline is included in Appendix 1 attached.

Prior to the interview, the prospective interviewee received a short description of the purpose of the interview and the nature of the questions in order to ensure a certain degree of preparation. In addition to the above, certain ethical compliance procedures were followed in order to ensure the safety of the University and the researchers from legal action. The ethical compliance process comprised of a consent form signed by each of the interview participants, detailing the purpose of the study, the costs and benefits of participating in the study, an assurance of confidentiality and measures to be taken to ensure confidentiality, a statement that participation was voluntary as well as the signature of the participants.

4.6. Data Analysis Approach

The mass of the data received or extracted from the interviews was text based data from the interview transcripts. The analysis process therefore will began right from the first

interview transcribed since this would allow the researchers to follow up initial insights suggested by early interviews and to also recognise the level at which data saturation had been reached (Saunders & Lewis, 2012).

The first part of the analysis of the collected qualitative data involved sorting and preparing the data prior to beginning the analysis. This summary of the collated data is presented in Chapter 5 of this report. The preparation of the data involved formatting the data in a systematic way in order to enforce consistency throughout the transcript, while also including interview details such as date, time and place of collection, interviewee details as well as ensuring that all typographical errors and words were spelt correctly and consistently throughout (Saunders & Lewis, 2012). Each interview transcript was saved as a separate file in the word processing system.

Each transcript was then scanned to find key themes emerging from the interview. Each theme was coded using a descriptive key word and a colour. After all the interviews had been analysed and themed, the researchers then began grouping the themes into categories. Using the deductive approach, the categories devised were drawn from terms and categories utilised in the literature review such as value distribution, value capture, power shifts, piracy, intellectual property and so on. Once the initial categories have been developed, they were be further refined in order to ensure that they were meaningful. Finally, the analysis was conducted and during the analysis, the researchers looked for matching or contradictory themes between the data gathered and the literature surveyed. This analysis is presented in Chapter 6 of this report. Each proposition was matched to relevant themes and literature and conclusions were drawn given the data presented in Chapter 5. Finally conclusions were drawn with models being proposed for further development and application.

Chapter 5

5. Results

Chapter 5 summarises the information gathered from in-depth interviews conducted with fifteen (15) industry participants who are deemed to be experts in the realm of digital music in South Africa. The participants were drawn from various sectors in the industry including artists, producers, publishers, traditional and independent record labels, digital content aggregators and retailers, hardware manufacturers, music industry legal practitioners, music educators and mobile operators. Table 1 below highlights the fifteen (15) industry experts that participated in the research study. In order to preserve their anonymity, the participants have been coded from P1 to P15 and will be referred to as such in the research report. The purposive and snowball sampling technique was largely utilised with some respondents recommending other experts in the field that could be interviewed.

Respondent Coding	Expertise / Type of Industry Experience
P1	Independent Record Label Owner / Digital Portal Founder
P2	Publishing Company Owner
P3	Content Aggregation / Mobile / Digital Distribution Operations Director
P4	Content Aggregation / Mobile / Digital Portal Operations Manager
P5	Digital Music Expert / Consultant
P6	Mobile Digital Music Business Developer
P7	Music Producer / Music Business Lecturer
P8	Artist Manager
P9	Legal Expert / Consultant
P10	Artist / Music Business Lecturer
P11	Major Record Label / Publishing Executive
P12	Producer / Lecturer
P13	Artist / Music Business School Director
P14	Digital Music Portal Business Developer
P15	Digital Music Business Developer, Music Industry Veteran

Table 1: Respondent Details

The objective of the interviews was to elicit the perspectives of the respondents as practitioners and participants in the industry. The perspectives sought were concerned with the impact of digital technologies on the South African music industry specifically, the enabling and constraining factors to digitisation, the resulting power shifts and ultimately the models most favoured for use in the local industry.

An interview guide was utilised during the interview process in order to direct the discussion, however, interviewees were permitted to respond at length and in the format that best suited them without necessarily following a rigid structure to the order in which they responded to questions. The open questions elicited a number of recurrent concepts and themes that highlighted the underlying dynamics inherent in the digitisation of the South African music industry. The themes led to conclusions regarding the application of international digital distribution and value capture models in South Africa. Interviews lasted between 30 and 75 minutes. These interviews were digitally recorded and later transcribed to enable accurate content analysis of the key themes emerging from the discussions.

Interviewees were initially requested to describe their back ground in the industry and their anecdotal experiences, failures and successes with digital technology implementation within the realm of the South African music industry. They were permitted to compare their South African experiences with the experiences of their counter-parts in the developed world. This process elicited key insights into the challenges, reasons for success or the lack thereof of digital distribution and value capture models within the South African context.

The industry expert interviews were supported by data gathered from industry publications and reports from the PriceWaterhouseCoopers Media Outlook Report (2011 – 2015), the International Federation of the Phonographic Industries (IFPI) Digital Music Report 2012 and the Department of Trade and Industry’s Copyright Review Commission Report (2011) in order to supplement and verify the available industry data. The discussion of the results is broken up into four major sections:

- (i) Impact of digital technology on the South African recorded music industry,

- (ii) Enabling and constraining factors to effective digital distribution and value capture in the South African recorded music industry,
- (iii) Impact of digital technology on power and control dynamics in the South African music industry and,
- (iv) Digital distribution and value capture models applicable to South Africa.

5.1. Impact of Digital Technology on Recorded Music Industry

In order to gain perspective on the impact of digital technology on the recorded music industry, interviewees were requested to venture their opinions regarding the impact of digital technology on the industry as a whole. The question was deliberately open-ended in order to elicit a wide variety of responses. Three key themes seemed to emerge from the discussions held – these were (i) the low impact of digital sales on overall industry revenues in South Africa, (ii) the impact of digital on specific artists and local market segments and (iii) the impact of digital technology on piracy and responses to piracy.

5.1.1. Digital Technology Impact on Recorded Music Industry Turnover in South Africa

A common theme emerging throughout the interview process was that digital had made little contribution to the overall South African recorded music industry's turnover with most interviewees citing figures ranging from 6% to 9.9% of current industry revenue in South Africa arising from digital sales. Despite a growing number of digital music retailers, "they are all doing very little revenue" in relation to the overall size of the R2.1 billion industry. According to the IFPI Digital Music Report (2011), South Africa had eleven internationally recognised digital music services during that year. The Digital Music Report (2012) indicated that the number of music services had grown by one more to twelve digital music services. The lists indicate that as many as five music services were no longer present from the previous year and six new ones had been added in 2012. Table 2 below shows the internationally recognised music services in South Africa for the three years 2010 to 2012.

Digital Music Report (2010)	Digital Music Report (2011)	Digital Music Report (2012)
DJs Only	DJs Only	DJs Only
GetMo	GetMo	Jamster
Jamster	Jamster	Just Music
Just Music	Just Music	LookandListen.co.za
MTN Loaded	MTN Loaded	MTN Loaded
Music Station	Music Station	Music Station
Nokia Comes with Music	Ovi Music	OMusic.com
Nokia Music Store	Ovi Music Unlimited	Nokia Music
Pick n Play	Pick n Play	Pick n Play
RhythmOnline	RhythmOnline	RhythmOnline
Vodafone Live	Vodafone Live	ThatGig
		Vodafone Live
Total: 11	Total : 11	Total :12

Table 2: Digital Music Services in South Africa (Source: IFPI.org)

Although the IFPI annual DMR report shows the internationally recognised digital music services, that retail both international and local South African music, as fairly static in the last 3 years, there are a number of digital music services that have been set up locally, catering to local music and niche markets. These include Afrodesiamp3.com which services the market for *house* music specifically, ExactMobile whose largest business (60%) has come from the local Afrikaans music market and other local music genres, as well as SimfyAfrica which has recently been launched (September 2012) and is the local streaming / access model equivalent of the international Spotify, Deezer and Simfy (Europe).

Most interviewees were quick to mention that digital's disappointing performance, thus far, comes against the backdrop of rapidly declining revenue from traditional physical CD product sales. The statistics produced by the Recording Industry of South Africa (RISA) in 2007 showed that 2007 was the high point of domestic CD sales in South Africa, at a peak of R1.8 billion according to the PwC South African Media and Entertainment Outlook 2011 – 2015 Report. However, the same report indicated that in the last five years, revenue in

physical sales had declined to just above 60% of the peak sales in 2007 (R1.1 billion). At that time (2007), South Africa was the only territory in the world to be reporting growth, while physical sales in the rest of the world were declining. This was largely attributed by participants to the development lag between South Africa and the developed world. Post-2007, South Africa has quickly followed suit with the decline of physical sales in the last five years. Table 3 below shows the turnover in millions of the recorded music industry in South Africa, comprised of physical and digital sales, as well as the total music industry revenue which includes live income from concerts and festivals. It reflects a sharp dip in physical music sales, while digital is growing at a rate between 25% and 40% per annum, off a very low base.

Revenue (R millions)	2007	2008	2009	2010	2011	2012
Physical	1757	1698	1568	1407	1249	1105
Digital	75	104	125	155	195	250
Total Recorded Music	1832	1802	1693	1562	1444	1355
Live	599	653	640	610	650	710
Total Music	2367	2485	2442	2303	2212	2154

Table 3: Music Market in South Africa (Sources: International Federation of the Phonographic Industry (IFPI), Recording Industry of South Africa, PricewaterhouseCoopers LLP, Wilkofsky)

Respondent P1 pointed out that digital was said to be growing at 30% per annum, but this growth was coming off a very low base. This is corroborated by the PwC Media Outlook Report for 2011 – 2015 which shows a compound annual growth rate in physical sales (over ten years 2006 to 2015) of -10.6% while digital grows at an average of 25.4%, off a very low base of 3% of industry turnover (R1.78 billion) in 2006. Therefore, most interviewees were in agreement that digital's growth currently, given South Africa's lag behind the more developed world, was too slow to replace losses in physical sales and would not be likely to do so in the next five years.

A number of interviewees observed that as result of digital's insignificant performance, most established industry players – with the exception of a very few - were making very little effort to grow their digital presence and were rather concentrating their energies on protecting their physical sales and diversifying into other revenue streams related to physical such as DVD sales and live performances. Respondent P3 quickly summed up the relationship of digital to overall industry turnover, very graphically:

P3: "So I have to say that I don't think digital has made much of an impact in the South African music industry. Can I sum it up for you in one easy swoop? RiSA [Recording industry of South Africa] aren't tracking digital! When they are tracking digital it will make an impact in everybody's life. .. Digital is not even the black sheep of the music industry - it's not even the cousin ..."

An interviewee (P4) from the content aggregation business stated that the pure-play digital music model is an extremely low margin business, which makes it very difficult to make money purely on the sales of music since the unit sold (a song) and the price per unit are much lower than in the traditional model (album sale). Most other digital music retailers are enhancing their profits through the sale of hardware (e.g. Nokia) or data bundles (e.g. Vodacom and MTN). This may have contributed to the lack of attractiveness of the digital business model in comparison to traditional physical business model. This has therefore led to the protectionist attitude of most traditional industry players.

All interviewees, however, were unanimous in their perspective that although they did not know when it would happen, digital distribution and sales were definitely the way forward for the South African music industry:

P3: "Yes, so I don't think digital has made a huge impact on the South African music industry; it will though! But if you think of it this way, they are projecting that in 2013 for the first time, digital will outweigh physical in the US. I think the UK has just tipped, so

think about how far behind South Africa is. That being said, people could make a lot more money out of digital if they did it correctly and if they leveraged it more smartly...”

Table 4 below summarises the responses of the individual interviewees with respect to the significance of the impact that digital has made on the industry’s turnover.

✓ = Agreed

x = Not agreed

N/C = no comment made on this subject

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital has made little impact on SA music industry turnover	✓	✓	✓	✓	x	✓	✓	N/C	✓	✓	N/C	✓	✓	✓	✓
Digital distribution is the future for the South African music industry	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Table 4: Key Interviewee Perspectives on Digital Contribution to Industry Turnover

5.1.2. Digital Technology Impact on Individual Artists and Recorded Music Market Segments in South Africa

A number of interviewees expressed the view that, despite the lack of significant impact on the turnover of the South African music industry as a whole, digital had exerted a significant impact for certain individual artists as well as certain niche segments of the local music industry. There was a general acknowledgement among participants that artists serving market segments such as those consuming ‘black urban music’ (hiphop, kwaito and house) as well as the new ‘Afrikaans rock’ had experienced particular success in the realm of digital music and distribution, especially those reaching out to the younger market demographics. Whereas, most of the more traditional music genres, appealing to older groups were primarily still stuck on physical sales.

P6: “So in terms of niche acts, digital has made a massive difference. Definitely niche! You can get online and find your customer base and sell to them. Without digital, you couldn’t do that – except for physical sales at gigs and that kind of stuff...”

It emerged that 60% of digital sales were related to local music and that local is the significant driver to consumption via digital channels as opposed to international music.

A couple of interviewees went on to further nominate specific artists such as *DJ Cleo* and *Die Antwoord* as specific examples for whom digital distribution was working very well in South Africa. An interviewee working with the leading digital distribution channel explained:

P4: “DJ Cleo is very, very proactive when it comes to digital; he is amazing! His manager says to me that when they digitize his album, he sits next to the guy who is digitizing to make sure that all the metadata is right, that everything gets delivered on it. Then he himself will go on a tour and say ‘Guys to be able to get downloads this [track], this is how you download’ and he will educate you on downloading... we didn’t have to pay for that, he did it because he knew that he is somehow going to get a revenue cheque; so he is clever and he is switched on - that is the reason why his digital sales outweigh his physical! Everyone phones me and [asks] why DJ Cleo is doing so good, and I say I am doing nothing for DJ Cleo, he is doing it!”

A number of interviewees expressed the opinion that the opportunity for artists to reach a broader audience through digital channels had emerged in South Africa in recent years, allowing them to bypass the traditional industry intermediaries. A number of locally hosted and international platforms were allowing artists to reach their audiences directly. However, this was qualified by the acknowledgement that this strategy seemed to only work well for artists who had already managed to create a successful brand around their music. Whereas emerging artists would find it difficult to achieve significant success without investing significantly into their marketing campaigns in order to assist customers to discover their music - and this is where traditional industry players such as record

labels with the marketing relationships and financial clout were often required. Another significant qualification to the usefulness of digital as a direct distribution method as expressed by both the digital retailers, aggregators and artist manager was the capability of artists and their managers to understand, navigate and educate themselves on the ins and outs of distribution via the digital technology and networks.

Table 5 below shows the summary responses of the individual interviewees regarding two key themes around the impact that digital has made for individual artists and music segments / genres, as well as the opportunity created by digital for direct engagement with audiences.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital has exerted a significant impact for certain artists and local genres	N/C	N/C	✓	✓	N/C	✓	✓	✓	✓	✓	N/C	N/C	✓	N/C	✓
Digital has created an opportunity to connect directly with audiences in South Africa	N/C	N/C	✓	✓	✓	✓	N/C	✓	N/C	✓	N/C	✓	✓	N/C	N/C

Table 5: Digital Impact on Individual Artists and Music Segments

5.1.3. Digital Technology Impact on Recorded Music Piracy in South Africa

Another common theme emerging from the interviews is the perceived impact of digital technology on the rate of music piracy in South Africa as well as the diverse responses and emerging perspectives on how to handle piracy.

There was general agreement among the interviewees who addressed the piracy issue that digital technology formats and networks have made illegal sharing of music easier than ever before in South Africa. Whether this ‘sharing’ is achieved via online methods such as peer-to-peer networking sites or via offline methods such as Bluetooth and USB transfers, the net effect is that digital music piracy is on the increase.

One interviewee (P7), who is also a music business educator, ventured the opinion that much of the digital music transfer that is occurring in South Africa is in the nature of piracy, especially among the younger audiences who have less disposable income. A number of interviewees expressed that the challenge of putting a selling price on digital music when the widespread attitude and perception among some consumer groups is that online music is free and ought to be free.

While combatting music piracy has been on the agenda of all industry stakeholders for a long time now, two of the interviewees (P12 and P14) presented an alternative perspective to the ‘problem’ of piracy. They acknowledged that the music industry is not the only industry to be affected by piracy and have decided to take their cue from security companies, the software industry and even governments where trade secrets leak all the time. They expressed a change in thinking that is occurring in certain sectors of the industry, where they are starting to view piracy as a ‘positive feedback tool’ which indicates how much the market likes and appreciates the product. They have begun to acknowledge the possible futility of continuing to fight a ‘losing battle’ and they are beginning to embrace piracy as a type of ‘statistical tool’. One interviewee expressed it this way:

P12: “So I think in the past five years as the South African music industry we have grown towards a point where we start looking at how [we] can use this to our own advantage rather than crying all the time and saying this is killing our sales.... Record labels have actually started to use piracy as a statistical tool – for example Zahara’s fame and popularity was actually measured by how much she was pirated rather than all the other stories that were told about her. Within the music industry we actually look at it as ‘Wow she struck something!’

Before her there were no stories of anybody ever being pirated that much, so now it's become a yardstick to measure popularity and it brings in the shows. People want to see her perform live and that's another avenue point for the music business so it is positive in that regard. "

A consensus among the interviewees indicated that “live performance” has always been the way that less established artists in the industry have earned their largest income share with recorded music sales growing once they became more established. However with the looming threat of digital music prices possibly tending towards zero, as a result of both piracy and digital economics, a number of participants ventured the opinion that the industry would once again see a growing reliance on revenue streams that used to be peripheral such as ‘live performance’. This is supported by the growth in live performance revenues reflected in Table 3 above, which shows a strong growth in live performance revenues with the PwC report projecting even stronger growth into the future. Table 6 below shows the summary of perspectives presented by the respondents in relation to the impact of digital in the growth of piracy in South Africa.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital technologies have catalysed the growth of piracy in South Africa	N/C	N/C	N/C	N/C	✓	✓	✓	✓	N/C	✓	N/C	✓	N/C	N/C	✓
With the growth in piracy, the industry will see a growing reliance on non-recorded music sales e.g. live, merchandising etc	N/C	N/C	N/C	N/C	✓	✓	✓	✓	N/C	✓	✓	x	N/C	x	✓

Table 6: Digital Impact on Recorded Music Piracy in South Africa

5.2. Enabling and Constraining Factors to Effective Digital Distribution and Value Capture in the South African Recorded Music Industry

In order to understand the enabling and constraining factors that inform the effectiveness of the models that drive digital distribution and monetisation in South Africa, interviewees were asked to venture their perspectives regarding the reasons that digital had or had not grown in South Africa in the previous five years. Eight key themes emerged, each of which will be explored in more detail below. These include the absence of internationally recognised platforms and models, infrastructural deficiencies, high pricing, not matching consumer requirements, lack of availability of local South African content on digital platforms, licensing issues, industry mind-set and lack of education about digital formats and finally legislation that is not up to date. Table 7 below reflects the eight enabling / constraining factors, ranked by number of mentions.

Enabling / Constraining Factors	Number of Mentions
Infrastructural deficiencies:	
- Broadband internet	14
- Metadata systems	5
- Payment platforms	7
Not matching consumer requirements	8
Licensing and Legislation issues	8
Lack of availability of local South African content on digital platforms	8
Industry mind-set	8
Absence of internationally recognised digital music platforms	7
Lack of education about digital formats	7
High pricing:	
- Cost per track	5
- Cost of bandwidth	6

Table 7: Enabling / Constraining Factors to Digital Distribution Ranking

5.2.1. *Absence of International Digital Music Platforms and Models*

At least half of the interviewees mentioned that from their perspective, the absence of major platforms from the South African market was one of the major reasons that digital had not really taken off or grown in the South African market. Most respondents nominated iTunes's absence specifically had harmed the market, given that currently 70% of all digital sales world-wide were achieved via the iTunes platform. Only one participant specifically mentioned Spotify, giving the reason that according to international statistics, a 20% increase in Spotify services, in some markets, has apparently led to an equivalent reduction in digital piracy.

The general feeling among respondents was that, up to now, major players such as iTunes, had not regarded South Africa as a territory significant enough to warrant their attention - the market was riddled with too many complexities and uncertainties regarding rights, licensing and infrastructure, and therefore the energy expended in settling the deals would not yield the type of fruit they could achieve in other larger and more lucrative territories. Their absence had therefore retarded the growth of the digital industry in South Africa. A legal expert (P9) commented on the absence of iTunes in the market as follows:

P9: "iTunes have not bothered to sit down with minor markets like South Africa and speak to the majors [record labels] in those territories. I mean they set up iTunes in America with four meetings, one with each of the four majors, it took four meetings ... and you know four meetings was a lot for Steve Job. So that's what it took, four meetings and that was 85% of recorded music and it was done and dusted. We are tiny little fish in the whole world market and it hasn't been worth their while to come here and have fights with Sony South Africa and Universal South Africa and Warner who are Gallo locally in South Africa and have fights about this territory with them..."

Most interviewees commented that South Africa has continued to lag behind the rest of the developed world, particularly in technological uptake, citing that the South African music industry has continued to lag behind the rest of the developed world by

approximately five (5) years. South Africa is only now starting to approach the levels of technological sophistication and infrastructure that were achieved in the developed world almost five years ago.

Table 8 below reflects the individual perspectives on the absence of digital music platforms within the South African music industry.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
The absence of international digital music platforms, such as iTunes, has constrained the digital music market in South Africa.	✓	✓	✓	✓	N/C	N/C	✓	N/C	✓	N/C	N/C	N/C	N/C	N/C	✓

Table 8: Absence of International Digital Platforms has harmed the digital music market

5.2.2. Infrastructural Deficiencies

The most frequently cited reason for the lack of significant growth in South African digital music sales has been attributed to infrastructural deficiencies. These infrastructural deficiencies were referenced under three distinct categories: broadband internet issues and reference database issues and payment platform issues.

The quality, speed and reach of South African broadband internet bandwidth was unanimously cited by all interviewees. Although there were some admissions that in the urban centres, broadband access, quality and speeds had improved in the last five years, the consensus was that these improvements were insufficient to support a fully-fledged,

quality digital music model that allowed speedy delivery of music files to consumer handsets and / or PCs. In fact for the mass market, residing outside of the urban centres, whose only option was to access the internet via mobile handsets - 3G or other broadband data services were currently not even available. The feeling was that due to restricted bandwidth pipes, downloading a song took too long and trying to stream a song resulted in interrupted service. The user experience was ‘terrible’ and eventually resulted in consumers ‘losing interest’. A key player in South Africa’s music publishing industry (P2) made this comment:

P2: “So then again you need to look at what the move internationally has been - away from the a la carte download services to the subscription services and the streaming services; and we don’t have broadband to sustain a streaming service – so you don’t have Spotify, you don’t have Deezer. You’ve had the brave launch of Simfy[Africa] just a couple of weeks ago and even at my office with the broadband connection we have there, I have interrupted service with Simfy, I mean I haven’t reported that to anybody but I can’t listen like it’s a radio. I am downloading content and listening to it [offline], but that ability to stream and listen is not there yet.”

According to the PwC South African Media and Entertainment Outlook 2011-2015 the internet penetration in South Africa is currently only at around 10% and is only like to reach 10.9 million subscribers which is 20% of the population in 2015.

The second aspect of infrastructural deficiency mentioned very often, although not by all respondent, was the lack of efficient shared databases for the information and metadata of music that would make the recognition, licensing and royalty payment systems in the industry work more smoothly. The complaint was that the existing systems were antiquated, unresponsive, old and not easily accessible.

P3: “Just to be clear about why that is important, when you digitize music, attached to the MP3 is a little text-file called metadata and in the metadata is all the

information about who owns those rights and who to pay. So if your metadata is wrong you will not get paid, you will not get reporting you will not get anything...”

A further complication, highlighted by one of the network operators (P4) interviewed, arises in the integration of the information databases, digital music delivery platforms and management of the digital music formats for delivery across the different network ‘bearers’ (i.e. channels) while also managing the relationships between the network, the record labels, artists and digital music platform / technology operators. The interviewee (P4) highlighted that as a business they had battled to get the right digital delivery platform and the right operational model for the platform. They were actually onto their third platform since the inception of their digital music business. The process was riddled with technological challenges and relational problems:

P4: “You can already see the problems. If the communication breaks down here, if the digitization is wrong, the track won’t work and you can’t sell it. If your reports are wrong, people don’t get paid. It is [all] incredibly complicated!”

A third crucial infrastructural aspect to the uptake of digital, according to a number of interviewees, is the availability and implementation of appropriate payment platforms. Online purchases are often accomplished via credit card or alternatively via payment platforms such as Paypal which has only recently launched in South Africa. However, most South Africans do not have access, neither to a credit card, nor to a bank account. Therefore the lack of an appropriate payment platform can be a significant hindrance to the establishment of an effective digital music distribution model. An interviewee (P6) who was the former founder of a mobile digital store explained that the voucher payment system for their mobile digital music solution did not work at all because they had significant challenges managing and educating the sales staff of their retail partners who did not understand the business model at all.

Table 9 below shows the individual responses to the role of infrastructural deficiencies on constraining the growth of digital distribution models in the music industry in South Africa.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
The quality, speed and reach of South African broadband internet is a significant constraining factor	✓	✓	✓	N/C	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
The lack of efficient shared databases for metadata are a constraining factor	N/C	N/C	✓	✓	✓	N/C	✓	N/C	N/C	N/C	N/C	N/C	N/C	N/C	✓
The availability and implementation of appropriate electronic payment platforms are a constraining factor	N/C	N/C	N/C	N/C	✓	✓	✓	N/C	✓	N/C	N/C	N/C	✓	✓	✓

Table 9: Digital music models constrained by infrastructural deficiencies

5.2.3. High Pricing and Costs Associated with Digital Music Consumption

Another reason for the lack of growth in digital music sales was associated with the eventual cost to consumer of the digital music tracks. First of all, the selling price of the track at approximately R10 per track was, in the words of one independent record label interviewee (P1), ‘debilitating’. His sense was that digital music platforms, and the labels who were licensing the digital tracks for sale, were attempting to retail digital music tracks

at approximately the same price as tracks on a CD yet consumers were not seeing equivalent value in the digital product as in the physical product. Therefore it is essentially overpriced, in the eyes of the market. His observation was that in the rest of the world, people were realising that digital music should be offered at a significant discount in order to ‘make it exciting for people to want to consume that way’.

The second dimension to the total cost to consumer of digital music is the sheer cost of bandwidth in South Africa. Most interviewees commented that the purchase of a downloaded or streamed digital music service involved the consumption of bandwidth on the broadband network. Given that the mass of internet access in South Africa is via mobile network, the mobile data bundles tend to be more expensive than fixed line data bundles, making the total cost of the digital transaction very high. An internationally exposed music educator (P13) and former record label manager commented that:

P13: “The biggest challenge ... is bandwidth and cost. I pay about three and half to four times more for my internet here than I did in the UK. Yeah, I would probably say three times more, and that is for a ‘capped’ [limited] line, whereas for the same price in the UK I got unlimited [bandwidth]. So it has come down, but your average person just can’t afford it!”

The combined effect of the cost per track and the bandwidth required, in order to download or stream the music, makes the consumption of the service prohibitive in the eyes of most interviewees. Table 10 below highlights the individual perspectives on the price per track and cost of bandwidth as constraining factors to digital music models in South Africa.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
The cost per track is too expensive for the local market.	✓	N/C	N/C	N/C	✓	N/C	✓	N/C	N/C	N/C	N/C	N/C	✓	?	✓
The cost of bandwidth makes downloading / streaming too expensive.	✓	N/C	N/C	N/C	✓	✓	✓	N/C	N/C	N/C	N/C	N/C	✓	?	✓

Table 10: High track pricing and bandwidth costs a constraining factor

5.2.4. Not Understanding Consumer Value, Attitudes and Requirements

Just under half of the interviewees emphasised that the success of digital music hinged around the capability of the industry to assess and respond to consumer requirements as relating to technology, service delivery and price. A music educator (P10), artist (P13) and producer (P7), all confirmed that the lack of uptake in the digital music sphere could possibly be attributed to an ‘attitudinal’ problem rather than mere accessibility. According to an urban artist manager (P8), consumers have become far more discerning about what they are buying and ‘if the product does not appeal to the masses, they just won’t buy it’.

Commenting on a failed digital music distribution platform and model, an interviewee (P10) stated that:

P10: “It didn’t offer customers something of value, with the relative ease of being able to do it [download music]. So they [consumers] just didn’t get it, so it didn’t work!”

Another interviewee (P7) made the observation that consumers had a wider variety of entertainment items competing for their attention, including gaming products and blu-ray

videos – items where the perceived value was higher than a digital mp3 track. Therefore the choice of obtaining the music for free from sharing networks has become a far more attractive option for some consumers, especially those in the younger age demographics whose disposable income is very limited. His observation was that “you can’t try and sell things when you are competing with free”. Contending with different demographic markets and their particular attitudes and purchasing habits has become a greater challenge:

P7: “You find a lot more of the younger kids are trading a lot, they will get from friends who’ve got it from somewhere and so on; whereas your older buying market they won’t necessarily have a peer group which they share with in that way. Of course there are exceptions to every rule, you can also get some 45 year old that knows how to use Limewire and will be able to download. Yet they [older people are] also still very much stuck in the traditional way of buying.”

Four interviewees emphasised the importance of customising digital music formats and models for easy accessibility by the South African market where the mass of the market did not have access to ‘fancy’ smart phones, or phones that are WAP or 3G-enabled. Low-end mobiles have to be able to access the service. The digital format of the music ought to be transmittable using low bitrate data services or traditional voice ‘bearers’ (channels) in order to make it easily accessible. Payment should be accomplished with the minimal fuss through a familiar model such as mobile billing.

The digital participation curve, which is the rate at which people are transacting digitally in South Africa, lags behind the internet penetration curve by 50% according to research conducted by Goldstuck (2010). Given that the internet penetration in South Africa stands at a very low 10%, this means only 5% of the population is currently transacting online. The South African digital participation curve reveals that the average internet user needs to be online for about 5 years before he / she will actively engage in high level applications such as online retail and other interactive services (Saunders, M. & Lewis, P., 2012). Digital music sales are growing at the same pace as the online retail curve which

suggests that they are strongly influenced by the Digital Participation curve according to Goldstuck (2010). He further states that current statistics around digital music suggest that the market is not ready to move away from the physical product as yet and a viable music track download market may only emerge in 2013 when the Participation curve truly kicks in and consumers start to get comfortable with the product.

Table 11 below reflects the individual perspectives on whether digital distribution models in South Africa have sufficiently managed to customise towards customer values, attitudes and requirements.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital music models are not customised sufficiently to suit the market's needs.	✓	N/C	N/C	N/C	✓	N/C	✓	✓	N/C	✓	✓	✓	✓	N/C	N/C

Table 11: Not Understanding Customers Values, Attitudes and Requirements is a Constraining Factor

5.2.5. Unavailability of South African Local Content on Digital Platforms, Legislative and Licensing Issues

A number of interviewees indicated that South Africa, like Africa, is largely a local music consuming market yet much of the local South African music has not been digitised and cannot be easily found on digital platforms. The demand could potentially be very high, however the lack of widespread availability of local South African artists and their music makes the demand lower than it could be for digital music.

P7: "I just think the access is difficult. So in other words, for example, if I wanted to go and buy a local South African artist and I typed in Johnny Clegg, I would probably never find Johnny Clegg anywhere. I would have no problem buying music if it was reliable!"

In addition, the common digital music retail outlets such as Look and Listen and MTN Loaded, generally only carry the most recent music and do not have extensive catalogs of older local music. They also tend only to carry the most recent top music hits, therefore the digital catalog is relatively small, restricting the opportunities for digital sales. If consumers fail to find the music that they are interested in, digital sales are unlikely to happen.

A good number of the interviewees agreed that the accessibility of local South African music on digital platforms is largely to do with the difficulties of the licensing environment. The interviewee from the content aggregator (P3) plainly stated that the difficulty of obtaining music licenses from each content owner is the fact that the industry is largely disorganised. Even where licenses have been obtained, many record labels are reluctant to digitise their entire music libraries as they claim that this is extremely expensive for them and they have fears around whether they will be paid correctly for the content given that the legislation around digital music is still outdated and therefore unenforceable.

The music business legal expert (P9) expounded that the Copyright Act of 1968 was out of date, making no provision for any forms of digital transmission such as internet streaming. This effectively meant that royalty collection bodies like SAMRO are unable to collect royalties for digital streaming of a song written by any composer who is their member. He further gives an example:

P9: “Now I happen to know that certain aggregators who are trying to sell music online and want to stream the music have applied to SAMRO and said to them please give me a license to stream music. SAMRO have written back with a standard letter which says we are not in a position to grant you a license at this time but please keep accurate records because the time will come when we will ask you for those records and charge you for them. So SAMRO is waiting for the change in

the law, before such time as they have the legal basis on which they can implement this. So there is an example of where our Copyright Act is out of date.

The problem with this situation is that unless copyright owners are assured of their ability to collect and enforce their rights, they may be tempted to withhold their content and not license it to digital music platforms wanting to retail it. An interviewed music publisher (P11) explained that:

P11: “Trying to get decent reporting stats and fair remuneration from WASPs (Wireless Application Service Providers)[is difficult]. We're now getting all sorts of providers and some of the majors are extremely poor to the point of being pirates in the way that they do not [report or remit payments]. We need a comprehensive licensing solution, not only for South Africa but for Southern African and Sub-Saharan Africa.”

The publishing and recording industry are currently working on a blanket licensing arrangement which permits digital music retailers to obtain one blanket fee in order to license and stream or sell digital music downloads, for an agreed revenue share on the basis of carefully tracked records of digital sales. Both publishing interviewees (P2, P11) felt confident that this would assist to regularise the situation and thereby encourage proper licensing and confidence in sales of digital music throughout the music industry.

Table 12 shows the individual perspectives presented by the interviewees regarding the lack of digitised local South African music, licensing constraints and outdated legislation as constraining factors.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
The lack of local digitised music is a constraining factor.	N/C	✓	✓	✓	✓	N/C	✓	✓	✓	N/C	N/C	N/C	N/C	N/C	✓
The outdated legal environment and licensing reluctance is a constraining factor.	N/C	✓	✓	✓	✓	N/C	✓	N/C	✓	N/C	✓	N/C	N/C	N/C	✓

Table 12: Outdated legal environment, licensing issues and un-digitised local music are constraining factors

5.2.6. Industry Mind-set and Education

A third of the interviewees agreed that one of the major constraints to the success of the digital music sales model in South Africa is related to the ‘mind-set’ of the companies themselves that are involved in the industry. According to the network operator interviewees (P4) and content aggregators (P3):

P3: “They [the record labels] are still seeing physical as their bread and butter and they see digital as maybe a little bit of sprinkles on the bread and they actually don’t care. So it’s very difficult because they are in the mind-set that they won’t digitize a full album, they will only digitize maybe two singles in an album and sometimes you can’t really sell ... just two singles in an album because it is difficult to get the money.”

As a result of not taking digital seriously, content owners and record labels, with the exception of a few, do not know how to digitise their content. South African labels and artists tend to be fairly uneducated about how to set up the correct metadata and

therefore they end up with bad information and bad revenues. The digital aggregator stated (P3) that:

P4: “Digital music is hard, hard, hard work; and the thing is you will find when you talk to the labels, they don’t want this, they want to go straight from there to there – but as you can hear [there is] specialized knowledge that you need in between”.

Essentially, one of the complexities or challenges is the specialised knowledge required as the music industry is no longer just a music industry but a technological industry. Platforms such as iTunes are essentially technologies and must be understood in order to be successfully exploited according to a digital music platform interviewee:

P3: “So there is still a huge learning curve to undertake yet for our market!”

Table 13 below shows the individual perspectives on the role of industry mind-set in enabling or constraining digital distribution models in South Africa.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
A lack of serious intent from the major players in the industry is a constraining factor.	✓	N/C	✓	✓	✓	N/C	N/C	N/C	✓	✓	N/C	✓	N/C	N/C	✓
Education on digital technologies will enable digital music models in SA.	✓	N/C	✓	✓	N/C	N/C	N/C	✓	N/C	✓	N/C	✓	N/C	N/C	✓

Table 13: Industry mind-set is a constraining factor

5.3. Impact of Digital Technology on Power and Control Dynamics in the South African Music Industry

In an attempt to understand the changes in the types of players and the power that they wield in the South African music industry, interviewees were asked to comment on their perspectives regarding which players in the digital music industry wielded the most power or control and the impact of these changes on the incumbent power holders such as record labels. Six key themes emerged from these conversations, most notably: (i) the overall demise of the power of the traditional record labels in the digital realm but a continuing strong hold in the physical distribution space which is still the major revenue earner in South Africa, (ii) the rise of the power of the digital platform/technology providers by virtue of the value they bring to both customers and suppliers, (iii) the definitive rise in importance of the Telcos – especially the mobile operators who wield power over the new distribution channels and continue to grow in South Africa and Africa. Artists and consumers both wield a measure of increasing power as well as other gatekeepers such as broadcast radio as a marketing mechanism which is still very important to the industry in Africa particularly.

5.3.1. Power and Control of Traditional Record Labels

There was a general acknowledgement by most interviewees that historically the power and control in the South African music industry lay in the hands of the record labels, primarily because they controlled and profited from physical distribution. Although physical sales are declining rapidly, 92-94% of South African music sales are still physical sales and therefore record labels still wield a great deal of power in the realm of physical distribution in South Africa. Two interviewees (P7, P8) pointed out that this was particularly so in some of South Africa's biggest genres such as Gospel which was still largely a physical sales market due to the market demographic that consumed the music. Whereas genres or market segments addressing the younger market, such as Black Urban were definitely tending towards digital faster. Therefore record labels still control the market in certain segments more strongly than in other segments, depending on the predominant mode of consumption in that segment. They are still a force to be reckoned with and cannot be ignored in the physical distribution

realm. A number of interviewees expressed the fact that the major record labels still fundamentally wielded the power in the realm of physical distribution and marketing:

P6: “Majors [major record labels] own the [physical] distribution infrastructure, they own the marketing infrastructure, they own the relationships with radio, with all sorts of promotions, with the [physical retail] stores – so it’s the same thing, you own the railway line or you own the telephone cable you own the business.”

Despite the shift from physical towards digital that has already happened in international markets, and is projected to happen in the South African market over the next five to ten years, a number of interviewees felt that the major record labels would not completely lose their significance however their role would change or shift. Particularly because they still wield a tremendous amount of financial, infrastructural and marketing muscle.

P13: “Majors are really marketing machines. That’s all they are! They are banks, they are financiers, they don’t really discover talent actually because the whole pop thing is dying so everybody knows what a pop act is and they see right through it, so they played that card out. What really happens is you get independent labels run the industry to further creativity so independent labels, one man operations, small little guys who work and develop a product on the ground, they will get the stuff going online and then the majors will sit there and go okay so these guys have got it to a certain level, if we invest in them we can take it to the next level. So the whole game plan has changed. I definitely think there is a role for majors, if you want to be big globally you need to be with a big organization [that] have got the money to finance marketing basically, in terms of distribution they are defunct really.”

Additionally, another interviewee pointed out that major record labels control the majority of licensing related to music, which then determines where and how it can be distributed. The major record labels have ownership of at least 85% of all recorded music and therefore digital

platforms that would like to distribute this music would need to get licenses for this music from them.

An independent record label owner (P1), however, was quick to point out that, on the whole, record labels are however losing power and control in South Africa because their market capitalisations have decreased by between 80-90% in the past ten years. A music publisher (P2) also added that another sign of the rapid decline in power and control was related to the consolidation in the industry, especially around physical distribution channel ownership which had already happened in the United States and Europe, and had recently happened in South Africa. He expressed that the reason for this consolidation among the record labels was that it was no longer profitable to run physical distribution.

Two other interviewees expressed that the fact that South Africa had started with five major labels, which had been consolidated to four and then now down to three was also a clear indicator that the major record labels are losing their power. Two interviewees asserted strongly that the shift away from the major record labels was favouring the independent record labels:

P10: "Indie labels all of them put together comprise just over a quarter of the market internationally which is the biggest market share. [This] is bigger than any of the others [majors] individually. The three majors together still make up seventy five percent but that pie [indies 25%] on its own is bigger than either Universal or Warner or EMI. Okay so there is a distinct power shift away from the established record label type business towards more sort of Indie."

Three interviewees spoke about the way major record labels are trying to extend their power and responsibilities shifting from dealing purely with sound recordings, to what they call a 360-deal with an artist, where the record label signs an artist and gains a share or controls all their revenue streams including those for live performance, merchandising, branding and so on, thereby extending and entrenching their power, mainly with larger international acts:

P8: “Now the majors are saying ‘No we also want to participate in live performance’, basically they want to own the artist brand; so it’s a whole thing what they call a 360 model. It is an easy approach to apply with an established artist with a following for him. They get the money and they then own everything that gets released under the artist brand, whether it is music, a book, TV or live show tickets. So I’m not going to be surprised if it starts happening in S,A and it has sort of started happening in a way with your gospel artists like [Khubeka] and so forth...”

When it comes to digital distribution, however, no matter how small it currently is in South Africa, most interviewees were in agreement that record labels did not wield as much control in this value system, although some labels have tried to get involved in the digital value chain by buying into or owning content aggregation businesses that play in the digital music distribution space. Table 14 below shows the individual impressions of the decline of record labels as a result of digital technologies’ impact.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
The major record labels have diminished power and wield very little power in the digital distribution space.	✓	✓	✓	✓	✓	x	N/C	✓	✓	✓	x	N/C	x	✓	✓

Table 14: Diminishing power of record labels

5.3.2. Power and Control of Copyright Owners (Publishers and Song Writers)

A third of the interviewees expressed strong views around publishers as possible “king makers” in this ecosystem. While record labels were experiencing a decline in revenues related to the sound recordings, the rights of composition copyright owners in the form of publishers and the song writers they represent still seems unassailable even in the digital ecosystem.

Whereas the rights of owners of copyright (mainly record labels) vested in the sound recording were not as carefully protected as the underlying composition right. An expert in the legalities of music business (P9) strongly asserted that the market power of record labels is falling, while the market power of publishers is rising.

P9: “So there has always been an understanding of the value of the composition. The sound recording is a late entrant into the market, and legislation in most places has not kept pace with understanding that the people who have invested in these sound recordings need to be compensated.”

Another interviewee (P2) felt that this situation might be temporary. Just as publishers had once been very powerful and then that power declined as the role of the sound recording and therefore the record label took prominence, this cycle might likely repeat itself once the legislation was corrected:

P11: “So I think it is an interim kind of thing where the value in the composition has continued because of the importance of its historical [position]; whereas the understanding of the importance of the sound recording hasn’t completely been valued. Once it does, that will shift again!”

To further substantiate the point, a publisher (P2) gave an example of a publishing business which is growing 15% year on year because, while the underlying dependence on the sales of records is declining and therefore their dependence on mechanical royalties is declining, their income streams flowing from other music-related usages, such as synchronisation is increasing. This may further substantiate what another interviewee observed in that in the world of digital downloads, where the price of each unit sold is so low that the mechanical royalties flowing therefrom are very small and could very well be moving towards free, related usages of music in films, advertising and other media may well be the future in terms of revenue streams flowing from the licensing of those usages. This further entrenches the power

of the songwriters and publishers. Table 15 below shows the individual interviewees that strongly affirmed the rise of the power of songwriters and publishers.

Respondent / Construct	P1	P2	P3	P4	P5	P5	P7	P8	P9	P10	P11	P12	P13	P14	P15
The power of songwriters and publishers is growing even in the digital realm.	N/C	✓	N/C	N/C	N/C	N/C	N/C	N/C	✓	N/C	✓	N/C	N/C	N/C	✓

Table 15: Rise of the power of the songwriters and publishers

5.3.3. Power and Control of Technology Platform Providers

Interviewees observed that there has been a rapid decline and closure, worldwide, of physical music retail stores in the face of the rise of digital platforms such as iTunes which is the single largest retailer of digital music in the world. Even in South Africa the physical distribution channel operators that used to mediate between the retail industry and the content owners have faced significant decline in recent years, no longer moving as much physical stock as they used to sell.

A key industry expert (P5) involved in many aspects of the traditional and digital industry stated it this way:

P5: “The difficulty and the delicacy for the music industry is that the power's always been held in most forms of industry in your distribution channel. Distribution controls the flow and that control is to a large extent out of the hands of the music industry now. The music industry doesn't control that flow [any longer]. People aren't going into music shops to buy music anymore; they're buying music on online services which aren't owned by the music industry”

In South Africa, according to the network and content aggregators (P3, P4), the digital music market is in the hands of four major content aggregators who manage the licensing contract with content owners such as the record labels and who also own and operate the technology platforms that serve the content on the internet and via the mobile networks. These are ExactMobile, Content Connect Africa (CCA), Spice Mobile and Silo Digital.

In the mass of these cases, these aggregators also operate the technology and the retail platforms that serve the customer directly. The mobile operators own and operate digital music retail stores, while outsourcing the content aggregation and technology platform operation. A content aggregator expressed the view strongly that in the digital value chain in South Africa, the retailer is the most powerful player in this value chain since the relationship with the customer is the most important thing.

P3: “The retailer owns the customer, so whoever owns the customer is king. At the end of the day whoever has the customer relationship is the most important person in the chain. You can have the world’s most amazing music but if you don’t have a way to monetize it, therefore it is not going to help you, so the retailer is the most important person. The retailer owns the customer, and also owns the marketing.

And they set the price, and they decide what gets paid down the value chain, they say we will charge R1.00 but we are keeping 60% of that; so definitely the retailer is the most important person in the chain.”

According to the digital aggregator and retailer (P3) interviewed, the content retailer has the technology to provide billing and content delivery to independent customers; because of their relationships with the distribution channels – in this case the mobile operators, so because of their relationship with the networks, they have a back end interface with the mobile operators, which allow them to do two things – (i) bill the customer using the mobile operator’s billing engines and (ii), deliver to the customer’s mobile phone the content they have purchased.

So it’s not just the broadband pipe, but also the technology platform and the means of getting to [the customer] that determines the control of the digital music value chain. Table 16 below shows the individual perspectives on the power of the ownership of the technology and digital retail front-end.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital retailers and technology platform operators wield significant power in digital distribution.	✓	✓	✓	✓	✓	N/C	✓	N/C	✓	N/C	N/C	N/C	N/C	✓	✓

Table 16: Power and Control of digital platform providers and retailers on the rise

5.3.4. Power and Control of the Telecommunications Operators

A majority of the interviewees felt that in the digital music value chain, the incumbent power brokers who would continue to grow in significance as digital music distribution became the major mode of distribution in South Africa, are the Telco Operators – most specifically the mobile operators. An interviewee (P4) expressed that the digital game in South Africa is a “two horse race” referring to MTN and Vodacom who respectively seem to control the market for digital downloads via ringtones and ring back tones which are the predominant mode of consumption of digital music thus far.

P4: “Vodacom and MTN are definitely outdoing anyone else in terms of sales, but one of the reasons that contributes to that, is because they sell ring back tones; only a network can sell ring back tones. WASPS [Wireless Application Service Providers] can’t! For caller tunes or welcome tones, the networks won’t allow anyone else access to that technology and that is the biggest selling format in South Africa so therefore they dominate in terms of revenues. But in fairness they would still dominate I believe just because of sheer traffic but that is a very important point.”

In addition to offering digital music via formats or technologies that non-Mobile Network digital music retailers cannot offer, the mobile networks themselves have internal Wireless Application Service Provider divisions that retail digital music services that compete with the other retail music services that are allowed to be disseminated via their network. These internal divisions, benefit from cross-subsidisation and cost breaks for services from the network that external divisions do not receive, giving them a significant advantage over their external rivals.

According to an industry veteran (P5), there is a complete shift of power taking place, it is not the record labels that are in control in the digital realm, it is the telco operators and the technology platform operators that control the traffic. He further enunciated that power in this type of an industry is derived from the capability to enforce “scarcity”. In the traditional music industry, this was at the point of physical distribution. In the digital reality in South Africa, that point of “scarcity” is at the point of people purchasing and paying for their broadband data or mobile connectivity. The mobile operators in South Africa – Vodacom and MTN specifically – control the mass of the broadband connectivity available to most consumers and they are pricing it at a premium thereby essentially throttling the capability of digital music distribution models.

P5: “He who holds the pipe, holds quite a lot of power ... MTN is by far the biggest digital filler of content in this country by far, they dwarf everybody else; and they wield a lot of power in their system...”

A few interviewees observed that a significant constraint to the mobile operators utilising their power in order to significantly advance the cause of digital music distribution more aggressively is the fact that digital music revenues are an insignificant fraction of the total telco revenues and therefore the networks do not allocate sufficient resources, effort or energy in order to truly understand or fully exploit the digital music business model.

According to a head of a music society (P2):

P2: “I just think that they [mobile operators] are not playing open cards with the content owners, like I said we have a dispute with [Network Operator] about invoices from NORM for mechanical rights. For them the amount of money that they generate out of the music is so low that they don’t assign sufficient [resources] to even accurately understand the invoices that we are giving back to them”

Another interviewee (P4) agreed that internal digital music divisions within the network operators could not effectively compete for marketing spend given the proportions of revenue they bring at hundreds of thousands of dollars per month in as compared to other telco divisions that create hundreds of millions of dollars for the organisation monthly. It was also emphasised that although the revenues from music were small in comparison to music revenues from other telco services, the revenues generated by these divisions is still quite significant and could constitute the entire revenue of many larger record labels. Table 17 below shows the rise in power of the telecommunications companies that supply the delivery channels.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
The network operators and mobile networks wield a significant amount of power in the digital value chain.	N/C	✓	✓	✓	✓	✓	N/C	N/C	N/C	N/C	✓	✓	✓	✓	✓

Table 17: Telecom operators and mobile networks rise in power

5.3.5. Power of the Consumer

There seemed to be no doubt in the minds of the majority of interviewees that the power of the consumer had significantly increased in the digital distribution value chain. A music

business educator (P10) explained that in the recent past, the South African music industry is starting to see a shift from Business to Consumer to Consumer to Consumer both in the physical and digital distribution sphere.

P10: “The internet has just allowed us to just go straight from creator to consumer which is great, and then you said to me what has facilitated that? I think technology has been a massive driver of that, I think that technology has allowed us to go straight form creator to consumer, I think also because of technology the consumers have become much more savvy.”

Digital distribution, however, is driving a fundamentally different consumption behaviour than the traditional consumption behaviour because consumers have access to more content than ever before at lower prices (or even free via sharing) than ever before – greater choice for the consumer.

P10: “The market dictates to you, you don’t dictate to the market and that’s what the record labels forgot, they didn’t really consider [it] so I think it was technology that enabled it, I think it was consumers that enabled it and I think to some extent it was also the frustration of artists.”

Where previously the industry dictated to the listeners what they ought to like and buy through radio airplay and promotion, now the listener through the use of digital channels is essentially dictating to the industry what he / she wants to listen to and what he/she likes.

P10: “And what’s happening is the cream is rising... I couldn’t listen to the radio two or three years ago now it’s kind of listenable again because they [the record labels] can’t call it anymore. Now, whatever people are asking for they [radio stations] play - pretty much. If you’re asking for it and people are talking about it on twitter, why

aren't we playing it? So the power has shifted completely! It should be very encouraging for everyone..."

An artist manager (P8) emphasised that audiences, especially younger audiences are becoming increasingly techno savvy and there is a requirement for the industry to meet them where they are at which is in increasingly sophisticated applications accessed via smart phones. Another two interviewees (P12, P8) explained that in a country such as South Africa, the mobile phone has become indispensable because the mass of the population spends its time “outdoors and on the move” therefore they require a music solution where they can “carry around their entire music collection without having to purchase and own all 800 tracks”. The challenge for the industry given the infrastructural constraints, according to an interviewee (P5), is to give the consumer what they want, when they want it, how they want it.

Table 18 below reflects the individual perspectives regarding the rise of consumer power in the new digital distribution chain.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Digital technologies have afforded the consumer more power.	✓	N/C	N/C	N/C	✓	N/C	✓	✓	N/C	✓	N/C	N/C	N/C	✓	✓

Table 18: The rise of the power of the consumer

5.3.6. *Power of the Artist*

According to the comments of the interviewees who addressed the power of the artist, it is unclear whether the digital technology has significantly increased the power of the individual artist, although the general feeling is that it should have changed the artists’ power and control over their music.

P2: “They talk about how the internet was supposed to be the great leveller in terms of the artist [who] now has access to their customers, but the artist doesn’t use that! You can go on to an artist’s page and you can say, “wow” and you listen to the videos and everything and [then] you press ‘BUY’ and you get sent through to a sales site[digital store], a sales site or a platform! Why? Why are they giving away the power? And they are continuing to do that!”

A reason mooted by a number of interviewees regarding the reason why artists do not seem to be any more empowered by digital technology and distribution models is because these are fundamentally based on technology, and most artists don’t understand technology or they may find it difficult or intimidating to navigate.

P2: “Well it’s a technology solution and it’s not easily understood, we artists are creative people and the administration and the technology are things that they really would prefer other people to deal with, which is why record companies were successful in the first place.”

An interviewee (P5) expressed the opinion that while the saying “content is king” still held true, one could not do anything with the content unless there was a channel through which to distribute and monetise the content. He, therefore, felt that there was a delicate power balance to maintain between the artists and his content and the commercial technology channels delivering that content to the consumer.

Another perspective on the artist’s power came from an interviewee (P5) who recognised that although the internet and free technology platforms, both locally in South Africa and international platforms that can be accessed from South Africa, have essentially “democratised” the music industry by making artists music available to anyone, anywhere in the world, instantly, this has led to a rising ‘music middle-class’ in music with very few pop stars ‘popping up at the top’. However, it is ever more difficult for the artist to lift his craft above the melee and make an impact on consumers, given the increasingly competitive nature

of the industry. If the artist does not gain the marketing or financial muscle to ensure consumer discovery and engagement, the promises of the digital era for artists often remains unrealised. Only artists such as DJ Cleo who are educated in and proactive about digital distribution seem to be succeeding with little or no 3rd party intervention. Therefore artist power on the whole in the industry, although slightly elevated, remains low.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Artist power should have increased but has not made much difference in South Africa	N/C	✓	✓	✓	N/C	N/C	N/C	✓	x	x	N/C	N/C	N/C	N/C	N/C

Table 19: Rising power of the artist is questionable

5.4. Digital Distribution and Value Capture Models Suitable for South Africa

In order to ascertain the most suitable digital distribution and value capture models for the South African context, interviewees were asked to comment on models that had been successful in the developed world such as iTunes and Spotify and further identify whether these models would work well in a South African context and to qualify why they should or should not work. Six key themes emerged which will be explored in greater detail below. These include the download/ownership models, streaming/access models, hybrid download and streaming models, the impact of mobile in the digital distribution model and finally the impact of legislation on the digital model.

5.4.1. Download / Ownership Models

The download model, which is also known as the music ownership model, was identified as the most common digital distribution model employed by most digital retail stores in South Africa currently. While iTunes, the foremost digital download model in the world does not currently operate in South Africa, many other similar models are already in operation in South Africa according to P9. RhythmOnline.com and BoomFM are such examples. Most of these models

are technologically functional and therefore according to a number of interviewees they do work well.

It emerged from discussions with a number of interviewees that the download/ownership models come in two distinct flavours: (i) downloads from a web based store (also called Over The Top (OTT) services) such as RhythmOnline or alternatively (ii) download via the mobile network using one of the five bearers provided by the network. The five bearers provided by the mobile network over which music can be delivered are: (i) sms-based fetch using network short codes (e.g. 35050) (ii) USSID request (iii) WAP (iv) WIG and (v) Interactive Voice Reponse (IVR) according to P4 who is responsible for content aggregation business within a network operator. Both these digital download models are favourable because they make reporting of download or purchase statistics very simple, as the revenue and royalty tracking in these types of systems is very simple.

The efficacy of the web-based or OTT download models, depends heavily on the underlying internet bandwidth pipe in the network which determines how fast or slowly the track can be delivered once it has been purchased and whether it will be delivered in its entirety without any errors. A number of interviewees expressed that while broadband speeds on Telkom were not unacceptable, the mass of people were accessing broadband internet via their mobile phones and often the downloads could take too long given the broadband constraints on the mobile networks, creating a poor user experience and disrupted service.

P7: “. So in other words your data services are an inhibiting factor when it comes to those types of services.”

The download services delivered via the mobile network bearers tend to be of better quality and more consistent because these are delivered over the dedicated mobile voice channels with quality of service assurance in order to ensure the delivery of the data music files. The majority of music downloaded in South Africa is accomplished using one of the multiple the

mobile network bearer modes. Hence ringtones and ring back tones are the most popular download methods of music delivery.

P9: “Ringtones still rule the roost in South Africa... in South Africa downloads are still fairly strong and if you check the stats, ringtones are still where you want to be as a whole on the continent...”

However, the most significant drawback of both download models in South Africa, according to a number of interviewees, is the fact that they still rely very much on a traditional understanding of a consumers’ buying patterns. In other words, it is assumed that consumers traditionally want to purchase and **own** the music product (i.e. a CD or a track). However, according to one interviewee (P7), consumers have so much music that they had obtained in multiple ways, dispersed across their many listening devices, that the storage space, transportability, transferability and cataloguing of the music has become very difficult. Therefore the download model is cumbersome and impractical from this point of view. Additionally these models tended to be related to “pay per track” charging models which could work out very expensive for consumers, if they were to legally purchase each track from a digital downloads store or through a mobile downloads store.

P2: “I don’t think this pay per track ... is working anywhere!”

A number of interviewees also pointed out that the web-based (OTT) downloads models also tended to appeal to a higher LSM customer (7-10) that had access to a credit card, bank account or a payment gateway such as Paypal as the “pay per track” model required the transaction to be performed online using an online payment method. The mobile related multi-bearer services, on the other hand, tended to appeal to a lower LSM (3 – 9) who could easily access the services and pay for them using mobile billing from their mainly prepaid airtime according to an interviewee in the content aggregation business (P3).

P3: “The South African market is so diverse, and you look at LSM 10 in comparison to LSM 3 that diversity is so huge... a lot of markets don’t have a LSM of 1 to 10 like we do; they have 3 LSMs and that’s it. That is why when we look at products we don’t ever look at products as that one product will be able to suit everyone, you have to make sure that is addresses every single LSM.”

Essentially most interviewees felt that although downloads would never totally disappear, the pure downloads model had a limited lifespan in South Africa. Only one respondent felt that the download model would completely disappear in the near future. Table 20 below shows the individual perspectives of each interviewee regarding the efficacy of the download models in South Africa and the pay per track methodology.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Download is a viable model for some South African segments.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	N/C	✓	✓	✓
Pay per track is not a favoured model for obtaining all music in South Africa.	x	✓	✓	N/C	✓	✓	✓	N/C	x	✓	✓	N/C	✓	N/C	✓

Table 20: Download model and pay per track in South Africa

5.4.2. Streaming Models

The streaming model was, by far, the most popular model with all the interviewees who seemed to agree that streaming models made sense in the future, even in South Africa. Although streaming models, such as Spotify and Deezer are well established in developed markets, South Africa has very few consumer-pays streaming models have been implemented and are working. During the course of the research, SimfyAfrica was launched which is the first Over The Top streaming model to be launched in South Africa. The only other streaming

models currently in operation in the market are online radio stations that stream their content and supported on a traditional broadcaster model which is based on advertising. Streaming models such as Spotify and Simfy have been described as access models as opposed to ownership models.

P7: “Now it is not about that you actually gain ownership, you just simply recall, it’s an access model you simply recall the songs and for me personally that is how I see it. I would say that as the mediums [devices] get smaller and smaller you will find that there will be more of a recall than an actual storage of the data; and so it would be the method in which you would then have access to it.”

Most interviewees enthusiastically described the benefits of the streaming service including its social capabilities, such as being able to see what your friends are listening to and listen and comment plus the capability to access your millions of music tracks for a fixed fee per month, create customised playlists and access these from any device, at anytime, anywhere without storage limitations. Interviewees were particularly enthused by the ‘feels like free’ nature of the payment options where a fixed fee guaranteed you unlimited access to the entire database of music.

P6: “What I see as being the most viable model going forward is a ‘feels like free’ model, a Spotify or a Simfy or something along those lines... Where you have unbridled access, unlimited access to all the music in the catalogue without feeling the charge, because the money you paid is built in to a device sale or a package sale or something like that. So that you are not feeling the cost of buying it on a track by track basis, it feels like you are getting it for free but the industry is getting paid, and the guy who is making that product is getting paid.”

Despite the excitement about such streaming models, some interviewees were quick to add that the full reality of streaming services is still a little bit far away from South Africa. Mainly because of the bandwidth quality and costs required for a well-functioning streaming service.

P13: “Now the challenge is that every single time I play the track it is streaming, so it is costing you in bandwidth unless you have an uncapped line because internationally uncapped lines are the norm so on an international level it is totally workable.”

Another challenge relates to how the current industry music industry especially content owners perceive streaming and the threat that it presents to their potential revenue earning. The concern expressed by a number of interviewees involved in the publishing and revenue collection world the fact that unless the artist is Lady Gaga and streams millions of tracks, the revenue earning potential based on a streaming service is very small when calculated. Another challenge expressed by another interviewee is that record labels and content owners, find it difficult to wrap their minds around how much they will be earning from such a novel model and exactly how those earnings come about.

P13: “As a label or as an artist it’s not a sustainable revenue stream. So you don’t make the same money that you would on CD sales; it is minuscule [sic] compared to what you would make.”

Although most interviewees agree that streaming models such as Spotify definitely constitute the future as various infrastructural, legislative and cultural hurdles are overcome, newly launched streaming services such as SimfyAfrica are the “Rolls Royce” of streaming services, targeted at the higher LSMs who have access to the disposable income, whose mind-set predisposes them to the consumption of such services and who have both the bandwidth and devices to be able to consume such a service. The primary consumers of such a service have been compared to DSTV subscribers:

P3: “Not only that, [customers must have disposable income] but their mind-set, how they see the world [is important]. Because they [DSTV subscribers] have got a

PVR, so they are starting to understand the concept of ‘on demand’. A lot of them do stream, do use YouTube, they understand that model. They understand when you say ‘music streaming model’ they all go “Oh we know what that is!” If you try and talk to anyone else about it, it’s like they go “huh?”.

The streaming model was almost unanimously the favourite model to succeed in South Africa, albeit for a specific target of users, as long as the bandwidth and cost hurdles continued as they currently are. Table 21 below reflects the perspectives of the individual interviewees regarding the streaming / access models and the fixed fee charging systems.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Streaming / access models are the way forward in South Africa.	✓	✓	✓	X	✓	✓	✓	N/C	N/C	N/C	N/C	N/C	✓	✓	✓
Fixed fee or utility based charging models are more favourable in the long run.	✓	✓	✓	N/C	✓	✓	✓	N/C	N/C	N/C	N/C	N/C	✓	✓	✓

Table 21: Streaming models and fixed fee charging structures

5.4.3. Hybrid Models

Although not many interviewees advocated for hybrid models, two interviewees stressed that since South Africa has such a large range of LSMs, ranging from 1 to 10, as opposed to other African countries that have a narrower LSM range, therefore different models would be required in order to service these disparate groupings.

P3: “It depends on your market, the South African market is so diverse, and you look at LSM 10 in comparison to LSM 3 that diversity is so huge you can’t say what is going to be [suitable]. When it comes to money, you are going to make more money from streaming but there will always be a download market in South Africa.”

Additionally, another interviewee (P11) added that since digital is so new in South Africa, it is not clear what is going to work and what won’t work, therefore it may be too soon to discard any of the digital models as yet.

5.4.4. Mobile Distribution

A number of interviewees observed that with an excess of 52 million mobile phones in South Africa and an estimated 17.5 million people having access to broadband internet via their mobile handsets by 2015, mobile network-related distribution methods are more likely to succeed in South Africa than PC-based, fixed broadband models that are more *au fait* in the United States and other developed markets. Another interviewee pointed out that the mass market access in South Africa is more likely to look like digital music consumption models in Nigeria, Uganda and Kenya where mobile network-based digital download services such as ringtones and ring-back tones are likely to continue for a long while.

P11: “You look at Africa, how is Africa consuming digital content – ring back tones; so it used to be in the ringtones and now it’s in the ring back tones. I don’t know why people feel that it gives them some sense of personalization of their instrument when you phone you hear one artist or another”

Not only is mobile a powerful model because it is the most ubiquitous form of access available in South Africa, but also because it is the simplest way to monetise services in South Africa and Africa according to a number of interviewees.

P3: “So that leads me to the monetization story which is essential in this ecosystem! The real way to monetize is to be able to recover it from air time...There is no question about how important mobile billing is to selling content on this continent. I am sure I don’t have to familiarize you with the word ... ‘underbanked’. This is the new word, ‘underbanked’, so there is no question that mobile billing is incredibly important.”

Despite the fact that content is currently an insignificant part of the income of the mobile networks in South Africa, the mobile networks will continue to invest in it and take it seriously, not because they see it as a huge money spinner, but because they understand that this is what will continue to drive customer-engagement through value addition. An interviewee explains it this way:

P4: “I think also when it comes to [network operators] selling music it is not only about [the] bottom line, it is also about retaining and acquiring customers, which is what a value added service is all about. It’s about tying the person to [the Mobile Network]. It’s [about] my favourite word, it’s about stickiness!

Now you go and tell that to the music industry, do you know how insulting that is when you go to someone and you say I am going to take this album that is the product of your life’s work that you bled real blood for, and I am going to use it as a value add to sell a cell-phone contract, it doesn’t make you popular. Not at all!”

Mobile downloads or streaming models and mobile billing seem to have widespread acceptance amongst the interviewees, a good number did mention that they perceive the mobile ‘take’ was too large and made the model not viable for the others in the value chain (aggregator, publisher, artist, record label) to profit off.

P6: “Now what works very well is short code downloads and direct [mobile] operator billing and that is the Holy Grail. If you are looking for the answer, you

want a store where you can purchase tracks or albums at will using [mobile] operator billing; the challenge is that the operators charge far too much, their take is so big that it is just not a viable business – unless the operators do it themselves. So that is them being the bottleneck and watching out for their own interests”

A number of interviewees concluded that mobile does seem to be the most viable solution if the industry can work together with mobile operators to achieve equitable distributions of the income so that content owners do not withhold their content and mobile operators who operate the network are incentivised to make the service work and everyone along the value chain continues to make money. Table 22 below reflects the individual perspectives of each interviewee regarding the role of mobile in digital distribution and billing.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Mobile distribution is indispensable to digital models in Africa	N/C	✓	✓	✓	✓	✓	N/C	✓	N/C	✓	✓	✓	✓	✓	✓
Mobile billing is the most viable way to achieve value capture	N/C	✓	✓	✓	✓	✓	N/C	✓	N/C	N/C	N/C	N/C	N/C	✓	✓

Table 22: The role of mobile in distribution and billing is accepted

5.4.5. Value Capture Models

A number of interviewees expressed the fact that access to adequate broadband connectivity is not the only bottleneck to a viable digital service in South Africa. A suitable payment mechanism is an accompanying factor that needs to be considered carefully. In an environment where many people do not have access to bank accounts and credit cards, viable alternative methods of payment must be established.

P5: “I would say if the key factors for music and other entertainment industries to flourish online [we need to solve] the lack of viable payment options for the majority. Not just in Africa, the majority of the the world, I think six percent, has credit cards and only like twelve percent or fifteen percent have bank accounts. “

The way that money is received is one crucial factor however the other crucial factor is how consumers are metered for their consumption of the music they download. This is a crucial consideration, given that most consumers in South Africa have low incomes and have acclimatised to a culture that is used to receiving and consuming digital music for free through offline methods such as broadcast radio and Bluetooth / usb sharing and some online peer-to-peer sharing through social networks and YouTube streaming.

P6: “The question is how does it [digital music] get paid for and that is what everyone is trying to figure out. Whereas consumers don’t want to pay for it, they would rather get it for free but that is just not sustainable and they need to pay for it in some way; everybody is trying to figure out the right way to do that!”

Two value capture options were mooted by different groups of interviewees. The first view on effective value capture of whatever digital music distribution model spoke to a model where an flat access fee is levied for unlimited consumption of music. The Spotify-type access fee is one option and another option is a legislated access fee which is implemented by Internet Service Providers and Broadband operators such as has happened in countries like Canada.

P7: “Yes I think you would have your universal payment system[s], and you will pay into a utility account, in other words you will have a [payment of] say R100 at the beginning of the month of which you use up so much as you use music through the month – or whether it’s an [all in] service”

The alternative perspective was that trying to get people to pay for content given the propensity towards free content online, as the precedent has already been set by sites such as YouTube and so on, was a losing battle. Therefore, the view expressed was that monetisation for the content creation industry may actually come from indirect income streams such as advertising, live concerts, synchronisation licenses for music, branding and so on. One interviewee commented:

P7: “That’s why you can say it is also moving away from sales or direct listening to indirect listening. So for example YouTube now, you can earn money through your music being embedded in a YouTube video and they have software that picks it out and you can get paid a certain amount every time somebody views that YouTube [clip].”

Another interviewee commented:

P13: “I think there isn’t an answer globally for how we can make money from recorded music; the thinking in terms of [digital music] tracks is to make money on performance and advertising etc. Publishing is quite big, the royalties for radio play, that is one way of making money off recorded music. But in terms of how we actually make money from sales of recorded music, there really just isn’t an answer to that overseas yet, and there certainly isn’t one for here. The market is obviously very different here just because of the population dynamics, different cultures, and different classes – so there just isn’t an answer yet”.

Table 23 below reflects the individual perspectives of interviewees concerning whether the trend towards consumers getting music content for free and value capture or monetisation occurring through alternate means is a reality that must be dealt with.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
The trend towards the consumer getting the content for free and value capture happening through other activities is real.	N/C	✓	x	✓	✓	✓	✓	N/C	N/C	✓	N/C	N/C	N/C	N/C	✓

Table 23: Value Capture through alternate methods and consumers getting content for free

5.4.6. Enabling Legislation

A number of interviewees alluded to the importance of a “policy intervention” that would assist to create a conducive legislative environment in order to enable digital music distribution model in South Africa to function well. An interviewed publisher (P2) felt that government would have to be persuaded to step in and legislate a number of issues in order to ensure the financial viability of the entire industry.

P2: “The problem is that it [an access charge] has to be legislated; so first of all you have to have government buy in ... and then of course you have to have behind the scenes consensus amongst all the players as to how to divide the spoils.”

Part of the legislative action that needed to be taken according to another interviewee is that an updated Copyright Law had to be produced, providing for a single collection society, empowered by law to enforce the collection of revenues from digital retailers.

P2: “So you need a situation like in France where you have one collecting society that does all the licensing and then divides to all the smaller societies ...”

A few interviewees felt that the legislation needed to go as far as legislating the guidelines related to how revenues from digital music sales ought to be shared by digital retailers with content creators. Table 24 below reflects the individual perspectives of interviewees around the need for government legislation in order to enforce revenue and collections.

Respondent / Construct	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15
Government needs to intervene with legislation that will assist the industry to collect, enforce and standardise revenue collection arrangements.	N/C	✓	N/C	N/C	✓	N/C	✓	N/C	✓	N/C	✓	N/C	N/C	N/C	✓

Table 24: Government intervention is required to legislate revenue collection efforts by the industry

Chapter 6

6. Analysis of the Results

While there is little doubt that digital technologies have had a profound impact on the global music industry value chain resulting in new models for value distribution and value capture, (Goldstuck, 2010), it has been unclear whether these models are suitable and applicable to a developing market such as South Africa given the vastly different infrastructure landscape (Frیده et al., 2011; Lawrence, 2010; Swatman et al., 2006).

A broad range of issues determine the success and applicability of value distribution and value capture models within the South African market including the issues surrounding perceived value by customers, communications infrastructure availability, technology adoption issues, intellectual property protection, legal and regulatory environment as well as customer and business attitudes and behaviours (Donner & Gitau, 2009; Simon, 2004).

These dimensions are structured into frameworks explored in Chapter 2 of this research paper. These frameworks include the Technology Adoption Model (TAM) and its variants, the Innovation Diffusion Theory (IDT) and Simon's (2004) Critical Success Factors for electronic commerce in developing countries. The discussion of the results in the following sections is evaluated in light of the foregoing frameworks and the surrounding literature presented in the entirety of Chapter 2. At the end of this chapter, a digital distribution and value capture model that may be suitable for application in the South Africa context is proposed and described. Each proposition presented in Chapter 3 is evaluated against the theory presented in Chapter 2, the evidence gathered in Chapter 5 and a conclusion is drawn regarding whether the proposition is supported by the data and evidence collected and collated in Chapter 5.

6.1. Digital Technologies Have Not Yet Made A Significant Impact on the Value Distribution and Value Capture of the South African Music Industry

Given the results of the research interviews, and the key themes emerging from the data gathering, it would seem that digital technologies would have had varying impacts on three

aspects of the music industry. These include (i) overall industry revenues in South Africa (ii) specific market segments and artists as well as (iii) illegal distribution. Each of these will be analysed in detail in the sections that follow and a conclusion drawn at the end of the section.

6.1.1. Impact on Turnover

Berman (2004) and Battacharjee et al. (2011) both observed that market shifting technologies had spawned a crucial trend, which is the rapid decline in album sales. The data gathered in the research study indicated that after a long period during which South African recorded music sales had ascended and reached a peak in 2007 of R1.8 billion, the physical sales in South Africa are currently in severe decline, currently sitting at R1.1 billion and thus following the trends in the rest of the world.

The difficulty of replacing lost physicals sales revenue with equivalent value in digital revenue within the South African music industry is common to the experience of more developed markets (Curtis, 2006; Jordan & Bolton, 2004; Maltz & Chiappetta, 2002; Simon, 2004). The problem of direct revenue replacement is related to the profitability of the unit of value and unit of charging in the digital realm (per song) which is far different from the unit of value and charging in the physical distribution realm (per album) (Berman et al., 2011). The research data collected was also consistent in this regard, showing that digital technologies currently comprise only 9.9% of total industry income, in a total music market valued at R2.1 billion. The data showed that although the growth rate in digital sales is currently pegged at an average 25.4% per annum, this growth is coming off a very low base. The current growth of digital sales is insufficient to replace the losses in sales of physical music in the South African music industry and is unlikely to do so for a number of years to come.

In the literature, Buxman et al. (2007) and Graham et al. (2004) highlighted that high pricing discourages a high volume of transactions. Docters et al. (2011) further highlighted that lower turnover could be as a result of pricing levels not properly adapted to the income levels within the country's environment. Despite fairly high prices per digital download, the researchers

learned that the digital music industry in South Africa was achieving low sales volumes and that the digital music model is currently an unprofitable business. The research data also found that most digital distribution portals in South Africa were retailing music files at the same price in South Africa as in more developed countries (approximately R10 per track) without consideration for the income demographics which are specific to South Africa. Buxman et al. (2007) and Graham et al. (2004) in the literature had already questioned the propriety of directly transferring the costs of the physical product onto the unit cost of the digital product and explained that this could well be the reason for the low sales volumes since the market may consider this pricing too high. This seemed to correlate well to the data gathered and reflected in Chapter 5.1.1.

The literature also showed that low transaction volumes make the recovery, of the development costs for content and maintenance costs for the digital platforms, highly improbable (Bhattacharjee et al., 2009; Docters et al., 2011). In order to make their businesses more viable, players in the industry were forced to look at alternative revenue sources such as merchandising and live performance (Buxmann et al., 2007; Maltz & Chiappetta, 2002). The data gathered revealed that most digital retailers in South Africa are currently enhancing their profitability through the sale of hardware, data bundles or other forms of supplementary income because the profitability of a pure digital download model is suspect at the current low transaction volumes.

Data from the interviews showed that as a result of the slow growth and lack of digital uptake currently, many established industry players in South Africa were found to be concentrating on protecting existing revenue streams and growing ancillary revenue streams connected to physical sales rather than digital sales. This seems consistent with Hougaard et al. (2010) and Pikas et al. (2011) who indicated that the declining physical revenues and unsuccessful digital value capture models in the traditional music industry were leading to established industry players gaining profits through other avenues unrelated to the direct sale of recorded music. These methods could include merchandising and live performances.

Therefore, the research shows that digital distribution models have not yet made a significant impact on the South African music industry's value capture measured by growth in turnover. Despite the current situation however, the study also revealed that all participants were confident that digital distribution and sales were definitely the way forward for the South African music industry in the future.

6.1.2. Impact on Individual Artists and Recorded Music Industry

In the literature, (Hougaard & Tvede, 2010; Pikas et al., 2011) showed that digital technology was responsible for eliminating the intermediating function between content creators and producers and their markets. The study discovered that despite the lack of positive impact on South African music industry turnover, a group of local music industry segments and local artists have benefitted tremendously from the growth of digital distribution models even if this benefit has not happened industry-wide. It was ascertained that digital distribution and value capture models, for certain proactive artists in the 'black urban' and 'Afrikaans Rock' industry segments, meant that they were now able to bypass the traditional industry structures and reach their audiences directly. An example was given of DJ Cleo and Die Antwoord in this regard.

However, it also emerged from research that the artists that were benefitting the most from digital media were those who are well-educated in the medium and have acquired a keen knowledge of the technical, marketing and commercial implications of distribution via the digital media. . This resonates with Simon (2004) who emphasises that individual users, business and consumers must be trained, educated and encouraged to utilise electronic media and adopt electronic commerce in order to ensure that it succeeds in developing markets.

The data gathered during the study showed that established artists with an established brand are more likely to benefit positively from digital distribution than little known artists who still require a great deal of marketing and financing support. Therefore the research found that despite the small digital music sector size, certain industry segments, and the artists in those

industry segments, have been impacted by digital distribution more than others. It was discovered that these genres tend to appeal to a generally younger market demographic who are adapting to digital faster than the older market demographic. The data also revealed that digital distribution seems to be working well for local music in South Africa more than international music, since 60% of the existing demand on digital was found to be among the market for local South African music.

6.1.3. Impact on Piracy

According to Premkumar et al. (2003) and Swatman et al. (2006), the size, scale and reach of illegal sharing have been enabled by the internet. The ease of illegal sharing came up as a frequent theme during the data gathering and is consistent with the literature cited above. The research ascertained that this piracy in South Africa is perceived to be taking place mostly among younger audiences who have less disposable income and who have developed a widespread attitude and perception that digital music ought to be free. This too is consistent with Pikas et al. (2011) and Kunze et al. (2007) who regarded young customers' attitudes toward paying for content that they perceive should be free, as being difficult to change especially as time goes by.

Oestreicher et al. (2009) showed that peer-to-peer networks have enabled the distribution of digital products without the permission of the copyright owners. Amberg (2007) further found that exchange via p2p networks was many times higher than through existing legal channels and was likely to continue growing in the future. The data gathered showed that attempts to curb piracy through peer-to-peer sharing in the local industry had made little impact and seem largely futile, causing a number of industry participants to conclude that this situation would only worsen in the future and sales of recorded music would continue to decline while other revenue streams such as 'live performance' would need to grow by necessity. Hougaard (2010) in the literature review concurs with this and ventures that maintaining music as an excludable good by fighting hard for legal rights may not prove to be a sustainable strategy in the long run.

Jordan & Bolton (2003) concurred that it was possible to conceive of a situation where illegal copying is either neutral or actually positive such as where an individual engaged in the copying would not have purchased the product even if the copying had not been an option. The research also showed that among certain sections of the industry, there is a widespread shift in attitude towards piracy as a negative, towards an understanding that perhaps piracy is a positive feedback indicator, signalling the market's acceptance of the artist and his or her music. A few interviewees gave evidence that piracy had started being viewed differently in the industry – as a 'positive feedback tool' rather than a problem.

Therefore the research study showed that digital technologies had spurred and accelerated the distribution of music via non-legal digital distribution mechanisms such as p2p networks or offline sharing mechanisms. This may not be a positive impact on the commercials of the South African music industry, but the impact is significant and present.

6.1.4. Conclusion: Impact on Value Distribution and Value Capture

In relation to the proposition that digital technology has not made a significant impact on digital value distribution and value capture in the South African music industry, it would seem that the responses and conclusions are different for value distribution than for value capture.

Digital technology would seem to be affecting value distribution significantly, though negatively, as seen by the continued growing levels of piracy or illegal sharing of music over digital devices and platforms, especially among younger consumers. Using official reports and statistics, it is difficult to accurately quantify currently how much digital music is being illegally distributed via formal and less formal peer-to-peer sharing platforms, however, given the growing demand for music and the conversely declining revenues it could be proportional to the annual shrinkage. Therefore digital technology has had a significantly negative impact on value distribution in South Africa.

However, the research has also shown, in line with the proposition, that digital technologies **have not yet** made a significant impact on **value capture** in the South African music industry as a whole given the statistics surrounding declining turnover and profitability of recorded music. However, despite the small impact on turnover, it was also found that digital technology is making a more significant impact in certain genres, especially those that are consumed by younger demographics more than those consumed by older, more traditional music consumers.

Therefore the proposition that states that ‘digital technologies have not yet made a significant impact on value distribution and value capture in the South African music industry’ would prove to be true when it comes to value capture aspects of the industry as overall revenue declines and digital revenues grow only very slowly. However the proposition would prove false for the value distribution aspects, as digital technology seems to be having a major impact on illegal value distribution models in the South African music industry.

6.2. Broadband internet infrastructure availability and accessibility are the foremost enabling or constraining factors to effective digital distribution and value capture in the South African Music Industry

Given that digital music platforms and portals reside upon and are delivered by physical communications infrastructure, more specifically broadband internet infrastructure, it was proposed that broadband infrastructure – its availability and accessibility - is the leading enabling or constraining factor for digital distribution and value capture in the South African music industry. The research outcomes revealed that infrastructure availability was more nuanced than originally envisaged in line with Simon’s (2004) Critical Success Factors framework. The results are analysed in the sections that follow.

6.2.1. *Infrastructure Availability and Accessibility*

Premkumar (2003) categorically states that despite the fact that a number of different value distribution and value capture models exist, none of those strategies would succeed without a solid communications infrastructure in place. Many of the established digital music distribution and value capture models exist in a developed world context where broadband internet penetration is fairly high, the infrastructure is sound and where industry bodies play a very important part (Evens & De Marez, 2010). In developing countries, like South Africa, however where broadband penetration is still less than 3% of the population, where bandwidth is expensive and where advertisers do not see the value in paying for online advertising, proposed digital distribution models may not be economically viable yet nor entirely applicable in the context (Bhattacharjee et al., 2011; Fridey et al., 2011). The research data revealed that there was a lack of significant growth in South African digital music sales and this was directly attributable to infrastructural deficiencies. A lack of adequate broadband internet with the right quality of service, speeds and pricing was the infrastructural deficiency cited by almost every single participant in the research as a constraint to digital distribution and value capture in South Africa.

The literature presented by Nair (2012) affirmed that mobile telephones are largely regarded by policy makers as the most accessible bridge for information and communications technology between the 'haves' and the 'have nots' in developing nations. Donner (2011) also affirms that although mobile access is the most ubiquitous in South Africa, it also tends to be characterised by restricted bandwidth, sporadic access and pay as you go pricing, which is more expensive. The data collected from respondents revealed that mobile internet was found to be the method most utilised by South Africans in accessing broadband internet and thus digital content. It was acknowledged however, in the study, that this coverage was not ubiquitous and evenly distributed throughout the country's urban and rural areas. Restricted bandwidth pipes and poor quality of service rendered most digital distribution models non-user friendly in the local market.

Secondly, Simon's (2004) societal factors advocated for technological standards that would assist to facilitate electronic commerce roll-out and stability in a developing nation. The data gathered pointed to an additional aspect of infrastructure which had not been contemplated in the original research proposition presented above. However, it was mentioned frequently in the interviews. The research also found that antiquated, outdated and inefficient shared metadata storage systems were also cited as an infrastructural deficiency in South Africa which made it difficult to ensure integration, recognition, licensing and royalty payment systems in the industry were working efficiently. As long as royalty payment systems in the digital realm are unsure and insecure, content owners are not willing to engage with them.

Thirdly, Swatman et al. (2006), Bonagui & Nel (2009) and Simon (2004) both highlighted that payment platforms and electronic currencies were required for digital value distribution and value capture models to function fully. Simon (2004) who advocated for government endorsed electronic currencies and trustworthy transaction environments, in his Critical Success Factors framework for electronic commerce, which would enable B2B and B2C transactions. Digital transactions in developed markets are traditionally accomplished via credit/debit card or electronic funds transfers. However, in South Africa, where many low income and young South Africans lack both credit cards and bank accounts, this constrained the growth of digital distribution. Mobile billing was highlighted as the major solution to this dilemma by Swatman et al. (2006).

The research study revealed that open payment platforms that catered to the mass market were also frequently cited as an infrastructural deficiency that constrained the uptake of digital music distribution. A number of interviewees cited the mobile network and mobile billing as the most viable value collection mechanism available and accessible in South Africa. However, they also highlighted that the mobile networks in South Africa keep a very tight hold on their mobile billing platforms and take a very large share of the proceeds which rendered many transactions unaffordable.

Therefore the study found that the availability of broadband infrastructure was unanimously the leading constraining factor to implementing viable digital distribution and value capture

models. Two other infrastructural elements were also frequently mentioned – namely the availability of shared metadata databases and affordable and accessible payment platforms, with mobile billing being the most accessible, though not necessarily the most affordable.

6.2.2. Absence of International Digital Music Platforms

Jordan (2004) quotes Steve Jobs as saying that in order to ‘beat’ piracy, you have to understand it and then provide something better. Both iTunes and Spotify were positioned by the respective companies as alternatives to illegal downloading and services (Goldstuck, 2010; Oestreicher & Kuzma, 2009). The data showed that a frequently cited reason for the constraint in growth of digital distribution in South Africa was the absence of major digital music distribution platforms. iTunes, in particular was frequently mentioned as the reason, in the research, that digital had not grown in the South African market given that iTunes accounted for 70% of digital sales worldwide and Spotify’s rate of growth in developed markets had apparently led to an equivalent reduction in digital piracy in those markets. The research further showed that the reason iTunes was not currently in South Africa was because of difficulties in the licensing and intellectual property legislation in the South African environment. This accorded with Simon’s (2004) point that unless intellectual property rights are assured in a developing market, international players will be reluctant to approach the market due to lack of guarantees regarding rights protections.

The data showed that the licensing and infrastructure environment rendered the South African environment too un-certain and complex to venture into by the established digital distribution platforms and therefore the absence of these international platforms had caused South Africa to lag behind the rest of the developed world. Simon (2004) in the literature had already identified that the inability of developing countries to create and implement policies and programmes that truly create an open sector with sound intellectual property rights, security and trust would dissuade the growth of electronic commerce platforms such as digital music distribution platforms coming into the developing country.

Therefore the research study found that another key constraint to the growth of digital distribution in South Africa was the absence of an internationally accepted technology such as iTunes or Spotify in the South African environment.

6.2.3. Pricing and Costs Associated with the Service and Infrastructure

Premkumar (2003), Buxman et al. (2007) and Maltz et al. (2002) showed in the literature review that pricing plays an important part in the success of the digital distribution and value capture models. Consumer and industry advocates have long questioned the propriety of directly transferring the costs of a physical product onto the unit cost of a digital product according to Buxman et al. (2007). Graham et al. found that excessively high pricing could discourage the consumption of digital goods. Not only pricing of the goods or services comes into question but also the pricing of the bandwidth in the total cost of the transaction could make digital distribution expensive and unattractive. Chetty et al. (2005) showed that mobile bandwidth in South Africa is highly priced.

The research found that the direct and indirect cost to the consumer of utilising digital music services were said to be too high as an aggregate by a great number of the research participants. The direct costs comprised of the nominal cost of purchasing the track and the indirect costs comprised the costs of the bandwidth required in order to download or stream the music track. As a result of the total costs of the transaction, the research concluded that consumers are finding digital music distribution to be prohibitively expensive.

Therefore pricing and cost considerations were found to be a significant factor in constraining the growth of digital distribution models.

6.2.4. Consumer Attitudes towards Technology Adoption

Bounagui & Nel (2009) anticipated that consumer willingness to purchase music online for downloading was influenced by the availability or lack thereof of a suitable payment method, however, they in fact found that some respondents would not be willing to purchase online even if suitable payment methods were available. This may be explained by the fact that there is a culture of free downloads among youth and young adults in South Africa (Lawrence, 2010; Shelley, 2012). Customer attitudes and requirements are fundamental to digital distribution and value capture models working according to Lawrence et al. (2010) as well as Oestreicher & Kuzma (2009). South African consumer participation in the online digital market for digital music can be modelled by the Technology Acceptance Model (TAM) which presupposes that perceived enjoyment, usefulness, trust and ease of use are good predictors of behavioural intention to purchase.

The research study found that the attitudes of consumers, who have a wider variety of entertainment choices on which to spend their money and with greater levels of choice of how to obtain digital music, were mentioned a number of times as being a significant factor towards the adoption of digital music distribution services. Specifically, the attitude of customers towards the price of the digital music tracks which were competing with free tracks from sharing networks, were thought to be a constraining factor. This combined with inaccessible music formats and platforms or models that the consumers did not understand were found to be a key constraint towards digital music distribution uptake.

Therefore the research study found that consumer attitudes and perceptions are a significant constraint to the adoption of digital distribution technology in South Africa.

6.2.5. Local Content and Legislative Issues

In the literature, Simon (2004), proposed societal critical success factors for e-commerce in developing countries and showed that electronic commerce requires legal and technical norms

and standards that cover a wide range of matters including contract enforcement, consumer protection, privacy protection and intellectual property rights in order to ensure that rights holders felt secure in releasing and proliferating their intellectual property (recorded music). Maltz (2002) commented that the legislative environment in many developing countries remained largely unfamiliar with the complex and rapidly changing electronic technologies and would require education which was lengthy and expensive.

The research found that very little of the local South African music, especially older music, has been encoded into digital formats that could be distributed across digital distribution platforms. This is a constraining factor because South Africa is largely a market that consumes local content. If this local content cannot be easily found on digital platforms, there is therefore a lack of growing demand for digital music services than would otherwise be the case if local music was easily available.

During the research, the lack of local music in digital formats was largely attributed to the difficulties of the licensing environment where record labels and content owners are reluctant to license their music libraries because they are uncertain how they will be paid for the content given that the copyright law in its current format is outdated and makes no provision for digital transmissions and therefore payment collection arrangements may not be enforceable. The researchers found that unless copyright owners are assured of their ability to collect and enforce their rights, they will be more likely to withhold their content and not license it to digital music platforms thereby constraining the growth of digital music distribution platforms. This was found to be consistent with the legal distribution environment however, this had little or no bearing on illegal distribution via peer-to-peer file sharing systems which operate outside of the regulated environment in any case.

Therefore the research study found that another key constraining factor to digital distribution models succeeding is an outdated or unenforceable legislative environment where standards are ill-defined.

6.2.6. *Industry Mind-set and Education*

In his framework presented in the literature, Simon (2004) pointed out that managers and policy makers in developing countries needed to be trained, educated and encouraged to understand and be aware of electronic commerce opportunities and skills.

The research data showed that many interviewees perceived traditional players in the industry as having the wrong ‘mind-set’ about digital distribution and as a result they become a constraint in licensing and digitisation of their catalogues and libraries for retail on digital distribution and retail platforms or portals that have the correct technology and systems. It was found that the specialised knowledge required in order to participate in the digital distribution and value capture side of the music industry was largely absent in the South Africa music industry and the feeling was that little was being done to correct this situation. This therefore was found to be a constraint to digital distribution growth in South Africa.

6.2.7. *Conclusion: Impact of Broadband Internet availability and accessibility as the foremost enabling or constraining factors*

The research concluded that based on the almost unanimous and most often cited mentions (14) of broadband internet as a constraining or enabling factor to digital distribution, the proposition that broadband internet availability and accessibility are the foremost enabling or constraining factors to digital value distribution and value capture in South Africa, is true. The availability and accessibility of broadband internet is certainly a necessary and sufficient condition as stated by Simon (2004) to digital distribution and value capture.

However, the researcher also found that even if broadband was accessible and available, other factors including customer attitudes and requirements, the availability of metadata databases and payment platforms, industry technological know-how, education and industry legislation played a crucial role in the enablement of digital distribution growth and value capture in South Africa.

6.3. Digital Technologies have shifted the power and control dynamics for value distribution and value capture away from traditional players to new players in South Africa

The record labels have been the incumbent power brokers in the traditional, physical value chain (Goldstuck, 2010), however the proposition explored was whether they continued to wield power in the new digital distribution chain in South Africa or whether there were new power-players instead. These issues are explored in detail in the sections below.

6.3.1. *Power of the Record Labels*

In the literature, Premkumar et al. (2003), Lewis et al. (2005) and Graham et al. (2004) all assert that power and control in the music industry are determined by ownership and control of music copyrights (intellectual property), distribution infrastructure and access to value capture mechanisms. Their control of the intellectual property however is mitigated by the growth of illegal sharing networks which undermine their capability to exploit these copyrights according to Bhattacharjee et al. (2009) and Premkumar et al. (2003).

The research study found that record labels in South Africa still wield a great deal of power in the physical distribution chain and although the sales from this value chain are declining rapidly, genres such as Gospel which is the largest genre in South Africa continue to sell primarily in physical format. The traditional record labels continue to be a major force in marketing and financing due to the organisational and financial capacity that they wield. Additionally, the major record labels continue to control a majority of the copyrights and intellectual property around sound recordings which means that they can determine when and how these are distributed.

However, it was also found that the record labels were diminishing in their power given the drastic reductions in the market capitalisations, turnover, profitability and the industry consolidations that were taking place. Therefore it was concluded that record labels were no longer as powerful as they once were in the music industry.

6.3.2. Power of Publishers and Songwriters

Songwriters' rights, through their publishers, have always been better protected under the law than the rights of performing artists and the sound recordings owned by the record labels according to Lewis et al. (2005).

The research found that it was thought that songwriters in South Africa and their publishers would continue to retain their control over their compositions, whose revenue growth is not just dependent on declining mechanical royalties from the sale of sound recordings but from other music usage-related royalty streams such as synchronisation in motion picture films, advertising and other media. There was a feeling that the composition would once again take centre stage in its importance. Therefore it was found that the rights and power of songwriters and publishers was unlikely to change much in the digital dispensation.

6.3.3. Power of Technology Platform Providers and Retailers

In the literature, Pappagianides (2005) advocates the importance of the role of the digital aggregator or retailer in the new digital value system, not only because of the economies of scale that they provide but also because they understand the technology platform required for digital distribution.

The research data showed that technology platform operators were seen as having rising importance and control in the digital music industry value chain. The power of the platform operator was found to stem from their relationship with the customer and a sense that

“whoever owns the customer is king” according to a number of interviewees. This ownership of the customer also arose from the direct billing relationship between the customer and the platform operator which gives the platform operator access to customer data on tastes, preferences and access to the customers’ wallet. The research concluded that in South Africa, the most powerful retailer therefore is the mobile network itself because it indisputably controls both the relationship with and the billing of the customer.

6.3.4. Power of Telecom Operators

In the literature review, Swatman et al. (2006) recognised that regardless of the type of online business model or portal employed, many portal operators still needed the support and cooperation of the internet service providers, telecommunications network or mobile operators in order to deliver digital music. Graham et al. (2004) further explained that since the traditional record labels did not own or operate digital distribution networks, they had therefore lost control of a significant determinant to their power. Graham et al. (2004) and Lewis et al. (2005) asserted that scarcity in the distribution channels of the traditional physical distribution system was the way in which the record labels profited from distribution.

The research found strong evidence pointing to the fact that the telecommunications operators, and mobile operators - MTN and Vodacom in South Africa more specifically, would continue to grow in scope and importance as broadband internet and digital distribution became more accessible and affordable in South Africa. According to the interviewees, this is because they own the digital delivery channel, the billing interface with the customers, the pace of infrastructure roll-out of broadband internet infrastructure and internal digital distribution portals. An interviewee went as far as to say that in effect the mobile operators were able to enforce a new type of “scarcity” which would be the source of their economic power.

The research also uncovered that the mobile operators in South Africa currently derive a very small percentage of their billion rand revenues from digital distribution of music and

entertainment therefore they do not allocate sufficient resources to it at this time when voice revenues and data revenues continue to constitute a much larger portion of their income at present. However, their capability to wield significant power in the digital music distribution model was undisputed according to the results of the research. Therefore the research concluded that the evidence above puts them on the scene as the new power players in the digital distribution system.

6.3.5. Power of Consumers

The literature showed that consumers' power has increased significantly in the digital distribution chain as consumers have more access to more content than ever before at lower prices and even for free according to Wolf et al. (2007). It is for this reason, according to Berman et al. (2011), those device manufacturers and content aggregators are allocating greater portions of their budget to offerings that actually improve the customer experience. Digital distributors and participants are therefore concentrating on opportunities that provide a friction-free experience (Oestreicher & Kuzma, 2009). A friction-free experience is that experience which permits the customer to access their favourite musical experience on any device, at any time and in any place.

This is consistent with the outcomes of the research that shows that interviewees perceived customers to be more empowered when making choices about the way they want to purchase, use and manage their media. This greater choice for the consumer gives him a great deal of power over what he chooses to consume, how he consumes it, where and why. The research showed that historically the South African music industry had dictated such things to their consumers and listeners through radio airplay and promotion, however through the use of digital channels, the consumer can now dictate to the industry what he/she wants to listen to, when and how particularly using social media tools such as Twitter, Facebook and so on. The data also highlighted the fact that younger audiences are seen as far more techno savvy, requiring the industry to meet them where they are and increasingly using smart phones. The research found that the perception is that consumers are looking for music solutions that permit them to access their entire collection at any time, in any place and on any device.

Therefore the research concluded that consumers are far more powerful than ever before in the digital distribution value system.

6.3.6. Power of Artists

Frیده et al. (2011) stated that the internet and digital technology were touted to change the power and control of artists by giving them the capability to interact with their audiences, cutting out middle men and transacting directly with their customers. Bhattacharjee et al. (2011) supposed that ultimately all intermediaries would be displaced and linkages between entities and consumers would be re-configured in new ways. However, Simon (2004) does point out that the success of any electronic commerce strategy is premised upon both business users and their consumers being trained, educated and encouraged to utilise the technology and adopt it.

In South Africa, however, the research showed that this was not the case. Artists, apart from a few like DJ Cleo, were largely unfamiliar with the technology and models required to distribute their music through digital distribution channels. As such, they still needed to utilise intermediaries in order to distribute and receive payment of their music to their audiences. The other problem that the internet continued to present for artists in South Africa is that unless they are able to differentiate and market themselves differently than all the other musicians utilising digital distribution methods, they are unlikely to make a significant impact on consumers whose attention is absorbed by many other alternatives. Therefore the research found that artists' power in South Africa remains fairly low despite the advent of digital technologies.

6.3.7. Conclusion: Shift of Power and Control from Traditional Industry Players to New Industry Players

Although record labels retain their dominance in the physical value chain, as much as it still exists and is declining, record labels power is being challenged by the skills required by the

new technology, the declining revenue base from physical sales, the law that does not support the collection of royalties from digital performances and weak intellectual property enforcement, especially around piracy and illegal file sharing.

The industry is seeing the rise of new power brokers in the digital distribution value system. The power of the new players, most notably the mobile operators and the technology platforms, stems from their control of the choke point of digital distribution – the line speeds and bandwidth available on the network for downloads or streaming services - as well as their customer billing capabilities.

Consumers are also increasingly able to demand that their needs be satisfied because of the broader choice of options that they have available to them. Their power therefore has risen to a great extent. While the power of artists, should be changing but is not.

Therefore the research proposition stating that digital technology is resulting in a shift of power from traditional industry players (record labels) towards new industry players (telecom operators) is largely true.

6.4. Digital Distribution and Value Capture Models that Have Worked in the Developed World Are Not Suitable for South Africa

Although digital distribution models like iTunes and more recently Spotify have been very successful in developed countries (Wolf & Wheelock, 2007), the proposition was that these models would not be suitable for South Africa because of technical and societal factors that differentiated South Africa as a developing market from these developed markets, particularly infrastructure availability and local societal attitudes, perceptions, education and skills. The suitability of each model is analysed in the sections that follow.

6.4.1. *The Download / Ownership Model*

The literature shows that the legal downloads business has been a growing business since Apple introduced iTunes in 2003. Digital channels now account for 25% of overall recorded music revenues worldwide and that figure is growing year on year (Lawrence, 2010; Rogers & Sparviero, 2011; Shelley, 2012). This model in particular runs over-the-top of a broadband internet connection and is therefore also called an over-the-top (OTT) downloads service as opposed to the mobile-bearer related download service which will be analysed in greater detail below. A credit card or a voucher would be required in order to make payment for the transactions performed online on a pay-per-download basis. Recent research, however, has also shown that the 'per download' service fee, generates a sub-optimal profit compared to a lump sum payment or a percentage of profit payment (Lawrence, 2010; Rogers & Sparviero, 2011). This model is also known as the ownership model since the content is transferred from the server to the consumers' device after the transaction has been concluded. This model assumes a traditional customer buying behaviour which may no longer be relevant, where the customer purchases and owns the music and stores it on their devices (Bhattacharjee et al., 2009). This stands in contrast to the access model which will be discussed and analysed next.

The research data shows that the world's foremost download or ownership model, iTunes, does not currently operate in South Africa. However the data also showed that the OTT download distribution model is currently the most commonly employed digital distribution model in the country with 12 internationally recognised download services currently operating in the country and a few of others that operate locally only. The research reflected the understanding that the OTT download model in South Africa appeals to a higher income customer that has access to a credit card, bank account or Paypal in order to pay for their purchase of the track. The major constraint to the viability of this distribution model was found to be the availability and accessibility of good quality, correctly priced broadband internet bandwidth that would be likely to be delivered over the mobile network.

The research also showed that the interviewees perceived the OTT download model to be cumbersome and impractical in the long run due to the storage space, transportability,

transferability and cataloguing difficulties for each individual owner of the music. Most interviewees felt that although the OTT downloads model would persist into the future, they felt it had a limited lifespan. The research also ascertained that while the download model would probably continue into the future, the pay-per-track business model most often associated with it, would likely die away sooner rather than later. Figure 3 below depicts the value process for the OTT download model value process.

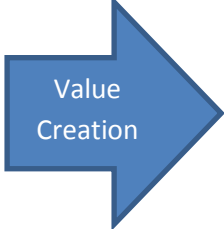
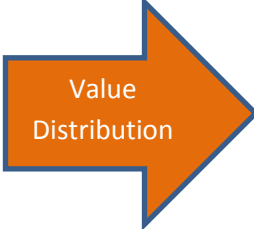
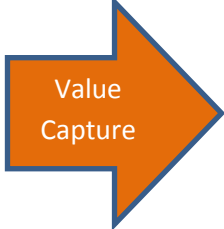
Key Business Model Factors			
Intellectual Property	Digital music	<ul style="list-style-type: none"> - Negotiate licensing of music with Record lables - Obtain pre-digitised music - Package the songs into value bundles - Market the value bundles / songs 	<ul style="list-style-type: none"> - Pricing the songs / value bundles e.g. 99c per song - Pay per download model
Delivery Infrastructure	Fixed line broadband internet OR Mobile broadband internet	<ul style="list-style-type: none"> - Software application downloaded onto customer device OR - Web-based portal - Download / ownership delivery model 	<ul style="list-style-type: none"> - Bandwidth package purchased - Usage-based metering for the bandwidth / Fixed fee for unlimited consumption
Payment Infrastructure	Credit Card payment gateway	<ul style="list-style-type: none"> - Easy, intuitive, safe, secure, trusted transaction with guarantees 	<ul style="list-style-type: none"> - Credit card transaction OR - Payment gateway e.g. Paypal

Figure 3: Value Process Model for the Download Model

6.4.2. The Streaming/Access Model

The streaming / access model also known as the audio-on-demand model is one where the audio file never resides on the consumers' device but is accessible to them for their use 'on demand' (Wolf & Wheelock, 2007). Spotify, is the most well-known of the global streaming services available. This model is also premised upon the accessibility and availability of sufficient and consistent broadband internet bandwidth (Premkumar, 2003). Therefore this is also known as an over-the-top model. However, the most significant difference between the download model and the streaming model is that the former involves ownership of the track while the latter involves simply licensing the track. A debate has been raging about whether the licensing or the ownership model are best for consumers, distributors and content owners. The licensing argument, however, seems to be winning the day (Shelley, 2012).

The research ascertained that the OTT streaming model such as Spotify was by far the model that made sense to all the industry experts, even in South Africa. However South Africa has very few streaming models that are currently implemented and working except for SimfyAfrica which was launched during September 2012. SimfyAfrica is the first streaming service of its type with a broad similarity to Spotify. The only other streaming services are the online radio stations which are supported by the traditional broadcaster model based on advertising.

The research found that the streaming services were more popular due to the payment options which were fixed fee guaranteeing unlimited content access for a fixed fee. However the challenge with these OTT streaming services in South Africa once again was the broadband access dilemma. This OTT model is hamstrung by the same bandwidth quality, availability and accessibility constraints as the download model. Once again, the research viewed the target market for this service as the higher income groups who can afford such services and whose mind-set predisposes them to the consumption of 'on-demand' services. They went as far as to compare the target market for OTT streaming services with the DSTV premium television

consuming market because they already had a category and an understanding of streaming through the video on demand services offered by DSTV. Figure 4 below depicts the value process for the oTT streaming model value process.

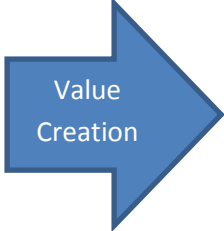
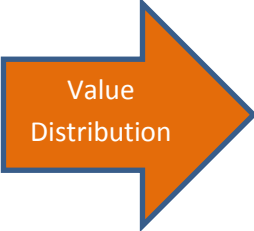
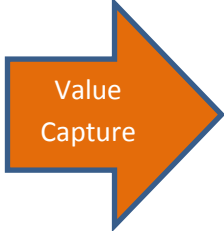
Key Business Model Factors			
Intellectual Property	Digital music	<ul style="list-style-type: none"> - Negotiate licensing of music with Record lables - Obtain pre-digitised music - Package the songs into value bundles - Market the value bundles / songs 	<ul style="list-style-type: none"> - Fixed monthly pricing e.g. \$10 per month - Unlimited consumption per fixed fee
Delivery Infrastructure	Fixed line broadband internet OR Mobile broadband internet	<ul style="list-style-type: none"> - Software application downloaded onto customer device OR - Streaming access, non-ownership model 	<ul style="list-style-type: none"> - Bandwidth package purchased - Usage-based metering of the bandwidth / Fixed fee for unlimited consumption
Payment Infrastructure	NONE OR Credit Card, EFT, Debit card payment gateway	<ul style="list-style-type: none"> - Easy, intuitive, safe, secure, trusted transaction with guarantees 	<ul style="list-style-type: none"> - Credit card transaction OR - Payment gateway e.g. Paypal - EFT - Mobile billing - Other

Figure 4: Value Process Model for the Streaming Model

6.4.3. *Mobile Distribution*

In the literature, Donner et al. (2009) and Paggiannidis et al. (2007) showed that internet users in the developing world would ultimately be mobile centric. This is because of the rapid diffusion rate of mobile as compared to fixed line infrastructures and also because of South Africa's high penetration of mobile telephony services which are giving an early indication of the way in which urban and rural populations will approach the mobile internet for educational and entertainment services (Shelley, 2012). Swatman (2006) also shows that telcos and mobile operators in particular are becoming significant players in presenting digital music portals which are competing with the over-the-top (OTT) portals and services. The mobile operators have built up an ecosystem of content aggregators that license and supply the content while also supplying and operating the technology required for the content distribution system across their networks (Donner et al., 2011).

The data from the study showed that mobile internet access methods are most likely to be the primary methods of access, therefore mobile network related digital distribution models are more likely to be prevalent in South Africa than PC-based fixed broadband models given that mobile is the most ubiquitous form of ICT available. The study also showed that mobile related services, would most likely be the bearer related downloads or streaming models rather than the OTT services given the bandwidth constraints that will continue for a while given the non-ubiquity of LTE, 3G and other broadband internet models in South Africa. Research showed that mobile distribution was going to continue to be popular because the mobile billing option is the most viable for customers who are under-banked which is the mass of South Africans.

The research showed that currently in South Africa, the most commonly utilised downloads model utilises the mobile network bearers to deliver the digital music file to the customers' handset. The over-the-top (OTT) download model is a lot less utilised given that most people do not have access to broadband that can download fast enough and broadband tends to be quite expensive. Therefore most South Africa download services are not accomplished currently using an OTT download model like iTunes but are rather heavily weighted towards a mobile network bearer modes. The mobile bearer download model was seen as the most

viable for the lower income groupings, which are the majority of South Africans. They are perceived to prefer the mobile related multi-bearer services because they are easily accessible and can be exploited using mobile billing from their mainly prepaid airtime.

OTT streaming services are new in South Africa and mobile-bearer based streaming services are currently unknown in South Africa. Therefore these are models which are yet to be tested and tried broadly. The research concluded that mobile-bearer download distribution models would most likely be the most prevalent form of digital downloads in the future. Figure 5 below depicts the value process for the mobile-bearer related value process.

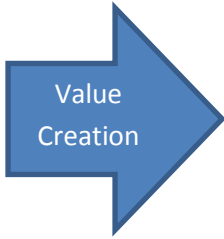
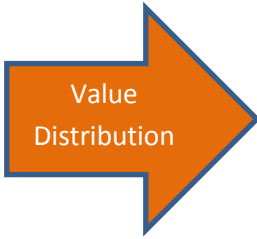
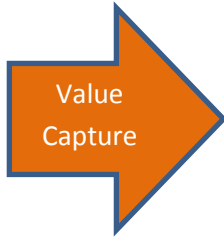
Key Business Model Factors			
Intellectual Property	Digital music formatted for each type of delivery channel	<ul style="list-style-type: none"> - Negotiate licensing of music with Record labels - Obtain pre-digitised music - Package the songs into value bundles - Market the value bundles / songs 	<ul style="list-style-type: none"> - Pricing the songs e.g. R10 per song - Pay per download model
Delivery Infrastructure	Mobile Bearer Network	<ul style="list-style-type: none"> - Network-based capabilities e.g. WAP, IVR, SMS, WIG etc 	<ul style="list-style-type: none"> - Ordinary Mobile contract for voice services - Music download service is a mobile value added service (MVAS)
Payment Infrastructure	Mobile Billing Platform	<ul style="list-style-type: none"> - Deducted from prepaid or postpaid airtime 	<ul style="list-style-type: none"> - Mobile billing using airtime

Figure 5: Value Process Model for Mobile Model

6.4.4. *The Hybrid Model*

Premkumar (2003) proposed six possible digital distribution strategies but stated that more than one of these strategies were likely to coexist together. Research has also shown that a mixed service model which incorporates a download fee and a subscription fee is optimal and can better capture the broader market of consumers who prefer to subscribe and others who prefer to pay per unit. It is surmised that this mixed service model may lead to higher profit margins for the digital retailer as a whole (Papagiannidis & Berry, 2007).

The research actually found that in a market with a range of different niche markets and income groups such as South Africa, the most likely outcome would be a hybrid model which would accommodate the download and streaming models as well as the pay per track and fixed subscription payment models in order to cater to the diversity of LSMs in South Africa.

6.4.5. *Monetisation Models*

Pikas et al. (2011) and Kunze et al. (2007) showed that consumers are increasingly becoming accustomed to obtaining their music for free. Two favourite methods of monetisation include a fixed monthly subscription fee or alternatively from indirect income streams such as advertising. Shelley (2012) favoured a fixed fee for unlimited consumption model as the way of the future, while Swatman (2006) favoured the advertising based indirect income model.

The research found that South Africans with lower average incomes than their developed nation counterparts have become used to free consumption through offline methods such as radio and online methods such as YouTube. Therefore, they may not easily adapt to paying for digital music content no matter how it is delivered. The data showed that both value capture models indicated above – fixed fee for unlimited consumption and indirect income streams such as advertising - were possibilities for the South African market. However the prevalent

view was that monetisation in the industry would like come from indirect income streams such as advertising, live concerts, synchronisation licensing, branding, merchandising and so on. The prevalent view seemed to be that the trend is towards consumers getting their content for free and value capture happening through other activities.

6.4.6. *Intellectual Property Issues*

In the literature, Simon (2004) stated that intellectual property rights had been crucial in providing the security and trust that permits content creators to trade their ideas, assured that they would get a commercial reward for their efforts. Yet the nature of digital content made it such that this was very difficult. Curtis (2005) and Jordan (2004) showed in the literature that the issue of intellectual property rights is of primary importance to developing nations since if they cannot actively police and prosecute copyright infringements within their borders, the originators of content would never earn a return to justify the original investment in their content development. Therefore Simon (2004) was advocating for the development of workable frameworks in order to address this matter.

The research found that the Copyright legislation in South Africa had fallen far behind the developments in the industry. The interviewees felt that government would need to be persuaded to step in and legislate a number of issues, including a fixed fee access charge and a single collection society with the relevant legal powers to enforce penalties, in order to ensure the financial viability of the industry as a whole. The data showed that a policy intervention was required in order to create a conducive environment for digital music distribution in South Africa. This intervention included updating the copyright law as well as promulgating codes of practise in the industry regarding revenue collections from digital retailers. This is consistent with the theory provided by Simon (2004) in his critical success factors framework.

6.4.7. Conclusion: Digital Distribution and Value Capture Models for South Africa

The research has therefore found that the over-the-top models – both download (such as Apple iTunes) and streaming models (such as Spotify) – would have limited applicability in the South African market given the broadband internet infrastructure challenges as well as the payment mechanisms that appeal to a higher income customer than a lower income customer. In the higher income segments, the download model is likely to die away and be replaced almost completely by the streaming model with a fixed fee for unlimited content model.

The research also concluded that the models that are working and would continue to work for the majority of lower income South Africans would be the mobile-bearer centric download models, which primarily utilise the mobile bearers or are capable of downloading on extremely constrained, poor quality bandwidth. Mobile billing is the key value capture mechanism that is most likely to work for these lower income market segments.

The research showed that, given the trend towards content for free, consumers are unlikely to continue to favour the direct monetisation methods and the industry is likely to gravitate towards indirect monetisation methods such as advertising and merchandising and live performances to make the mass of their income in the long run.

Finally, the research showed that no single model would work for the entirety of the South African population, but a hybrid of models would be most likely to address the diverse requirements of the market.

Therefore, the research proposition that states that digital distribution and value capture models such as iTunes and Spotify, will not work in South Africa in their current developed world format, is found to be false for a limited, high income grouping but is found to be true for the larger group of lower income South Africans.

6.5. Towards a Digital Distribution and Value Capture Model for the South Africa Music Industry

Given the research outcomes described in Chapter 5 and the research conclusions reached in the sections above, this research paper concludes by proposing two models for application within the South African music industry and beyond. The first model is an enhancement to Simon's (2004) Critical Success Factors model. This model examines the pre-determining factors for the launch of a viable and successful digital distribution and value capture model in the music industry, video, film or gaming industry, in any developing nation. The second framework is the Digital Value Distribution and Value Capture framework which assesses the appropriate digital distribution model given income and bandwidth as variables. This model has specific application to the South African music industry only.

6.5.1. The Enhanced Critical Success Factors Model

Simon (2004) devised a generic model that described the Critical Success Factors for electronic commerce in a developing country and these comprised of technical success factors and societal success factors. After the outcomes of the research process carried out in this study, the researchers would like to propose an enhanced Critical Success Factors model.

This enhanced model is likely to be applicable to the music industry and other bandwidth intensive, licensed content industries including video, film, television and gaming in South Africa and any other developing country with similar demographics. The enhanced Critical Success Factors model as seen below sets out the pre-conditions to launching a commercially viable and successful digital distribution model for music, video, film, television and gaming.

This model may be utilised by a local or international commercial entity that is looking at launching a digital distribution service in a developing region or country. The entity

would use the model to assess the region or the country in light of each of the success factors. The objective of the assessment would be to ascertain the readiness of the region or market for the launch of such a service.

Alternatively, this enhanced model can be utilised by government or any of its regulatory arms to evaluate and decide on policy priorities that need to be enacted in order to create an environment that stimulates and is suitable for electronic commerce of the type contemplated within this paper.

The enhanced model, like Simon’s earlier model, is split into technical factors and societal factors with the technical factors being the necessary and sufficient condition upon which the other factors are premised. Table 25 below summarises the Enhanced Critical Success Factors model.

Critical Success Factor	Description
Technical Success Factors	
Broadband Internet Infrastructure	<p>The availability, accessibility and proliferation of broadband internet, which is deemed to be an internet connection with speeds in excess of 100Kbps must be assured.</p> <p>Availability refers to the ability of the intended customer to access the service if so desired whether via mobile connection or via fixed connection.</p> <p>Accessibility refers to both the technical and commercial capability, by the customer, to attain the service without undue hindrance.</p>
Appropriate (open) payment infrastructure	<ul style="list-style-type: none"> • An open payment infrastructure refers to generally accepted, trusted and legal electronic tender that can be utilised in exchange for access to the service (Simon, 2004). • The service must be perceived by the potential

	<p>customers to be useful and easy to use as per the Technology Acceptance Model (Davis, 1999)</p> <ul style="list-style-type: none"> • Mobile billing should be negotiated and ought to be a payment option that can be made available as widely as possible (Swatman, 2006)
Metadata (shared / open) databases	Open and accessible, standardised, national or regional databases that contains all the biographical and administrative information relating to musical content developed by South Africa, African and international artists such that the administration of royalty tracking and payments as well as legal compliance is made easier.
Societal Success Factors	
Legislation and Standards	<ul style="list-style-type: none"> • An updated Copyright Act which clearly defines all types of copyright for the relevant industry • A deregulated telecommunications environment which caters for open competition and a strong and effective regulator and / or anti-competition tribunal • Technical and commercial standards or codes of good practise that encompass technical and communications practise in the market.
Intellectual Property and Licensing	<ul style="list-style-type: none"> • Clear Intellectual Property Rights legislation with enforceable protections • A proactive blanket licensing regime that integrates and covers traditional and next generation technology licensing practises clearly in order to ensure that content creators are paid.
Education	Certified and standardised industry and government accredited education programmes addressing the technological, commercial and social aspects of implementing digital distribution models.
Business and Government Awareness	Managerial and government awareness campaigns that aid to acclimatise business and government heads to the key issues that must be confronted and dealt with when implementing digital distribution platforms.

Consumer Protection	Consumer protection and privacy legislation and codes of good practise that ensure that consumers are protected and have legal recourse should their trust be betrayed by service providers.
Taxation	Clear tax regulations regarding domicile, jurisdiction, payment, producer and seller liability, product warranty, consumer protection, financial regulation and fraud prevention Strong commercial and tax incentives for digital distribution companies to be based in South Africa rather than outside of South Africa while offering services to South African customers.

Table 25: Enhanced Critical Success Factors Model

6.5.2. The Digital Value Distribution and Value Capture Framework for the South African Music Industry

In addition to the enhanced critical success factors model defined above by which a commercial organisation or a government entity can assess the suitability of the environment for the implementation of digital distribution and value capture models, a further framework is proposed within this research specifically for the music industry in South Africa. This framework is designed for use by a commercial entity that is looking to enter the digital distribution service space in South Africa and needs to know what value distribution and value capture models are likely to succeed in a specified market space based on income and bandwidth availability.

Given the diversity of customer profiles, requirements and income brackets, the research concluded that there would not be ONLY a single model that would be suitable for the entire South African market. Therefore the research paper proposes a framework that could aid in selecting the most suitable digital distribution and value capture models given different income segments. This model sets income or LSM grouping on the y-axis, against availability, accessibility and quality of bandwidth on the x-axis. Availability, accessibility and quality are categorised under the single term ‘constrained’ or ‘unconstrained’ bandwidth. The framework then presents four quadrants that describe the type of digital distribution and value capture model that

would be suitable for that income grouping subject to their bandwidth constraints or lack thereof. Although the model depicts four distinct quadrants, the researchers acknowledge that there is scope for enhanced hybridity even among the four models described herein. The degree of hybridity would be determined by a specific mapping exercise that would take into account the specific income ranges or LSM groups under consideration and the average bandwidth pipes available to them as different groupings. The diagram below, however, depicts the general model with descriptions of each quadrant below.

High Income /High LSM	Value Distribution Model: Over-the-Top Download/Ownership Service (e.g. Apple iTunes) Value Capture Model: Pay-Per-Download	Value Distribution Model: Over-the-Top Streaming / Access Service (e.g. Spotify) Value Capture Model: Flat Rate Subscription / All-U-Can-Eat
Low Income / Low LSM	Value Distribution Model: Mobile Bearer Download Service (e.g. ringtones / ring-back tones) Value Capture Model: Advertising Supported	Value Distribution Model: Mobile Bearer-based Streaming Service (e.g. IVR-based streaming service) Value Capture Model: Time-based Flat-rate Subscription
	Constrained Bandwidth	Unconstrained Bandwidth

Figure 6: Digital Value Distribution and Value Capture Framework for the South African Music Industry

6.5.2.1. The Green Quadrant (Low Income / Constrained Bandwidth)

The Green Quadrant of the framework proposes that low income customers who have constrained broadband internet at their disposal, but who have access to mobile telephony services, should be serviced using a mobile-bearer related download service. This service utilises the normal voice channels in order to deliver the music. This is the service that is normally used to deliver ringtones and ring-back tones on the mobile networks. The appropriate payment method in this case would be for the customer to receive the download for free and the digital distributor and mobile network can earn income using an advertising supported model which they share.

6.5.2.2. The Blue Quadrant (High Income / Constrained Bandwidth)

ON the other hand, if bandwidth is constrained and the customer is a high value customer who has some access to broadband internet but it is somewhat constrained, the appropriate model for this customer is the over-the-top (OTT) type of download or

ownership service such as iTunes. This service has a great deal more features and flexibility than the first one but is unlikely to support a good streaming service, so a download model, (even if the download takes a little longer) will still provide a satisfactory service. The appropriate payment mechanism in this regard would also be a pay-per-download model which can be recovered using a multiplicity of payment platforms including Electronic Funds Transfers, credit card payments, mobile billing or a payment gateway such as Paypal. This higher LSM customer is likely to have one or more of these payment methods available to him.

6.5.2.3. The Orange Quadrant (Low Income / Unconstrained Bandwidth)

If bandwidth is unconstrained (in terms of pricing, accessibility and availability), then the low income customers can have access to a mobile-bearer related streaming service where instead of downloading the tunes, they have access to a more dynamic service which permits live-streaming of the music and a wider catalogue of music to choose from. This service could be offered at off-peak hours on the network when carrier capacity is more readily available and this service could be charged as a daily, weekly or monthly subscription, recovered from the mobile airtime of the subscriber.

6.5.2.4. The Yellow Quadrant (High Income / Unconstrained Bandwidth)

Finally, where bandwidth is unconstrained and the customer is a high income customer, the most appropriate service would be the over-the-top streaming/access service where the value capture mechanism is subscription based and can be effected using a multiplicity of payment platforms due to the nature of the customer.

These frame-works are derived from the literature in Chapter 2, the data in Chapter 5 and the findings of Chapter 6. They seems to correlate with the findings of the research report, however they need to be tested through further research and validation. Having, achieved

what the research set out to achieve, the following chapter presents some closing implications and recommendations.

Chapter 7

7. Conclusion and Recommendations

This chapter summarises all the findings of the research with reference to its achievements of the original aim. It further highlights the contributions that this research has made to the existing academic literature, offering recommendations for participants in the music industry including government. The chapter concludes by offering recommendations for future research.

7.1. Summary of Key Findings from the Research

This study took the form of an exploratory investigation into the impact of digital technologies on the value distribution and value capture aspects of the South African music industry. The aim of the study was to investigate the state of the current South African music industry, the impact of digital technology on its key players and the value distribution and value capture models being utilised therein. This evaluation was done in light of South Africa's limited broadband infrastructure penetration levels and bandwidth constraints.

The objective of this investigation was to ascertain whether the digital value distribution and value capture models implemented in developed countries were suitable for the South African music industry context or not. The final intention was to propose a South African digital music value distribution and value capture model. The four key findings of this study, which are described in detail in Chapter 6, are briefly re-stated below.

7.1.1. Impact of digital technology on value distribution and value capture

The study concluded that, in South Africa, digital technology has thus far had little impact on the value capture aspects of the music industry with digital sales failing to

replace rapidly declining physical sales. However in contrast, it was also found that digital technology had already had a significant (though negative) impact on the value distribution aspects of the industry given that digital technology has caused the significant acceleration of illegal file sharing especially among younger market segments.

7.1.2. Broadband internet as the foremost enabling or constraining factor on digital distribution

The research study also found that the availability and accessibility of broadband internet is indeed the foremost enabling or constraining factor to the implementation of viable digital distribution models in South Africa. However, the study further found that even if bandwidth was not a constraining factor, there are a number of other significant factors including the availability of shared metadata databases, open payment platforms, industry education and training as well as a key focus on customer requirements that enable or constrain a viable model.

7.1.3. Power shifts from traditional players to new players

A third key finding from the study was that digital technology has caused power to shift from the traditional players (record labels) towards new players who consist of the technology platform operators and the mobile telecom operators in particular. This is true in the digital value chain although power in the traditional physical value chain remains with the record labels which still control physical distribution.

The key determinants of power are the ability to control the distribution systems as well as the control of intellectual property and payment platforms. The control of intellectual property in the digital realm was found to be problematic given the outdated copyright law in South Africa as well as illegal file sharing networks that bypassed formal channels. However, the mobile operators in South Africa, were found

to be effectively controlling the digital delivery channels which makes them powerful in the digital value chain.

7.1.4. International models not suitable for South Africa

A final key finding from the study ascertained that digital distribution models utilised in the developed world would not, in their current format, be entirely suitable for the South African market. Although there was a great deal of excitement about streaming / access models such as Spotify and even Apple iTunes download type models, these models are largely dependent on good bandwidth and low bandwidth pricing being available. It was found that such models would only be suitable for the higher income brackets in South Africa but the mass market would continue to depend largely on mobile-based distribution channels.

7.1.5. Refined Critical Success Factors Model and Income / Bandwidth Digital Model Framework

The study culminated in two models being proposed in section 6.5 of Chapter 6. The first model is an enhancement of Simon's (2004) model which looks at the Critical Success Factors for electronic commerce in developing markets. The refined model looks at specific technical and societal success factors applicable to the digital music industry in South Africa as a developing market. This model can be extrapolated to cover other bandwidth intensive and licensed content industries such as video, film, television and gaming. This model is suitable for use by a commercial entity looking to implement a digital distribution model in a developing territory or alternatively a government institution seeking to create a policy environment conducive to electronic commerce in the media and entertainment industries.

The second framework proposed a method for deciding which digital distribution and value capture models would be applicable to the different income segments in South

Africa given situations of constrained or unconstrained bandwidth. The framework proposed four different models for each of the four combinations of income and bandwidth availability. This framework could be utilised by a commercial entity looking to develop a distribution or value capture model to service a specific income segment of the South African population.

Both these proposed models are open to further research, validation, refinement and enhancement.

7.2. Recommendations for the Music Industry Participants

Digital technology is here to stay and its impact on the South African music industry will continue to be magnified rather than diminished as the communications infrastructure proliferates. However, as the study has shown, very little industry effort has been effected towards developing localised models that will be suitable for the South African environment.

Therefore, all industry players, from content creators, developers, marketers, distributors and retailers need to take a long-term view to developing industry-wide solutions for the digitisation and commercialisation of music. The government needs to become more active in ensuring that legislative issues surrounding the digital space as well as intellectual property rights are addressed as a matter of urgency. With this in mind, the research therefore outlines a number of recommendations and considerations for music industry participants and legislators to incorporate into their activities going forward.

- Government needs to heed the call to update the Copyright legislation and learn from experiences and developments in other markets (such as France and Canada) surrounding the prioritisation and treatment of intellectual property rights. This is crucial to the implementation of a flourishing digital distribution environment in South Africa that benefits both the consumers and developers of content.

- Alongside the development of appropriate legislation, is the issue of enforcement of that legislation. This involves creating penalties for copyright and intellectual property infringements. Unless enforcement of legislation can take place, the legislation will always be weak.
- The Department of Communications alongside the Communications Regulator, ICASA, need to enforce policies and codes of good practise specifically for the Significant Market Powers (SMPs) such as Vodacom and MTN that encourage them to reticulate broadband internet networks nationwide for every community with affordable pricing in order to encourage the consumption of digital content. ICASA also needs to ensure that these networks do not use anti-competitive behaviour to stifle competition from other content aggregators, distributors and retailers who are not internal to their organisations.
- Current participants and potential players in the digital space need to gain a deeper understanding of the South African consumer, his requirements and challenges and then develop customised South Africa solutions around the customers' consumption patterns rather than trying to dictate to the market. This understanding can only be gained by conducting deep research into the customer base. In line with this recommendation, the market needs to be segmented appropriately and digital service providers must not assume a "one-size-fits-all" policy to their digital distribution solutions.
- Music business educators and schools need to equip themselves to understand and educate the industry on the dynamics of the digital industry as there is a significant void in this area. This may mean developing partnerships with international schools such as Berklee College in the United States which has a significant competence in the area of music business and digital strategy.
- Government needs to allocate greater budgets towards developing educational programmes of all types in this sector.
- All industry participants from individual artists, to business and government need to attend training courses and educational seminars to assist them to get to grips with both the technology and the commercial considerations brought about by the new technology.
- Record labels and other content owners need to invest time and finance toward digitising their catalogues. This starts by them changing their mind-set towards

digital distribution. They need to understand that unless they give the market a viable alternative to illegal sharing, this phenomenon will only get worse.

Therefore they need to invest key resources to ensuring that viable alternative models are developed and implemented.

- The industry needs to collaborate through industry associations and bodies to maintain standard databases which contain all the South African music metadata. This will ensure that all industry participants receive their royalties and that the complexity is taken out of the process of royalty administration in the digital arena.

These are the recommendations proposed to the industry, the policy makers and all participants. The next section looks at the limitations of this research.

7.3. Research Limitations

Firstly, although the exploratory research methodology utilised for this study may have given certain insights and a certain level of understanding about the structural changes that are taking place in the South African music industry, the research could not draw definitive conclusions about the future of the value distribution and value capture models described herein. Therefore it is imperative that this exploratory study be followed by a series of studies that look into specific aspects of this exploratory study that may not have been explored in sufficient detail.

Secondly, this study was confined to the South African music industry and did not consider the rest of the developing world, especially Africa, which may be facing similar challenges. Therefore the study may or may not be applicable to other developing world contexts and situations.

Thirdly, due to resource limitations and time limitations, the research study could only take place only in Gauteng (mainly Joburg and Pretoria), with a few telephonic interviews

conducted with three participants based in Cape Town. No face-to-face interviews were conducted with industry participants that are resident outside of Gauteng. The ability to observe facial expressions and body language in this type of research is crucial in obtaining thoughts, attitudes and feelings in this area of great uncertainty therefore this was a significant limitation of the study.

Fourthly, the size of the sample, once again, due to resource and time limitations, was smaller than initially envisaged. Access to significant role players in the industry was also limited and not all the industry experts that could have been interviewed were interviewed.

Finally, the sample of interviewees all presented answers to the questions from a personal perspective rather than an organisational perspective. Therefore very little reliable quantitative data from the organisations they work for could be obtained to verify some of the statements made.

The recommendations and limitations above, lend themselves to recommendations for future research which is addressed in the following section.

7.4. Recommendations for Future Research

The aim of the research was to gain a broad understanding of the impact of digital technologies in the South African music industry and explore the appropriateness of digital value distribution and value capture models for this industry. The findings of the study have therefore provided a number of opportunities for further research which are outlined below:

- Adoption and Diffusion theories address the changes in consumer behaviour towards the acceptance or rejection of a particular type of technology and its diffusion among a population. However, there is no study that has been conducted

recently in South Africa that examines the exact perspectives that inform consumer adoption of paid digital distribution models in low income markets versus free digital distribution models. This is an important piece of research in order to understand what low income consumers may be looking for in a digital content distribution service.

- A detailed enquiry into mobile, as a digital distribution medium, must be conducted. This research would explore the connection between the musical content and the customer's continued engagement with the mobile network.
- A study needs to be conducted that looks into the relationship between declining prices for digital content and the growing or declining supply of digital content. It has been argued that the declining turnover in the industry dis-incentivises creativity and leads to poorer quality musical products. This assertion needs to be further investigated and validated as this has a significant impact on the future of intellectual property rights.
- A study into the correlation between illegal sharing and recorded music sales should be conducted in order to examine whether there is a positive or inverse relationship between illegal sharing and the sale of recorded music. This would show whether sharing in South Africa has either a beneficial or a destructive effect on recorded music sales as has been asserted many times in the industry.

7.5. Conclusion

Generally, the study achieved its overall objectives as outlined in Chapter 1 and Chapter 3 by supporting the research propositions around the significance of the impact of technology on the music industry value distribution and value capture, as well as the power dynamics, suitability of developed world models and importance of broadband internet as an enabling or constraining factor for digital distribution. The in-depth interviews with the fifteen participants produced some significant insights which are presented in Chapter 5 and further analysed in Chapter 6. Most importantly, the research was able to answer the question of the appropriateness of developed world models for digital distribution in South Africa. A further success was the ability to propose two models for use in the South African music industry.

In conclusion, digital technologies are changing the South African music industry landscape and this change needs to be actively engaged by both the traditional and new players in the industry. In order for this change to present a win for consumers, content creators and the country as a whole, government, business and industry associations, need to work together to create a landscape that harnesses the benefits of digital technology while minimising its negatives.

Appendix

INTERVIEW GUIDE

Topic: A Model for Digital Value Distribution and Value Capture in the South African Music Industry

Interviewer: Dumisani N Nkala

Subject: -----

Role / Responsibility: -----

Organisation: -----

Date: -----

Start Time: -----

End Time: -----

Brief Industry

Background: -----

INFORMED CONSENT SECTION

As a part of the requirements of the Gordon Institute of Business Science (GIBS) MBA curriculum (a division of the University of Pretoria) I am conducting research on the impact of digital technologies on the distribution chain (value distribution) and monetisation (value capture) of digitised music products in the music industry value chain. I am examining and trying to understand whether models that have been utilised in first world countries for the dissemination and monetisation of digital music products will work in South Africa and what the enabling or constraining factors may be in this regard. This research is expected to further add to the body of knowledge around digital music in South Africa and will be fully owned by GIBS.

*Our interview is expected to last about thirty minutes, and will help us understand how far the South African Music Industry has come in relation to establishing a viable model for digital music. **Your participation is voluntary and you can withdraw at any time without penalty.** Of course, all data will be kept confidential. If you have any concerns, please contact me or my supervisor. Our details are provided below.*

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Signature of participant: _____ Date: _____

Signature of researcher: _____ Date: _____

INTRODUCTION AND BACKGROUND

What do you perceive to be the biggest changes in the South African music industry in the last five years? (3 mins)

Q2: "What is your current highest value product? Please rank in order 1-7

- Live performance
- Shop-based sale of CDs
- Revenue from royalties & licensing
- Revenue from digital downloads
- Revenue from ringtones
- Revenue from memorabilia
- Other - please specify

Tell me more about your top-ranked choice...." (5 mins)

Question 1: DIGITAL TECHNOLOGY DRIVER OF FRAGMENTATION AND DISTRIBUTION

Preamble: Digital technologies have transformed the recorded music product and they have had an equally profound impact on the structure of the recorded music industry itself. Value activities in the new digital music industry seem to be more disintermediated and fragmented. This is in opposition to a more structured, sequenced, static physical music industry structure.

Given the major processes for creating recorded music (Value Creation, Value Marketing and Distribution and Value Capture (monetization)), which sections of the South African music industry are most affected by digital technologies, how and why? (8 mins)

How are the functions and nature of the relationships between industry participants changing due to digital distribution technology in South Africa specifically? (5 mins)

Question 2: POWER AND CONTROL DYNAMICS

Preamble: The music industry's major record label participants have historically wielded firm control of the value chain's key elements of value dissemination and format. Digital technology has emerged as the most significant driver that is restructuring the power dynamic among the incumbent players, weakening their market control, although the incumbents are not conceding ground easily.

Has digital technology affected power and control dynamics in the South African music industry of the major record labels? Why or why not? (5 mins)

Who controls the South African digital value distribution chain – is it the same incumbents or new incumbents? How and why? (5 mins)

In the digital distribution models that are prevalent in South Africa, who largely controls the payment or monetization mechanisms? How and why? (5 mins)

Question 3: RELEVANCE OF FIRST WORLD DIGITAL DISTRIBUTION AND VALUE CAPTURE MODELS

Preamble: Legalised download systems are a growing business since Apple introduced iTunes in 2003. Yet many of the established digital music distribution and value capture models existing in a developed world context where broadband internet penetration is fairly high, the infrastructure is sound and where industry bodies play a very important part.

Do you think that models such as iTunes and Spotify (or any others you can think of) will work or are working for the South African industry? Why or why not? (5 mins)

How effective do you think mobile music distribution models are likely to work the best for digital distribution (value distribution) and monetization (value capture) of music in South Africa? Why? (5 mins)

Referrals who might know more on this topic that I could talk to? (2mins)

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