

A Business Model for the Digital Distribution of Music in the South African Context

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Abstract

Increased technological capabilities in the realm of independent audio production coupled with online trends of Social Media, e-commerce, m-commerce and user-generated content have created unique opportunities for content providers to use Web 2.0 as an innovative distribution platform for mass dissemination of content. Artists not contracted to a record company, who are able to produce low cost, high fidelity audio recordings, are able to utilise this web-platform to connect directly with consumers without reliance on record companies, who have traditionally retained control over production and distribution in the music industry.

This paper presents elements of an emerging business model which aims to re-architect the traditional value chain by linking artists and consumers directly through an Internet platform. A key component of the model is utilising new technologies and integrating existing service providers through webservices to provide an aggregated value-added service package to both artists and consumers in a cost-effective manner. The model is aimed at the South African market with the assumption that proposed ICT infrastructure upgrades will enable increased broadband Internet access at substantially lower cost. The model also aims to capitalize on the high mobile phone penetration in South Africa and utilise this as an additional distribution channel, particularly in rural areas.



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List of Abbreviations and Acronyms

3G: Third generation of standards for wireless communications

AAC: Advanced Audio Coding

AIRCO: Association of Independent Record Companies

API: Application Program Interface

ALCD: Artist-led/Consumer-driven

CGM: Consumer Generated Media

DRM: Digital Rights Management

FICA: Financial Intelligence Centre Act

HTML: Hypertext Markup Language

HTTP: Hypertext Transfer Protocol

ICT: Information and communications technologies

IM: Instant Messenger

IP: Intellectual Property

ISBN: International Standard Book Number

ISP: Internet Service Provider

LAN: Local Area Network

LSM: Living Standards Measure

MIDEM: Marché International du Disque et de l'Edition Musicale

NORM: National Organisation for Reproduction Rights in Music

OD2: On Demand Distribution

OECD: Organisation for Economic Co-operation and Development

P2P: Peer-to-Peer

PC: Personal Computer

RSS: Really Simple Syndication

SAMPRA: South African Music Performance Rights Association

SAMRO: South African Music Rights Organisation

SARRAL: South African Recording Rights Association

SNS: Social Networking Site

SRLP: Suggested Retail List Price

SSL: Secure Session Layer

UGC: User Generated Content

URL: Universal Resource Locator

WAP: Wireless Application Protocol

WLAN: Wireless Local Area Network

XML: eXtensible Markup Language



Notes to the Reader

The reader is referred to the following terminology that is used within the research documentation.

Application Programming Interface: an interface that defines the ways by which an application program may request services from libraries and/or operating systems.

Applet: A small computer program that has limited features, requires limited memory resources, and is designed to be downloaded from the Internet to run on a webpage.

Bootlegging: the commercial recording, reproduction and distribution of music that has never been released by official record labels (e.g. live studio concerts and studio outtakes).

Counterfeiting: the commercial copying of legitimately released albums, including the cover art.

CD burning: individual non-commercial copying of officially available music onto a CD.

Dis-intermediated: a term used to describe the position that a previous intermediary is in when their service provision becomes redundant.

Firm: a business or organization, which is comprised of different divisions performing specific functions necessary for the running of the business.

File sharing: the 'sharing' of music (both officially released and that which would appear on bootlegs) via the Internet, particularly utilizing peer-to-peer software such as Kazaa and Napster.

Freeware: computer software that is available for use at no cost or for an optional fee

Indie: An independent artist or band that desires to do-it-all themselves and/or are not affiliated with a larger record label.

M-commerce: the ability to conduct commerce via a mobile phone.

Marketspace: An electronic marketplace.

Mashup: a web application that combines data and/or functionality from more than one source.



Metadata: data on a digital audio file that is used to name, describe, catalogue and indicate ownership or copyright, as well as allow user characterizations of the audio content (ratings, tags, and other auxiliary metadata).

MIDEM: Marché International du Disque et de l'Edition Musicale – a large music industry and trade fair held annually in Cannes, France.

Moshito: A South African music industry conference and exhibition which aims to broaden the business intelligence of music industry professionals in South African and Africa, to strengthen business networks for participants and inform delegates, traders and the public about the multifaceted and dynamic nature of the global music industry.

OECD: Organisation for Economic Co-operation and Development. There are 30 member countries: Australia, Austria, Belgium, Canada, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, South Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Slovakia, Turkey, United Kingdom, and United States.

Ontology: a rigorously defined framework that provides a shared and common understanding of a domain that can be communicated between people and heterogeneous and widely spread application systems.

Performance Aggregator: A software solution which tracks and stores data on the online performance of a particular user for later use as management information.

Pirating: the commercial copying of the *sounds only* of one or more official releases.

Platform: a computing framework on which applications may be run.

Social networking site: a web based community of people who share interests and/or activities, or who are interested in exploring the interests and activities of others.

Tape trading: the swapping of tapes and CDs featuring the same type of recordings as bootlegs. This is typically a non-commercial activity where collectors trade recordings between each other.

Unsigned artist: An artist that does not have a recording contract with a record company.



Virtual item: An item that exists within a virtual environment on the Internet. The item may have social capital value, aesthetic or functional value. The item may or may not be paired with an offline equivalent.

Warehouse: the process of indexing, meta-data tagging and referencing of a large amount of digital content at the time of storage in a repository to enable efficient search abilities at a later stage.

Web 2.0: refers to a new generation of web-based services and communities characterised by participation, collaboration and sharing of information among users online.

Web platform: An Internet- based software system.

Web services: a software system designed to support interoperable machine-to-machine interaction over the Internet.

Widget: A graphical user interface that runs a web-service applet.



1. Introduction

Like any culture industry in a market economy, the role of the music business is fundamentally to transform its cultural products into financial rewards. This process, of course, has been significantly influenced by the technological advances that have determined the production, dissemination, and reception of music (Garofalo, 1999)

Over the last century the music industry has grown to a state where record companies have majority control over major distribution networks, with most successful artists being locked into contracts with these companies. Many smaller record companies have, over the years, been acquired by larger ones, resulting in only a few companies managing the vast majority of commercial artists. This oligopolistic setup has created a barrier to entry for emerging artists wishing to penetrate the market independently, due to the high setup costs associated with the production and promotion of new artists. Stemming from this apparent position of power, these intermediaries could be over-compensated (the record companies) whilst others could be under-compensated (the artists) when compared with the relative amount of value that is created by their service or content respectively.

In the past decade, the traditional recording industry value chain (particularly in the area of distribution) has been placed under great pressure to change its structure due to the increased availability of the Internet and broadband technologies, which made peer-to-peer networks and file sharing services such as Napster possible. This has provided wider and more affordable distribution capabilities, but less controllability than traditional record companies are accustomed to. It also allowed the consumer access to content that was free and easily available, which was not governed by 'fair use', resulting in an increase in Internet piracy – the cost of which was largely borne by the artists themselves.

In conjunction with this, the availability of high quality, low cost audio recording equipment has enabled musicians to produce their own high quality recordings without having to resort to big studio facilities which are costly to use. This move towards artist-led distribution has empowered musicians to market and distribute their own work, but has left the large record companies and distributors relatively dis-intermediated in comparison to the industry situation of 20 years ago.

This shift of control suggests that the current industry model may be outdated due to technological, socio-economical and geopolitical developments. Some specific strategic drivers which dictate future change and development in the context of the music industry are most notably:

- 1. globalization (which implies access)
- 2. information explosion



- 3. a shift from technocracy to 'humanocracy'
- 4. the need to compete with 'free'

South Africa is a well defined, contained emerging market, which provides a suitable test environment in which emerging artists can use the Internet and mobile telephony to distribute their work. Local record companies are likely to be impacted financially, however, should this model become largely adopted by the artists, as the revenue traditionally incurred through distribution may be greatly reduced. This study will not focus on the impact on the record companies but will rather focus on the benefits available to the artist.

This study will present aspects of a new business model which is tailored to the South African context which, for the purposes of this research, will be termed the 'Artist-Led / Consumer- Driven distribution model' or ALCD distribution model. The aim of a new business model is to empower local talent, and thus boost the local music industry.

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2. Rationale

The topic of this dissertation was chosen in order to identify new ways of generating revenue for emerging artists in South Africa. By identifying and utilizing emerging distribution and marketing technologies which lend themselves to an emerging market, this study aims to link the artists and the consumer in a mutually beneficial way.

South Africa is an emerging market, with great growth potential in the information and communication technology (ICT) industry. More affordable and scalable broadband access is set to arrive in the very near future. This will enable previously disadvantaged communities to have access to this platform, as well as providing support for bandwidth intensive online applications (such as media content distribution platforms) which rely on high speed broadband connectivity.

The music industry in South Africa needs to be re-architected to make use of this platform and exploit the networking capabilities that the Internet provides. By opening the communication channels between the artist and consumer, competition among local artists is likely to increase, as each bid for their sales. If artists can reach listeners outside of the commercial centres, but still be able to interact with their audience in a virtual space, they are likely to rapidly advance their popularity and thus their sales. Increased competition also promotes better quality, which will uplift local artists towards an international standard and will encourage listeners to purchase local music over international, thus boosting the local industry.

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3. Problem statement and research questions

In South Africa, there are an ever increasing number of local artists emerging. The local recording industry is modelled after the UK and US industries to a large extent, and therefore suffers the same economic imbalance of intermediary compensation. This research report will set out to answer the following primary questions:

- 1. How can local artists become commercially viable?
- 2. What are the characteristics of a business model for the digital distribution of music that will be successful in the context of the South African market?

Secondary questions include:

- 1. How can a local artist disseminate their music to the listeners without having to rely on acquiring a recording contract?
- 2. How can artists benefit from a 'virtual' value chain, where previous role-players are replaced by Internet service providers?
- 3. How can artists work with other members of the value chain to enhance their economic position?
- 4. What are the unique attributes of the South African market space that would affect the design of a digital distribution model?



4. Aim of this study

This research aims to identify aspects of a suitable business model for online music distribution in the South African context which focuses on the artist and the listener as the core creators of value in the music business. This, by implication, could dis-intermediate previous role players, the effect of which is intended to drive down costs for the end consumer whilst increasing compensation for the artist.

Additionally, this research aims to provide mechanisms which reduce audio-visual piracy and foster localism and local talent. By commercially empowering artists, with an aim to provide a model for independent distribution, the industry is likely to grow and evolve into one that is largely led by the artist and driven by the consumer, and regulated by heuristic principles built into the model.



5. Value of this study

This study provides a view of the South African music market in the context of global technological and ICT developments. By identifying and contextualising opportunities that exist for the emergence of new business models that commercially empower the artist and the consumer; both of these role-players are set to benefit from such a change.

This study will also provide a guide to new music graduates of how to make themselves commercially viable, and putting their music skills to economic use, as well as contributing to the body of literature that has been called for on this topic.

It is clear from the Department of Arts and Culture's annual report, that the key service delivery objectives for 2007 and going forward are focused on networking and public performance more than on infrastructure and the adoption of new technology. The key focus areas were given as the following (DAC a 2006):

- Promoting collaborations amongst players from both the private and public sector and the
 public, in order to provide opportunities for business networking, information exchange,
 music business education, promotion and product development.
- Providing a global presence for the South African music industry at MIDEM.
- Promoting local South African artists through festivals and projects such as South African Music Week.
- Electronic music promotion amongst the youth and aspiring DJ's and producers.

There is value in this study in that it can provide government with additional understanding and context to motivate the promotion of the infrastructure to support the online distribution of music in South Africa.



6. Overview of this study

This study begins with a review of the available literature on the current state of music distribution models in various journals, websites and publications. The scope of the study encompasses both local and international trends. This study explores the global context before identifying which of these principles would be applicable or adaptable to the local South African context.

The study then delves into the details of three of the most established international business models in the digital music environment namely iTunes, MySpace and Artspages. These three models are analysed according to documented business model principles and business strategy with the aim of developing a set of guiding principles upon which future business models can be built.

By exploring and contextualizing new and emerging technologies currently in use online, but not limited to the music industry, this study then extends to identify which of these technologies are appropriate in the South African setting and which technologies have the ability to fulfill areas where the current global and local business models are lacking. Aspects of an emergent local business model are then qualified in the context of South African copyright law.

A business model is suggested which aims to provide an opportunity for local South African artists to become more commercially viable than they have been in the past. This will encompass a direct link to the consumer which is supported by a marketing strategy for artist promotion.

Lastly, topics for further study are identified.

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7. Theoretical Framework

In order to fully understand and analyse business models that relate to the artist and consumers as the primary entities in the value chain, one would need to understand firstly the *needs* of the consumer and what *value* they derive from purchasing music must be considered. One should also understand how the artist would best position themselves to address the needs of the consumers.

The following methodology (as described by Vlachos et al, 2006) will be used as an overarching framework for this research. The table below summarises the six integral steps to identifying emerging business models.

Table 1: The six steps to identifying emerging business models (Vlachos et al, 2006)

Phase 1	Phase 2	Phase 3
Investigate existing	Identify technology's	Change
configurations	influence	
Step 1: Document the	Step 2: Assess the influence of	Step 4: Define alternative
current business model	technology innovation	business models
	Step 3: Identify missing roles	Step 5: Analyse the key elements of alternative business models
		Step 6: Estimate the impact of technology innovation on the external environment

7.1. Phase 1: Investigate existing configurations

7.1.1. Step 1: Document the current business model

The ontology documented by Alt and Zimmerman (2001) will be used to describe the broad characteristics of the proposed new business model in generic terms, as well as to describe existing models. This ontology is documented in section 10, and constitutes analysis in the following streams:

- Mission
- Structure
- Processes
- Revenues
- Legal issues
- Technology



The existing e-commerce based business models to be used for this analysis will be the following:

- iTunes music store
- MySpace
- Artspages

7.2. Phase 2: Identify the influence of technology

7.2.1. Step 2: Assess the influence of technology innovation

An analysis of all the current and future trends with regard to web 2.0 technologies and e-commerce trends will be conducted. The investigation will be conducted under the following headings:

- High Speed Internet
- Digital Watermarking
- Cloud Computing
- Web 2.0
- Social Media
- Social Networking
- E-commerce
- M-Commerce
- Google

In addition to documenting the influence of technology, it is also important to understand the constraints under which a future business model will need to operate. The music industry is highly legalized, and there are many regulatory factors which control different aspects of the value chain. If innovation is going to be successful in this environment, one would need to understand the possible industry reaction that is likely to be encountered, as existing structures and elements of the value chain are repositioned, or repurposed. Therefore a section on the 'legal considerations' for the South African market has been included under step 2.

7.2.2. Step 3: Identify missing roles

By adapting the standard industry models to the South African context, there are likely to be various shortfalls and missing roles because the demographics and economic platforms are so vastly different. This section will consider these shortfalls, and identify opportunities to close these gaps. This will be done with a view of some local music distribution models currently being exploited in the mobile environment, with the aim of identifying if there are possible synergistic relationships that can be formed.



7.3. Phase 3: Change

7.3.1. Step 4: Define an alternative business model

This will be done by way of graphically illustrating how the new business model would work, and describing each process in the value chain.

7.3.2. Step 5: Analyze the key elements of the new business model

The ontology documented by Alt and Zimmerman (2001) will be used to describe the broad characteristics of the proposed new business model in generic terms. This will then be combined with the ontology of Osterwalder and Pigneur (2002), which will address more specific elements of ecommerce within the proposed new model. A full description of these ontologies will be given in section A Business Model Ontology 10. This analysis will be structured as follows:

1. Mission

- a. Overall vision
- b. Target market
- c. Strategic goal
- d. Value proposition

2. Structure

- a. Activity configuration
- b. Partner network
- c. Resources and assets

3. Relationship Capital

- a. Information strategy
- b. Distribution channels
- c. Trust and loyalty

4. Processes

- a. Artist
- b. Consumer
- c. Record companies and performance aggregators
- d. Mobile
- e. Social media
- f. Content aggregation
- g. Dissemination

5. Revenues

- a. Cost structure
- b. Profit model
- 6. Legal issues



- a. Licensing of artistic works
- 7. Technology

The validity of a proposed new business model will be tested using Porter's 'Five Competitive Forces', as documented in Porter, 2008. These five forces are:

- 1. Threat of new entrants
- 2. Bargaining power of buyers
- 3. Threat of substitute products or services
- 4. Bargaining power of suppliers
- 5. Rivalry among existing competitors

7.3.3. Step 6: Estimate the impact of technology innovation on the external environment

This will be done by viewing a future business model and how it will work in the current setting. The following questions will be addressed:

- How are the key industry role players likely to be affected by a new business model?
- What is the reaction within the current industry structure likely to be?
- What new roles have been created, and how will this change the current marketspace?
- What new trends, if any, are likely to emerge from a new business model?

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8. Methodology

To gather qualitative data, a literature review, both international and local will be conducted in order to develop a firm understanding of current and future trends that exist with regards to digital distribution and virtual supply chain management across various industries. The scope of the study aims to encompass most of the relevant information that exist as part of the body of literature on this topic. Aspects to be addressed are:

- Historical context of the current music industry
- Common threats existent in the industry
- Content, services and infrastructure available in both the online and mobile environments
- Current and future trends evident in both e- and m- commerce
- A contextual study of the current state of the South African market
- Case studies specific to the South African context

There is a paucity of research concerning the South African current music environment. The analysis of this will be largely based on secondary sources and media. Given the diversity of these secondary sources, they will be validated by observing only consistent trends across multiple verticals, and where applicable quantitative data will be used as a correlation check.

Quantitative data will be collected from three primary sources that are well respected within the music industry. These are:

- 1. The International Federation of the Phonographic Industry (IFPI)
- 2. The Recording Industry Association of America (RIAA)
- 3. The National Music Publishers' Association (NMPA)

In the South African context, quantitative data will be required from the following industry associations and parastatals:

- 1. The Recording Industry of South Africa (RISA)
- 2. The Department of Arts and Culture (DAC)
- 3. Telkom annual Reports

In line with previous studies of the South African music industry (De Villiers, 2007, Devroop, 2007), analysis of the data will be performed with respect to two related activities:

1. A search for all relevant industry insights and patterns on an international level



2. An investigation of the South African music industry, using findings in (1) against which to benchmark.

This study will combine both *explorative search* and *exploitative search* as outlined in Baden-Fuller et al (2001) to find a solution which is innovative, yet gains advantage from developments that are currently happening within the music industry as well as other industries that utilize online distribution methods.



9. Literature Review

This literature review begins by providing a brief history of the music industry in order to provide the context for current and future developments in the realm of music distribution. A description of the traditional value chain is detailed, describing the role of each contributor as well as an overview of the value created by each entity.

Issues of piracy and Peer-to-Peer networking are also addressed as they have significance when dealing with the security of digitally distributed products.

International trends in the music industry provide insight into how the South African market is likely to change in the future. These trends are documented along with a review of existing digital distribution models for audio content.

Lastly, the South African market is reviewed in terms of current music offerings available to consumers.

9.1. A Short history of the recorded music industry

The music industry undoubtedly has its roots in the early printing and publishing industry of the 15th century, with the invention of movable type by Johannes Gutenburg (Garafalo, 1999). Until German-American immigrant Emile Berliner had developed a recording process based on a flat disc for a machine he called the gramophone, sheet music was the main vehicle for the mass dissemination of music, and music publishers were at the centre of the music business. The gramophone forever changed the concept of music from a dynamic and interactive entertainment experience to a fixed product (Kusek and Leonard, 2005, p12). At its very first demonstration in 1888, Berliner prophesied the ability to make an unlimited number of copies from a single master, the development of a mass-scale home-entertainment market for recorded music, and a system of royalty payments to artists derived from the sale of discs (Garafalo, 1999). As predicted, music moved from being a performance and a service to being a product (Kusek and Leonard, 2005, p12).

There was a very high cost associated with the mass production of audio recordings. This was attributed largely to the high cost of studio time and equipment, the need for highly trained specialists, such as engineers, sound-board operators etc. and the high cost of transferring recordings on to vinyl or tape, as well as the cost associated with distributing the copies. This encouraged the development of companies that specialized in the process (Meisel and Sullivan, 2002).

The invention of new devices or ways of recording, storing, playing, and distributing media has always been a source of huge changes in the media market. Whenever new inventions changed the



landscape of the music industry, many companies claimed that these inventions would ruin their business. For the most inflexible companies, this sometimes turned out to be true, but the majority of companies managed to adapt to the new reality and survived, and often even thrived because of new business opportunities that had opened up (Wilde and Schwerzmann, 2004). It was thus that record companies, by adopting emerging technologies which worked in their favour, slowly began to take control of the industry previously controlled by music publishers. It is pertinent to note that a similar situation occurred (and to some extent is still occurring) in the media world regarding Internet distribution. The music industry's major record companies initially viewed the Internet as a threat, whilst others adopted this medium to full effect regardless of the associated risks of Internet piracy (Meisel and Sullivan, 2002).

The modern music industry has now evolved to having the record companies as the major controlling force. This shift can historically be attributed to the fact that early recording companies after the turn of the century determined that pooling their patents (for reproduction processes) would advance the technology (as well as their economic self-interest), and in the process provide them with a form of oligopolistic control of the industry. By the 1960s it had become clear among corporate executives in the music industry that the key to profitability lay in manufacturing (via the relatively cheap pressing process) and distribution and thus record companies began contracting out most of the creative functions of music making (Garafalo, 1999), allowing the record companies to act largely as aggregators and distributors of content.

9.2. Traditional industry value chain

Supply chains can be described as a series of linked suppliers and customers, who can be termed links, actors or players; chains are commonly portrayed as simple linear processes. Within a supply chain, upstream suppliers provide input; the company then adds value to these inputs, before passing them downstream to the next actor which can be either another company or the end user (Porter, 1985).

Though the physical product itself may have changed, the distribution channels and the division of labour within the industry have remained relatively stable over the last 50 years. The product is the culmination of a set of value adding processes that take place in the physical world (Rayport and Sviokla, 1996). Each intermediary between the artist and the consumer adds costs and takes profit which leads to a higher final product price. The writer creates the initial product through his/her composition and arrangement. Aside from providing the necessary initial capital investment, record companies provide the necessary expertise in the field of audio production as well as the marketing expertise to create, market, and distribute music on a large scale (Graham et al, 2004). The basic structure of the traditional industry value chain is illustrated in the figure below.



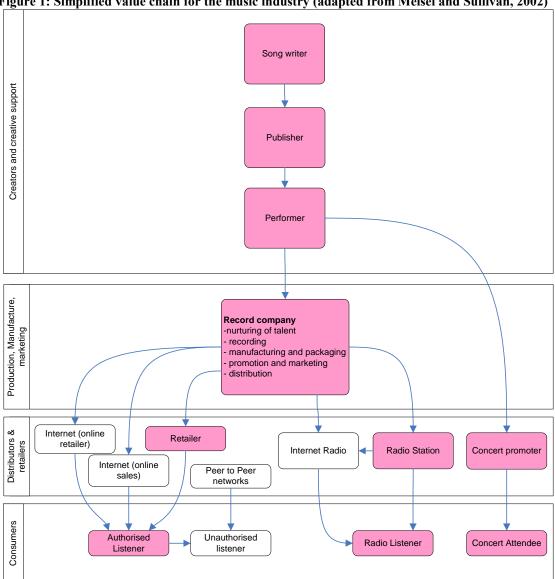


Figure 1: Simplified value chain for the music industry (adapted from Meisel and Sullivan, 2002)

In the United States, the major labels dominating the industry are Sony BMG Music Entertainment, EMI, Universal music group and Warner Music Group. In the opinion of Passman (2003), these large record companies are traditionally structured with the company having the smallest obligation that it can negotiate, while keeping the option to get as much product as possible. This structure places the artists as one of the smallest contributors and beneficiaries in the supply chain.

The value-adding services that a record company typically provides to artists, according to Passman,2003 (p64) are:

- Sales
- Marketing
- Promotion



- Product management
- Production
- Finance
- Business affairs/legal
- International affairs

The figure above (Figure 1) depicts a basic view of the value chain for the music industry. It is intended to show the stratification of value process, as well as the key role-players in the industry, and where they fit into the value chain in relation to each other.

Record companies create the context and business environment upon which the whole value chain rests. The initial creators of content are the performers, songwriters and their associated publishers.

9.2.1. Content creators

Songwriters

Songwriters or composers enter into a contract relationship with a music publisher, who, in return for a percentage of the author rights revenues, tries to optimise the exploitation of the composer's work. Alternatively, composers can form their own publishing companies, thus retaining complete control of their own copyrights (Wunsch-Vincent and Vickery, 2005), without the promotion or marketing that a publisher would do. They do not traditionally deal directly with record companies, unless they are also the performer of the work.

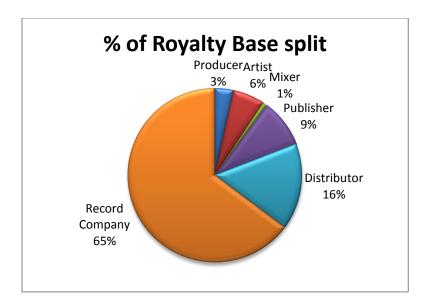
Performers

Artists are the creative entities that bring the musical product to life for recording or live purposes. They are not necessarily the composer or writer of the music they perform, so they are remunerated separately from the composers (who are paid by the publishers) by a percentage royalty fee on the product they help to produce. The artist is generally the entity that holds a contract with the record company.

Artists are typically paid a royalty from a royalty base which is a designated percentage of the Published Price to Dealer (PPD). The table below shows how the royalties are divided amongst the players in the value chain on the sale of one CD as a percentage of the royalty base (adapted from Shaw, 2007 (p91-94) and Passman, 2003 (p106)):



Table 2: Royalty split on sale of one CD¹ (Shaw, 2007 and Passman, 2003):



Contributor	% of Royalty Base
Producer	3.4
Artist	5.95
Mixer	0.85
Publisher	9
Distributor	16
Record Company	64.8

9.2.2. Record company

The amounts reflected above are heavily skewed toward the record company. These numbers do not reflect the associated costs of producing an album, however. Some of the typical costs incurred in the production of an album are briefly listed as:

- Funding of man-hours for production (studio staff not included in the royalty base)
- Storage media
- Marketing costs (e.g. album launch, publicity, press kits, posters etc)
- Website design and hosting
- Music video production
- Tour support
- Packaging design and manufacture
- Bar code purchasing
- Funding session musicians

¹ This is assuming a 12% all-in royalty, producer 4%, mixer 1%. Free goods (15%) apply. Reserves do not apply. Publisher royalty based on 6.67% of PPD, and distributor royalty is based on 12% of PPD.



The purpose of showing the large difference between the percentage allocations of the royalty base, is to provide context for the question as to what the artist remuneration vs retail value would be if the costs associated with the physical product were to drastically diminish as would be the case if the product was no longer physical, but virtual?

9.2.3. Artist & Repertoire (A&R)

The content creators are reliant on record companies to create the musical product of their work, as much as record companies are reliant on artists to perform the creative work. The two entities are traditionally brought together by talent scouts from the Artist & Repertoire (A&R) department of a record company. These agents seek out new promising artists and attempt to sign them into long-term exclusive contracts. A&R entails the identification of new talent, signing artists, developing repertoire, overseeing production and creating artist images.

9.2.4. Producer

The role of the producer is to take a product from a virtual entity into the real product by overseeing the recording, editing, mixing and mastering processes of the album. The labels finance production and often provide advance payment for signed bands at this stage (Wunsch-Vincent and Vickery, 2005).

9.2.5. Manufacturing

Some record companies have their own production plant, while others outsource manufacturing. The big four record labels – EMI, Warner Music, Universal Music, and Sony BMG – leverage global CD pressing facilities to accomplish economies of scale (Wunsch-Vincent and Vickery, 2005).

9.2.6. Sales and Marketing

Consumers don't generally purchase music with which they are unfamiliar. For this reason, it is very important that consumers are able to sample music regularly to develop a liking for it before they actually purchase it. Radio and TV stations play a crucial role in the marketing function of consumable media. Promotion is thus essential to everybody in the music business and everybody ranging from performers to large labels works closely with radio programmers.

9.2.7. Distribution

The major record companies often have a global network of branch offices that can handle sales, distribution, and marketing. Independent companies have to license local distributors (Wunsch-Vincent and Vickery, 2005).



9.2.8. Retailers

Retailers purchase the album from wholesalers when the music is required. Retail outlets vary greatly in terms of their offerings to consumers. Mega-retail outlets in the United States such as Best Buy and Wal-Mart represent price leaders, often charging less than cost price for a CD and buying in huge volumes. Independent record stores also exist, with sub-distributors often handling the smaller accounts. Shelf space and positioning are critical to success in a physical-only distribution scheme.

Retail outlets owned by the major record companies, along with large national retail chains, account for over 85% of record sales in the United States, while record clubs and mail order businesses account for about 12%, and online retailers account for 1% of sales (Meier, 2000)². The 2008 global usage statistics indicate that digital music sales (comprising online, mobile channels and subscriptions) account for just over 20% of the total recorded music sales revenue (IFPI b, 2008). More recent reports indicate that online music sales will outstrip physical music sales by 2013 (PWC, 2009). This shows the dramatic increase in online commercial activity in the past decade. Statistics regarding online music sales compared to physical music sales in South Africa are not available.

9.2.9. Consumers

Consumers as the end users of a music product, generally have the buying power which dominates genre popularity and ultimately drives the direction of the industry as record labels respond to consumer needs. This is of particular importance in the Pop and Rock genres, which are driven largely by trends and fashion.

9.3. *Piracy*

Piracy is a generic term covering a wide range of activities with different characteristics which involve unauthorized reproduction of copyrighted material (Marshall, 2005). Marshall identifies six different types of piracy in the music industry:

- 1. *Counterfeiting* the commercial copying of legitimately released albums, including the cover art.
- 2. *Pirating* the commercial copying of the *audio only* (without the cover artwork) of official releases
- 3. *Bootlegging* the commercial recording, reproduction and distribution of music that has *never been released* by official record labels (e.g. live concerts and studio 'outtakes')
- 4. *Tape trading* the exchange of cassettes and CDs featuring the same type of recordings as bootlegs. This is typically a non-commercial activity where collectors trade recordings between each other.

² Equivalent statistics for South African retailers are not available



- 5. CD burning individual non-commercial copying of officially available music onto a CD
- 6. *File sharing* music which is made available for distribution by a third party (both officially released and that which would appear on bootlegs) via the Internet, particularly utilizing peer-to-peer software such as Kazaa and Napster.

For major record labels who rely on physical music sales, mitigating the risk associated with piracy is of critical importance. Their profits come from their ability to control the supply chain for music from artist to consumer (Graham et al, 2004). The study carried out by The Institute of Policy Innovation study entitled 'The True Cost of Sound Recording Piracy in the US Economy' projected losses to US record companies from illegal downloading worldwide at US\$3.7 billion (August 2007), (IFPI a, 2008).

The IFPI (2008) report gives some statistics of piracy around the world, naming China as having the highest piracy rate. Piracy is fragmenting into many new forms as technologies increase (e.g. sharing via instant messenger, blogs, Bluetooth, and mobile), however P2P file sharing still accounts for the majority of illegal activity. University students were found to account for the majority of illegal file-sharing activity. Although these are not yet issues which the South African market face, it is worthwhile to note the possible risks that are present in a digital distribution model.

9.4. The influence of Peer-to-Peer Networks and file sharing

The proliferation of broadband connectivity to the average PC user has been a disruptive technology for the traditional music value chain and its business model, generating product and process innovation, the entry of new players and new opportunities for music consumption and revenues. High-speed connections have allowed consumers to download music rapidly, and bypass traditional methods for enjoying music (including unauthorised file-sharing) (Wunsch-Vincent and Vickery, 2005).

Peer-to-Peer (P2P) technologies are defined as a communication structure in which individuals interact directly, without necessarily going through a centralised system or hierarchy. Users can share information, make files available, contribute to shared projects or transfer files (Wunsch-Vincent and Vickery, 2005). All file sharing tools use P2P technology, meaning that the actual files are always exchanged between individual users. This is a departure from the more traditional client/server-model, where service providers offer a particular service (such as the pages of a Web site), and clients use this service by connecting to the server. P2P is an architecture where participants dynamically can be



server and/or clients, which makes the overall architecture much more flexible (Wilde and Schwerzmann, 2004).

Napster for example – though not a pure P2P network (because it relied on a central server to direct users to sought content) – illustrated the mass appeal of P2P file-sharing. The Napster phenomenon gave rise to networks built on FastTrack, Gnutella, and other software, which have been designed without central servers and have so far avoided Napster's legal fate (Einhorn and Rosenblatt, 2005).

The popularity of the illegal downloading of digital music has challenged the traditional supply model that has relied on the physical distribution of music recordings such as CDs. The result is increased value in the area of IP rights enforcement and piracy protection as well in digital distribution and sales. Value is substantially destroyed, however, in areas of traditional manufacturing, distribution, inventory and sales (Bockstedt et al, 2005).

As P2P networks became more popular, elements of a digital music value chain emerged comprising the following:

- file sharing software
- Internet connectivity
- personal computers
- jukebox software
- portable MP3 players
- a community of users providing content.

These components were interchangeable and assembled according to the consumers' discretion, providing a loosely-coupled infrastructure for the direct distribution and consumption of unprotected music files at a scale that quickly took the practice outside the realm of fair use (Klym, 2005). In reaction to the wide scale distribution and sharing of copyrighted music, the music industry charged that Napster committed contributory and vicarious copyright infringement. Napster countered that its service was subject to a fair use exemption because of legitimate space shifting and sampling uses of the service. The courts ruled in favour of the music industry, and Napster was shut down in 2001 (Meisel and Sullivan, 2002).

Klym (2005) suggests that legal action against P2P networks (such as Napster) led to innovation in two opposing directions. On the one hand, unauthorized networks found more effective ways to circumvent authority. On the other, the authorized online music market was born, distributing protected content using digital rights management (DRM) technology.



These events forced the music industry to adapt its current business model to these external forces. Characteristics of the emerging model involve the following factors (Meisel and Sullivan, 2002):

- Increased freedom for producers and consumers to influence the design of the product, for consumers to access music, and for the market to offer alternative transactional methods.
- Internet-induced merger and joint venture activity to combine Internet content creation entities with distribution channel conduits
- Early upstart prototypes searching for sustainable online business models that in many cases have been integrated into the major record companies

The most striking characteristic of the new economic environment resulting from digital music offerings over peer-to-peer networks is unrestricted access to a virtually unlimited resource library, hosted and maintained by the consumers themselves. Meisel and Sullivan (2002) describe the music consumers in this situation as simultaneously consumers, distributors, and marketers of/for the music companies. It also denotes that most of the costs associated with the antiquated system (the physical production of discs, the transportation of discs to warehouses, the shipments to retail stores and the instore promotion of the music) are no longer borne solely by the record company, if at all.

Meisel and Sullivan (2002) also highlight another major advantage of this technology, which is the ability to sample music easily, quickly and cheaply. Since the attributes of music can only be judged after consumption, file sharing can aid in the purchase of music in a traditional format.

The implications of file-sharing on the traditional value chain, according to Graham et al (2004) are:

- The physical distribution chain becomes less and less important
- The major record companies' control over the music industry is likely to be lessened as other players find it easier to enter the market.
- The rise of music piracy through the Internet undermines the position of the record companies (as well as other music industry participants).

Additionally, the discovery process of artists and thus the work of A&R-departments may be impacted through the use of P2P networks, online music offerings, and artists' web sites (Wunsch-Vincent and Vickery, 2005).

On the positive side, file-sharing features, where users are actually authorised to share files, are starting to be recognised as an attractive feature in legitimate music content offerings. These services involve distinct value chains, possibly producing cost savings and changing industry roles. These



services leverage consumers as distributors of licensed content. In so doing, they can reduce hosting and distribution costs, and build on the promotional capacity of sharing (IFPI a, 2008).

Further implications of file sharing have become evident in music consumers buying behaviour. Italy's Luigi Einaudi Foundation in 2007 found that 30 per cent of P2P users bought fewer CDs and DVDs; while only six per cent said they bought more CDs. In Australia, research undertaken for Australasian Investor Relations Association (February 2007) shows that 57 per cent of P2P downloaders rarely or never purchase the music they download. This is an indication that illegal downloading may be substituting legitimate sales. Numerous studies in different markets confirm the finding that the effect of illegal downloading on CD buying is impacting negatively on the industry (IFPI a, 2008).

Despite the popularity of P2P networks, the integrity of the data being shared is reportedly on the decline and negative experiences are discouraging users from continuing activities. Quality of content is crucial to any music service and is a key issue in the battle between authorized and unauthorized services. On the one hand, unauthorized services are increasingly plagued with incomplete and mislabelled tracks, low bit-rate files, watermarked recordings, viruses, etc. On the other hand, the volume and variety of music is reportedly greater than what is available on authorized sites (Klym, 2005). The IFPI (2008) report indicates that the most common complaints about unauthorised services are the inability to find desired songs (39%) as well as the inability to download from search results (32%).

9.5. International trends in the music industry

9.5.1. Internet services and record labels

The first trend that is evident in the music industry is the collective reaction to online file-sharing. Record companies need to adapt to be able to provide competitive services on the Internet. User feedback of the Napster system suggests that future models need to supply track downloads that are:

- low cost (preferably free)
- high quality
- accessible
- highly portable
- easily searchable



In the post-Napster era, several major record labels and Internet providers launched their own versions of MP3-based music delivery causing a proliferation of digital content distribution techniques on a very large scale, which extended further to include videos and games (Ghini et al, 2005).

9.5.2. Digital Retailers

Digital music distribution has displaced the physical 'brick-and-mortar' retailers as the last link to the consumer, with pre-recorded CDs replaced by digital downloads and digital streaming. Music is now licensed to different sets of online music stores or mobile content providers and is then distributed further in digital format to the consumer. The range of new retail interfaces available to the consumer is considerable: online music stores of major record companies, third party online music stores (i.e. iTunes), Internet Service Providers and mobile content suppliers (Wunsch-Vincent and Vickery, 2005).

The digital music providers are able to capitalize on their ability to differentiate their product in terms of versioning, services and branding. This market differentiation allows them to create unique product offerings and value-added services such as recommender systems, versions based on audio quality or copyright restrictions and product extensions such as downloadable lyrics. As the number of online music consumers increases, so too will the amount of control that the online providers have over the associated costs of selling music increase (Bockstedt et al 2005).

Graham et al (2004) however, write that major record companies who have tried to establish their own sales services online, have had little success, preferring to outsource this task to specialist online distribution companies. Business activities as a result started to move to a more networked structure as opposed to a sequential chain of events, as was traditionally the case, allowing much more flexibility in terms of how the players in the traditional value chain are now able to interact.

9.5.3. Outsourcing and Mergers

Graham et al (2004) found that after various interviews with leading record label employees, that even though major labels prefer to outsource their distribution (i.e. pay someone who is specialized in distribution), they mostly (if not all) bought equity stakes in major subscription services to whom they supply content, in a bid to keep some sort of control over their content. Record companies have also created teams specialising in identifying brand partnership opportunities via digital platforms, with the aim of capitalizing on the widespread appeal that music engenders to help brands penetrate markets and gain credibility among specific segments (IFPI a, 2008).



Additionally, record companies are collaborating with a variety of technological partners on solutions for digital distribution and copyright protection (Graham et al 2004). The primary goal of these newer legitimate services is to provide a convenient way to legally obtain digital music files at a reasonable price, while offering superior quality content. These market-based solutions presume that, given the choice, users will choose a legal option if it's easy to use and the price is right (Klym, 2005).

Company mergers have caused the structure of the music market to change. For example, AOL and Time Warner merged to combine one of the music majors with the largest provider of Internet access. Thus the music of Warner Music Group can be featured on the AOL sites that dominate the portal market (Meisel and Sullivan, 2002).

The concept of outsourcing tasks to those that specialize in a certain field as well as identifying merger opportunities may provide a basis for change to the traditional value chain.

9.5.4. Impact on the traditional value chain

The technological nature of the Internet may alter the traditional supply chain. The new possibilities of direct contact and negotiation between end consumer and producer could make intermediaries superfluous (Schuster and Gilbert, 2005). Fisher (2000) documented the following social and economic advantages of widespread adoption of the technique of distributing digital music via the Internet - either in MP3 format or in some other form:

- 1. Cost savings associated with 'disintermediation' Currently, most of the retail price paid by a consumer for compact discs goes to the manufacturer of the disc itself, the distributor of the disc, the retail store where it was purchased or the record company that produced the recording. The composer and the recording artist (often the same person) rarely receive more than 16% of the purchase price. If the music was distributed over the Internet by the artist himself/herself, almost all of the costs associated with making and distributing discs could be eliminated. The result: musicians could earn more or consumers could pay less, or both.
- 2. *Elimination of overproduction and underproduction* Under the current system, the record companies must guess how many copies of each CD consumers will demand. Distribution of container-less digital files over the Internet eliminates this problem.
- 3. Convenience and precision The many annoyances associated with buying music in retail stores (travel time; the disappointments when CDs are out of stock; etc.) would all be eliminated by Internet distribution. The less substantial annoyances associated with mail-order purchases of CDs (waiting for delivery; being forced to purchase an entire CD when



- one is only interested in a few tracks) would also be eliminated. Consumers would acquire instantly exactly the music they wanted (and none of the music they did not want) instantly.
- 4. *Increase in the number and variety of musicians* The opportunities available to new artists and to music groups that appeal to 'niche' markets would increase rapidly through widespread adoption of the new technology.
- 5. Semiotic democracy One of the cultural benefits of the Internet lies in its tendency to decentralize the semiotic power that, in most modern capitalist countries, has been concentrated in relatively few hands. Internet distribution of digital music would contribute to this decentralization by diminishing of the cultural power of the major record companies due to point 4.

Distribution of digital music via the Internet, however, has one, very substantial disadvantage to the artist: It undermines the ability of music creators to earn money. Two circumstances, in combination, give rise to this problem (Fisher, 2000):

- *MP3 files are unsecured* In other words, nothing prevents a person who has acquired (with or without permission) an MP3 file to make an unlimited number of copies of it.
- The copies made using digital technology are perfect unlike the copies of musical works made using analog technology. In other words, each copy is identical to the original resulting in unauthorized, perfect MP3 copies of copyrighted recordings that are widely available on the Internet at no cost.

9.5.5. Artist-led distribution

The high costs of establishing a distribution system and the control of distribution channels by the major record companies have created considerable barriers to entering the record industry for an independent artist. In this situation, artists not contracted to a record company have difficulty competing against these conglomerates. Therefore, artists have either remained independent and focused on small, niche markets, or have signed long-term contracts with major labels in an attempt to break into mass markets (Graham et al, 2004).

Graham et al also suggest that the domination of the supply chain by the big conglomerates as a reason for why musicians do not actively get involved in music business or the distribution of their own music. Additionally, artists do not always have the necessary specialist skills to take care of the business side of their careers – skills which record companies offer (IFPI a, 2008).

Digital distribution, although it does have the aforementioned drawbacks, has the key capability of removing the traditional barriers that have prevented artists from entering the industry without the aid



of a record company. The increased capability of the internet and the growth of e-commerce seem to have provided more opportunity for the artists, by allowing artists to record and edit material inexpensively themselves, and to distribute and promote it over networks such as the Internet or commercial online services. With these barriers removed, the artists have an opportunity to pursue their market independently.

Digital distribution also allows artists to test consumers' reactions to their music, build an audience for their recorded performances, and even distribute their products entirely in the 'marketspace' (Rayport and Sviokla, 1996).

Bockstedt et al (2005) identify the following characteristics of the digital music product which benefits the artist directly.

- 1. *Easily reproduced* there is a high cost to make a track master, but this is accompanied by a lower break-even point due to the removal of manufacturing costs.
- 2. *Easily transferred* low distribution costs
- 3. *Separability* the product has moved away from the 'album', to being the 'single' thus reducing the time to market significantly for the artist.

This implies that opportunity does exist for artists in this position to by-pass the record label completely and secure their own marketing, production and distribution channels by alternative means. Graham et al (2004) postulates that since only very few musicians make any money out of selling records, (and even when they do, the majority of the revenue goes to their record labels) they would receive the same amount of money as before if they were to sell their own music directly through their website – even if the overall revenue from their music dropped by 90%.

Surveys by Rainie and Madden (2004) indicated that the majority of musicians and songwriters (83% in 2005) provide music samples online, in a bid to popularise themselves and be able to sell more concert tickets. Brockstedt (2005) identifies three propositions relating to artists and online distribution:

- 1. Artist-Led Direct Distribution due to new incentives mentioned above, artists are able to form their own online direct distribution capabilities.
- 2. Digitally Intermediated Distribution Artists may contract with digital music retailers for online distribution of their music.
- 3. *Music Singles Production* Artists are able to concentrate on producing singles for online distribution, which also reduces their time to market.



There are certainly artists who are resistant to the movement towards artist led distribution. This could be attributed to the fact that artists may well want the benefit of working with others who share and match their vision, energy and enthusiasm in the context of a record company. In the opinion of Max Hole, Executive Vice President at Universal Music Group International, even if artists could distribute their own music, many artists want the benefit of 'someone,' he says, 'who can open a door to the producer, the recording engineer, the songwriter that they love.' (IFPI a, 2008).

Recording companies remain positive, saying that even though the artists are becoming more self-sufficient, and that more bargaining power has been put into the hands of the consumers, they are still optimistic that artists will continue to sign up with them, in order to profit from their marketing expertise (Graham et al 2004). This is in agreement with the IFPI (2008) report, indicating that the trend has not changed over the last four years. Artists are increasingly looking to labels to provide specialist support services, like boutique sites such as U2.com, which offers exclusive music tracks, behind the scenes interviews, fan reviews, limited edition merchandising and invitations to become involved in the campaigns in which U2 are active (IFPI a, 2008).

9.5.6. Digital Rights Management

Digital Rights Management (DRM) and rights clearances are an important aspect in preparing for digital consumption for both the artist and the consumer. For the artist, more recent major label artist contracts allow the digital sale of songs, but negotiations with the labels and publishers themselves for use of master recordings must first be completed. The large range of rights from different parties and uncertainty as to what rights are implicated during online distribution, complicates this process (Wunsch-Vincent and Vickery, 2005).

For the consumer, it is a matter of how they will use the digital content after download. Some DRM techniques are restrictive in terms of which devices are able to play particular files, as well as how a certain file may be used, especially regarding reproduction of that file.

9.5.7. Interoperability

Interoperability refers to the ability of a product, device or service to work across multiple technology platforms without any additional interfacing required. In the context of digital music product, this refers to using format which is compatible with all platforms that are likely to use the product that is being distributed. For example, an MP3 file format is regarded as interoperable, as it is playable on most, if not all platforms that require it. Files available from the iTunes store (AAC format), however, are only compatible with Apple devices, which then render them proprietary.



The lack of interoperability between services and devices has been a significant barrier to the development of the digital music sector. Interoperability has long been a key goal of the record industry, which has worked with its industry partners to develop technological solutions enabling fully interoperable DRM (IFPI a, 2008). Subscription services only make up five percent of all digital sales (IFPI a, 2008), however, the main reason holding back potential growth as identified by the IFPI report are their lack of interoperability with the iPod.

Wunsch-Vincent and Vickery (2005) surmise that for maximum growth of digital content distribution to occur, technological measures for protection of digital content as well development for interoperability should be adopted by all players in the value chain associated with online music delivery.

The DRM-free model (i.e. music that does not contain any DRM) of distributing music online is one way to avoid the problem of interoperability mentioned above. It allows consumers to buy music from any store, take their tracks wherever they want and play them on any device. The use of a non-DRM model has led to new services such as Amazon entering the already-established digital music market (IFPI a, 2008).

9.5.8. Mobile Telephony

As mobile smart phones have evolved to being converged devices, being able to generate and consume different types of high quality content, such as images, music and video, they are becoming a preferred device for purchasing and listening to music. (Belimpasakis et al 2008).

The need for people to share, synchronize and archive their content has lead to the creation of multiple related mobile applications and adoption of existing protocols for content sharing (Belimpasakis et al 2008). Additionally, mobile operators have started offering music downloads and streaming directly to cell phones via cellular networks, by the use of 'wireless music portals'. (Klym 2005, Ghini et al 2005). In most of these cases, the music is accessible to the user via (Wunsch-Vincent and Vickery, 2005):

- 1. The necessary hardware to play the music (PC, portable device, mobile handset).
- 2. A certain music player (music jukebox) which is essentially a specific software programme on the hardware

Over and above generic WAP – based services, wireless services such as WiFi, 3G, HSDPA, Edge and Bluetooth are becoming integrated into the majority of handsets. This provides a robust, locally available and low cost means for the deployment of music-on-demand distribution services (Ghini et al 2005). Ghini et al identify likely scenarios that may benefit from these wireless infrastructures.



They suggest WLAN-based music 'showers' that distribute digital musical contents to authorized customers within reach of the corresponding WLAN access point (Music Internet Cafés, Music Kiosks, and Cyber Music Saloons) as well as Opportunistic Music Communities. These are communities of several users of which only a few are under the coverage of a music 'shower'. The other members, who are not covered, constantly 'probe' neighbours to share their downloaded musical content.

9.6. The move to m-commerce

As mobile networks expand to provide more services to the user, music phones may complement or even replace the personal computer as the primary *sourcing* device for music content, thereby challenging *online* music models in general to include a mobile component in order to capture value from traffic that up until now by-passed mobile networks (Core-Edge working group, 2005). These commercial transactions that are conducted over the Internet using mobile phone technology are what are known as M-commerce.

In November 2000, DDI-Pocket, one of the phone operators in Japan, became the first digital music distributor in the world utilizing the mobile phone in the world (Stanford-Smith, 2001). They used a Secure Multimedia Card to store decryption data to allow access to play songs on a database via specific mobile phone models with built-in compatible software. The latest models that are emerging make use of integrated technologies, services and platforms to provide the same services consumers are used to on the Internet.

9.6.1. M-commerce value chain

As is the case with the traditional value chain, m-commerce involves a number of players in a chain of value adding activities that terminate with the customer. In Barnes's (2002) analysis of the m-commerce value chain, he divides the value chain into two main areas:

- Content
- Infrastructure and services.

These areas are defined in the coming sections.

Content

Content is comprised of (Barnes, 2002):

- Content creation (music)
- Content packaging (formatting and editing)
- Market creation (mobile portals, content and service selection).



Where the Internet is largely free and gives limited control, the mobile industry has far greater control over the content that is accessed over the network. One might equate this level of control with the record labels in the traditional value chain. Although there are many opportunities presented here to the network operators, Juniper (2008) warns of the restrictions that this level of control would instantiate in the mobile music industry. Without the freedom in the mobile environment that consumers are used to in an online environment, such as social networking, consumer generated content and instant messaging, the 'Direct to Consumer' model, prevalent on the Internet, will not be possible unless the mobile Internet is completely open. This will allow users to share, collaborate and exploit content/information without any one party controlling the value chain (Juniper, 2008).

As stated by Klym (2005), one of the major threats to the iTunes Music Store model, is the rise of the music phone as the portable playback device. One of the latest emerging models, Mobi Music by Mark Schmitz of Grid Records, presents a value-added distribution model for record labels and album sales executives, providing the closest service to what iTunes offers online to the mobile community. It was conceptualized to give a universal audience a simple access point to purchase full-length music tracks and complete albums instantaneously via a wireless phone, then have the purchase immediately available to save in the user's desired computer music program, and requires no integration or downloading of additional software, monthly subscription fees nor unsecured virtual payments (PRlog news, 2008). This first generation of the 'Mobi Music' program allows the purchase of digital music to be made using the consumer's mobile phone bill. Reports also indicate that Napster may be returning from bankruptcy with the hope of launching a mobile music service, with partners AT&T (DSL report, 2008).

Infrastructure and services

Infrastructure and services are made up of (Barnes, 2002):

- Mobile transport (transmission technologies, network operators etc)
- Mobile services and delivery support (mobile payment systems, security, servers, platforms etc)
- Mobile interface and applications (micro browsers, mobile operating systems, application developments and authoring tools)

New generation mobile phones, such as the iPhone, have sophisticated functionality which allow for content sharing between both devices and Internet platforms. M-commerce business models for the distribution of music which aim to mimic the virtual value chain already well established in the online environment need to exploit the latest technology to provide fast, instant service to consumers. Belimpasakis et al (2008) introduce the concept of 'open platforms' which are deployed in some



smart phones, which allow 3rd party developers to create their own applications and, via some predefined Application Programming Interfaces (APIs), allow these applications to access functions that the smart phone platform provides. If one were to couple these services with an Internet connection, applications such as described earlier by Ghini et al (2005), become possible.

The iPhone Developer Program (a software development environment), available directly from Apple, Inc, provides a complete and integrated process for developing, debugging, and distributing free, commercial, or in-house applications for iPhone and iPod touch (Apple, 2008). This contains all the development resources needed as well as real-world testing functionality and distribution on the Apple Store. This development environment allows anyone with a certain level of computer programming knowledge to develop a software application for utilisation on the iPhone and then distribute it to customers. The innovation that this affords developers provides enough scope and support for developing custom applications which could allow the distribution of music through mobile to expand further into the realm of customization.

It is this kind of customization that would be a key driver in the context of a country like South Africa which has a higher penetration of mobile phones than computers connected to the Internet.

9.7. Current digital distribution models

Business models utilizing the Internet to distribute music need to ensure that musicians are paid appropriate royalties for the use of their work, and that measures are taken to prevent piracy in order to incentivise musicians to stay in their field. The following section looks closely at how business models relating to the distribution of online music have evolved over the last decade.

9.7.1. First Generation Online Business Models

Two key business models emerged from the first wave of authorized (online music) services in the era following Napster:

- 1. Device centric
- 2. Software centric.

The former is the near-exclusive domain of Apple's iTunes Music Store (iTMS) and the latter comprises online stores selling music supported by Windows Media Player (Klym, 2005)



Dubosson-Torbay et al (2004) make reference to the following business models as 'traditional':

- The subscription model users pay a monthly fee for downloads and streamcasts (e.g. MusicNet). The perceived disadvantage of these sites is that they cannot compete on the choice dimension of P2P networks.
- 2. The 'à la carte' model users are able to pay-for-play, or pay-for-download e.g. iTunes.
- 3. The 'à la carte' and subscription bundle model e.g. Ministry of Sound subscribers have access to a recording catalogue (including major labels) for a subscription fee. They allow subscribers to download time-limited tracks, after which they pay to have permanent access.
- 4. The online radio model this model allows users to design their own radio station that plays their preferred selections.
- 5. The distribution model this is a strategy known as OD2's which uses an online music rental service, offering entire catalogues for previewing before a selection is made. OD2 acts as a distributor to online stores, providing them with encrypted licensed copies of tracks, which are only playable by the consumer if they are in possession of the digital license required. This also acts as a digital rights manager to enable royalty payments to artists.
- 6. The advertising model this makes use of advertising revenue generated by targeted advertising to online listeners in order to pay royalties.
- 7. The integrated model this model aims to centralize the destination for all music content online, regardless of format, distribution technologies, business models and devices.

IFPI (a 2008) identifies *a la carte downloads* (iTunes, Amazon, and Nokia's new 'Comes with Music' service) as the dominant business model in the market at present.

Many companies are starting to offer bundle subscriptions. Nokia's 'Comes with Music' is an example where millions of songs are available by subscription to consumers who buy selected music phones (IFPI a, 2008). This is not a new model, as we have seen a similar model in the very first music phones by DDI, as mentioned previously. What is new, however is the device-centric subscription service, used as a marketing tool for the handset manufacturer. While the music comes virtually 'free' to consumers under this model, record companies and artists get paid out of the sale of services or devices (IFPI a, 2008). Similarly a partnership in late 2007 between Universal and Neuf Cegetel (A French ISP) saw the bundling of high speed internet, fixed line telephony, HD TV service and an unlimited music download service with Universal's catalogue (IFPI a, 2008). In a similar deal EMI partnered with Alice, an ISP owned by Telecom Italia, in December 2007.

Prem Premkumar (2003) surmises that one future strategy will most likely not trump the others, but rather hybrids of the above will co-exist in their own niche markets. Each model has its pros and cons,



however most of them benefit the artist while dis-intermediating the distributor and retailer. The $record\ company-retailer-customer$ strategy is the least disruptive to the supply chain, with minimal risk of copyright violations, whilst the Artist-customer is the most beneficial to the artist, but also puts them at risk of copyright infringements.

9.7.2. Second Generation Online Business Models

Emerging business models make use of innovative ways of generating revenue that has a slightly different focus to the traditional models discussed. They are largely centred on using the music as medium for attracting people to the source, but receiving payment for something entirely different. Dubosson-Torbay (2004) makes reference to the following business models as new or emerging:

- 1. *The ransom model* an album is made available online at no cost (to all), only if by a set date, a specific amount of money (the ransom) has been donated online. If not, the money will be donated to a charity organisation and the product will never be released. People can pay as much or as little toward the ransom amount as they wish.
- 2. The tipping model when users download a song, they are given the opportunity to tip the artist.
- 3. The promotion model first used by 'The Smashing Pumpkins' in 2002, when they used Napster to distribute their music at no cost on the Internet without traditional marketing, with the aim of increasing their overall revenue as a result of fame from increased exposure.
- 4. The customer data model this model generates management information back to the supplier or artist each time a song is used. This is used to evaluate consumer preferences or to direct investments.
- 5. The preferred placement model record labels will pay an intermediary like Altnet or MusicCity to ensure preferred placement in P2P network search results under the premise that customers will pay for higher quality content, if it is less than \$1 per track. This model also gives musicians the option to set the content and price, and they receive a percentage of the profits.
- 6. The statutory levy model this is an alternative to maintain a financial incentive for creation. Tax on the sale of content would be used to fund creation.
- 7. The space shifting model this model stretches the definition of 'fair use' by allowing customers who can verify that they own the original CD, to download the MP3 version for listening on another device.
- 8. The partnership model this model works on promoting products outside of the original medium, e.g. by enticing users to download tracks ahead of release by providing them with a pin number and URL where they can access this.



9. The merchandise model – this model aims at offering music at no cost and earning revenue on the sale of related merchandise, which are used to pay royalties.

Addition models documented in the literature are the following:

- Ad-supported services offer consumers free access to streamed or downloaded music while
 artists and record companies are compensated by revenues generated by advertising. The best
 examples of this are the recent deals between some record companies and social networks
 such as MySpace, Bebo, YouTube, LastFM and Imeem. These deals are mostly based on
 licensing agreements for streaming music and music videos for a share of advertising
 revenues (IFPI a, 2008).
- 2. Honesty box system British band Radiohead set a precedent by offering downloads of their new album 'In Rainbows' directly on their website under an honesty system (Lawson, 2009). Fans were given the option to pre-order the album download at a price of their choosing (minimum charge of £0.45) or pay £40 for a premium boxset which included two CDs, two vinyl records plus artwork and booklets.

9.8. The South African context

In the preceding paragraphs of this chapter, the analysis of the industry has almost exclusively been focussed on the international market with the exception of some particular areas that were highlighted as pertinent in contrast to the South African context.

The South African music industry itself is in a fragmented state, as evidenced by the Moshito conference proceedings of 2007. The following was quoted by Keith Lister on behalf of RISA (Lister, 2007):

Yesterday, at various times and in different ways in speeches by the Minister of Arts and Culture, by Advocate Mpofu, by Nick Motsatse and by AIRCO, we were told that the industry is hopelessly fragmented, inefficient and still brutally unfair towards artists – 'the most talented' of whom, according to the Minister, 'die in the gutter'.

There have been efforts to promote South African music in recent years, for example: Local Content Legislations implemented by the Independent Broadcasting Authority South African Music Regulations (1997), compelled music stations to devote at least 20% of airplay to South African music (CIGS 1998). The musicians whose music is played on air are not paid for this airtime, but the radio station does get paid in the form of advertising revenue. This situation has sparked a huge debate in the industry which has been ongoing for the last several years, as to whether radio stations should be paying a royalty to these artists. Commonly known as a Needletime Right, which is implemented in most parts of the world, it was removed from South African copyright legislation in



1965. Recent amendments to the Copyright Act, 1978 and the Performers Protection Act, 1967, have resulted in its re-introduction into South African legislation (Wood, 2007). It is only more recently (August 2008) that collection societies have been accredited with the task of collecting these royalties, allowing artists to actually receive these revenues (SAMRO, 2008).

Additionally, it's not only on radio that local artists have to push for airplay - local South African artists are forced to compete with international stars for shelf space at retail stores at a comparable price. However the statistics are encouraging as RISA Chairman Keith Lister revealed that in 2006 (Biggar, 2007):

...for the first time, sales of CDs by South African artists outstripped those by international acts - 9.7 million units [up 18.9%] versus 8.5 million units. This was largely due to the huge market for Afrikaans music, as well as the growing appetite for Afro-pop and urban vibes.

Should this trend continue (and it is the opinion of the writer from personal exposure to local artists that the calibre of artists emerging from South Africa are ever improving), South Africa seems to be ready to embrace a local online distribution model which will allow artists another avenue to use for their commercial gain. This is certainly dependent on the infrastructure that has been discussed earlier in this document. Perhaps the most effective usable means and that with the most potential in South Africa in the immediate future is the mobile phone network infrastructure and its infrastructure.

9.8.1. *Mobile*

The International Telecommunications Union statistics report that South African mobile subscriptions for 2008 were at 90.6 per 100 inhabitants which is representative of 90.3 % of total telephone subscribers, (ITU, 2008). This is in comparison to a mere 4.5 million fixed line subscribers which is roughly equivalent to 9.3 per 100 inhabitants (Telkom 2008). This extremely high penetration rate of mobile phones has created a unique economic setting in the country, which has generated the interest of many companies interested in piloting mobile concepts in developing countries. This demographic scenario also suggests that any music distribution business models emerging in the South African context in the near future should concentrate on having a major mobile component in order to get maximum reach.

9.8.2. Mobile Music Offerings

There are a few mobile music offerings already in the market. Vodacom recently launched MusicStation to the South African market. This is a mobile subscription service (by Omnifone), designed to work on a wide variety of mobile handsets worldwide. Workable on both Symbian and



Java platforms, MusicStation offers consumers access to a library of over 1.4 million tracks from all majors and many independent labels for a small weekly fee, with no extra data transfer charges. It backs up a users' library so that if a consumer mislays their handset they do not lose their music collection (Dennis, 2007).

Other mobile content suppliers, in a bid to keep their current users from migrating, launched their own platforms, with an emphasis on promoting new potential amongst local South African artists. Instant messaging platform MXit entered the market shortly after MusicStation with a platform called MXit Music where local artists could promote themselves to the local users. A voting poll would determine the top bands and every three months the winners would be offered a recording contract through MXit's associated partners, under MXit's own label. About six months later MTN brought their offering to the table – a similar aim to MXit Music called XPloaded however their value-add was slightly different. Their model works on the principal that the better the artists perform in terms of downloads the more support they receive from MTN's professional management expertise and recording facilities (IT-online 2008).

9.8.3. Internet Access

The South African market in general has a much lower Internet usage when compared to OECD countries, Of the current population that have access to the Internet, only 20% of this segment download music online (SAARF, 2009). This can be attributed to both the lack of access as well as high broadband prices. According to the DSL report (2008), movements by Google, HSBC, and other high profile corporates are set to bring high-speed satellite Internet to under-served portions of the African continent. Reportedly, this could reduce bandwidth costs across the continent by some 95% (DSL reports b, 2008). Additionally, the placement of an undersea fibre-optic cable (provided by Seacom) linking southern and eastern Africa, Europe and south Asia will allow South African internet service providers to connect to international broadband networks, allowing users the benefit of cheaper, unlimited broadband access from mid-end 2009 (Seacom, 2009).

Should this be the case, it would be worthwhile for online music distribution models to allow for an increase in scope, which could see South Africa utilizing more of the current models employed in developed nations.

9.8.4. Internet Music offerings

Digital Music services in South Africa are limited when compared with the rest of the world. According to IFPI (2008) there are only three services available. These are (1) SAMP3.com (2) MSN



Music and (3) Musica.co.za. The iTunes store will not allow purchases for users with a South African billing address, preferring to only offer only application downloads for the iPhone and iPod touch. There are other sites, however, that have elements that contribute to the promotion of local independent music. These are described below:

H-art Beat Radio

H-art Beat radio is a webcast platform, which profiles independent South African artists and allows them to upload their original content onto the site. Listeners are able to preview this content on a streaming basis, however purchases or downloads are not available.

SAMUSIC dot coza

SAMUSICdotcoza (located at www.getsa.co.za) is a local website dedicated to providing a community for local artists with a news forum, events calendar and other links within the music industry, however it does not offer any streaming content, or download capabilities.

Jacaranda FM

Jacaranda FM Demo station (located at www.jacarandafm.com/demostation) is very similar to H-art Beat Radio in that it allows independent artists to upload their demo tracks or albums onto their site. Listeners can then vote and the most popular artist gets played on air.

9.8.5. *Piracy*

Piracy is as much an issue in South Africa as it is in the rest of the world, although it is largely dominated by DVD piracy. Music piracy is one of the main reasons why young and upcoming local artists do not succeed as artists in South Africa (RISA 2008). Artists and the record companies who support them lose an estimated R500 million each year to piracy. Artists such as Shwi, Yvonne Chaka Chaka, Steve Hofmeyr, Chicco, Arno Carstens, Rebecca Malope, Mandoza, Joyous Celebration and the late Brenda Fassie and Lucky Dube, are some of the most pirated artists in South Africa (RISA, 2008). In spite of this statistic, the sale of CDs has not been hit as hard as the US and UK markets. This could be attributed to the fact that P2P illegal downloading is not as prevalent due to the limited availability of band-width and the lack of Internet connection to a large percentage of the population.

In South Africa CD sales have held up quite well because we don't have a downloadenvironment, but artists that want to plug into the future that is beginning to arrive, are going to have to embrace the internet (Arthur Goldstuck - Media analyst in an interview with Carte Blanche, 2008)

Many South African up and coming artists use Myspace as their launching platform. However, there are more than 1.2 million rock acts and 1.7 million R&B acts alone competing for the same market on



MySpace (IFPI a, 2008). With little filtering (to display only South African content) available on the site, it makes it very difficult for these artists to be found.

A Case study

A South African artist, who came up with a marketing and distribution strategy that circumvented both the MySpace paradigm as well as the record labels, was Verity. She was, at the time, a young English white female who at the time, was writing and performing her own songs in a country where the market for all English speaking music, local and international, was less than 500 000 people. According to Music Producer, Peter Lacey (Carte Blanche 2008), South African niche-market music like Afrikaans, Afro-Pop and Kwaito has a captive audience, so their sales are huge. It's estimated that Bok van Blerk, with his controversial 'De la Rey' album, sold around 250 000 units, and Steve Hofmeyer sells that number on most of his albums. Kwaito star Mandoza's latest album sold more than 25 000 on the day it was launched, while Zola's album sold 180 000.

In Verity's case, she received very little support from the record labels and as such she had to come up with an innovative way to get the means to record her first album. What she did, although not necessarily unique, was the first of its kind in South Africa. Her approach was to set up a website, which aimed to market and sell her album before it was even produced. She took a very personal approach to engage with her fans, and allowed them to help her create the album. They could vote for which songs they wanted on it. In doing so she managed to raise enough money to cover the recording costs of the whole album, as well as making a contribution to charity.

Advertising Creative Director, Alistair King, in response to Verity's success, said the following (Carte Blanche, 2008):

There is not a lot of support for local artists in that genre. Record labels generally find it a lot easier to just take an album, straight from the US, slap it on the station: they can sell 100 000 copies without any effort whatsoever, because it's someone famous, and someone who's already a big brand.

It therefore seems particularly pertinent that unsigned South African artists pursue alternate avenues for marketing and distributing their product. It is also evident that emerging artists may not benefit if they rely solely on a record company to make them a success, as their focus is primarily profit driven, and they may not wish to invest time and money in artists from less popular genres. As such, the responsibility falls on the shoulders of the artists themselves to lead their product to success.



10. A Business Model Ontology

The previous chapter has given insight into some of the models that currently exist. An understanding of how business models are structured is useful when designing future business models. This chapter will discuss a framework or ontology for defining a business model.

Ontology, as defined by Fensel (2001) is a 'rigorously defined framework that provides a shared and common understanding of a domain that can be communicated between people and heterogeneous and widely spread application systems'. When addressing ontology for business models, it appears that there is little agreement among executives, reporters, analysts and academics as to what the term 'business model' actually means. They use it to describe everything from how a company earns revenue to how it structures its organization (Linder and Cantrell, 2001).

This study aims to adopt well documented business ontology in order to describe the interrelationships between role players for a proposed future business model for online music distribution. This chapter aims to clarify for the reader, the role of a business model in creating and sustaining value, when multiple role-players are contributing to a value chain.

10.1. The artist in the context of the Firm

Most literature on strategy and business model analysis refers to the business model in the context of the 'firm'. In order to apply any of this knowledge to an artist, it is necessary to define the role of an artist in the context of the firm. A firm is generally a business or organization, which is comprised of different divisions performing specific functions necessary for the running of the business. This view can be applied to an artist, as a micro organization of role-players, when described as follows:

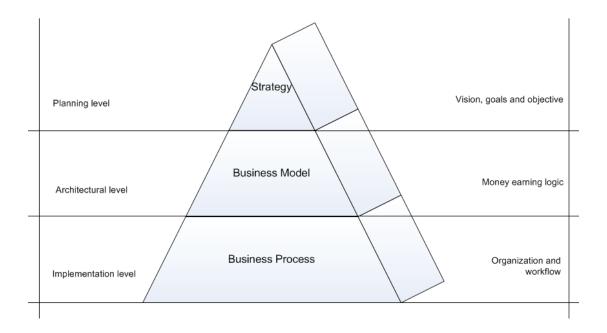
The artist is a creative entity who is able to provide a musical service for public consumption. If we were to view the artist in the context of the firm, this would imply that the artist performs a variety of different functions, which enable him/her to make money from their art, most of which is not related to the creative act of making music. It is not necessary to limit all these functions to a single entity, as the artist may employ other entities to perform these functions on their behalf. For example an artist may contract a producer, business manager, agent and lawyer to perform the non-creative functions of running their business. It is in this context that one should view the artist, and all relevant entities associated to the artist, which contribute to their business as 'the firm' for purposes of this research.



10.2. What is a business model?

Osterwalder and Pigneur (2002) document a business model as the description of the logic of a 'business system' for creating value, which lies behind the actual processes, rather than a complex social system itself with all its actors, relations and processes. Therefore a business model is understood as the conceptual and architectural implementation of a business strategy and as the foundation for the implementation of business processes as shown in the figure below:

Figure 2: Business logic triangle (adapted from Osterwalder and Pigneur, 2002)



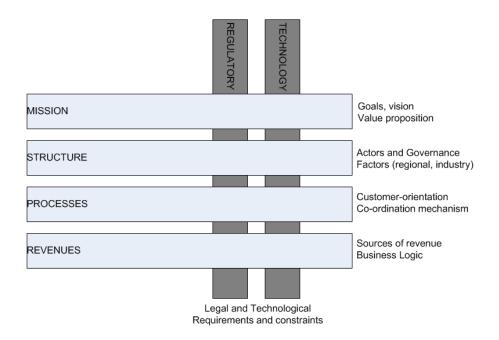
Alt and Zimmermann (2001) researched the word 'business model' as it appears throughout the literature. Their aim was to identify common elements of many known and published business models in order to provide a strategy for developing new ones, and as such providing a universal understanding of business models and promoting the adoption of a shared ontology. They identified the following generic elements of business models that should be considered in order to develop 'sustainable business models in a new economy':

- Mission One of the most critical elements of the business model is developing a high-level
 understanding of the overall vision, strategic goals and the value proposition including the
 basic product or service features.
- Structure determines which roles and agents constitute and comprise a specific business community.
- Processes provide a more detailed view on the mission and the structure of the business
 model. They show the elements of the value creation process and which requirements they
 address in the customer process.



- Revenues sources of revenue and necessary investments need to be carefully analysed from
 a short and mid-term perspective, not just a long term view.
- Legal and regulatory issues have to be considered with all dimensions of business models. Legal issues also may influence decisions on structures of value creation systems like value webs, processes of value creation (e.g. privacy laws), and revenue models.
- *Technology* is both an enabler and constraint for IT-based business models. In addition, one has to take into account the ongoing technological developments and their impact on the business model design.

Figure 3: Elements of generic business models (adapted from Alt and Zimmerman 2001)



Osterwalder and Pigneur (2002) took the same approach to unifying the understanding of business models; however their focus was on business models designed for e-business. They base their ontology on four pillars:

- 1. *Product and Services* that a firm offers, representing a substantial value to the customer and for which he is willing to pay. This is further described as product innovation which addresses the following aspects of the product and services:
 - Value proposition
 - Target customer
 - Capabilities
- 2. *Infrastructure and network of partners* that is necessary in order to create value and maintain a good customer relationship. This comprises of:
 - Activity configuration this is a description of the value chain



- *Partner network* Firms can then focus on their core competencies in the value system configuration and rely on partner networks and outsourcing for other non-core competencies and activities
- Resources and assets these are tangible (equipment, cash), intangible (patents, copyrights) and human assets (people needed to create value)
- 3. *Relationship capital* the firm creates in the customer, in order to satisfy him and to generate sustainable revenues. This comprises of:
 - *Information Strategy* defining the strategy relating to handling of customer information e.g. customer profiling for personalization and recommendation, data warehousing and mining, behavioural tracking
 - Feel and Serve (distribution channels) this defines how the customer is reached and through which channels
 - Trust and loyalty –making use of virtual communities to build trust and loyalty
- 4. *Financial Aspects*, which are transversal and can be found throughout the former three components, such as cost and revenue structures. Aspects of focus are:
 - Cost structure
 - Profit model

Given these two ontologies, Alt and Zimmermann (2001) provide a more generic structure for describing business models, whereas Osterwalder and Pigneur (2002) provide a more in-depth description that is tailored to an online application. It is for this reason that the former ontology will be used to describe the existing business models (namely iTunes, MySpace and Artspages) which are suited to a more generic description by virtue of the fact that we only wish to study these models at a high level. The ontology of Osterwalder and Pigneur (2002), is a more detailed structure, and hence will be used to analyse and describe a future set of processes which work together to add value to the task of distributing music online.

How these two models relate to each other is described under step 5 in Chapter 7.

An understanding of business model ontologies provides a structure for documenting new business models. Before the business model structure is defined, however, the overall strategy of the model needs to be identified. The following chapter deals with forces and factors that shape strategy with the aim of identifying the forces active in the digital music distribution arena.



11. Strategy

The top triangle of Osterwalder and Pigneur (2002)'s 'Business Logic Triangle' (see **Figure 2**) deals with strategy. This is essentially the plan a firm will develop to understand and cope with competition.

By proposing a new business model for the digital distribution of music, this research is in essence identifying a way of challenging the competition, which in this case is all currently existing music distribution systems, both local and international. These competitors may not currently be providing exactly what is proposed in this study, however, the potential to adopt this approach is likely, should this model succeed. One would therefore need to treat all of these agents as competitors. This therefore necessitates that particular attention be paid to the 'Five competitive forces that shape strategy' as identified by Porter (2008). These five forces are:

- 1. Threat of new entry
- 2. Threat of substitute products or services
- 3. The power of suppliers
- 4. The power of buyers
- 5. Rivalry among existing competitors

The two primary business models that currently exist internationally for distributing music (iTunes and MySpace) are not as dominant in South Africa as they are in the rest of the world. Although these models will be studied in depth to understand where there is potential for competitive gain, the primary competitor in the South African context is still the record company. There are various different models currently emerging which exhibit similar characteristics which are worth observing. It is in this context that Porter's five forces will be applied to the local South African music industry in the following section.

11.1. Threat of new entry

The most influential factors providing barriers to new entrants entering the industry are (Porter, 2008):

- High capital requirements
- Unequal access to distribution channels

11.1.1. Capital requirements

A new entrant into the arena of music distribution will need to have a high initial capital outlay in order to provide an environment where an artist can record their music; edit, mix and master it; distribute it and then promote it. The need to invest large financial resources to compete can deter new



entrants. Capital may be necessary not only for fixed facilities but also to extend customer credit, build inventories, and fund startup losses (Porter, 2008).

As such, a new entrant, who aims to be competitive without large start up costs, would need to make use of new open-source technology to recreate (virtually) what a record company achieves, and has already achieved, physically.

11.1.2. Unequal access to distribution channels

A new entrant into an industry must secure distribution of its product or services from competitors. The more limited the retail channels are and the more that existing competitors have tied them up, the tougher entry into an industry will be. Sometimes access to distribution is so high a barrier to entry that it in itself acts as a catalyst to circumventive actions by new entrants. As an example of this circumventive action, upstart low-cost airlines have avoided distribution through travel agents (who tend to favour established higher-fare carriers) and have encouraged passengers to book their own flights on the Internet (Porter, 2008). This is not dissimilar to the online distribution of music, as the record companies have largely tied up all the physical distribution channels, and the Internet provides the alternative to create a new distribution platform.

Historically, the major record labels have been reluctant to participate in any alternative distribution model, which would restructure the current music distribution hierarchy. This reluctance is due to their investment in the current physical distribution infrastructure and their relationship with the retail channel (Fox, 2004).

New entrants do not have the historical investments in infrastructure to weigh them down, and are free to utilize new technologies on the Internet to achieve access to a distribution platform that has the same if not further reach (albeit uncontrolled) as that of a record company. Therefore, the threat of new entrants to the record companies is high if they pursue this avenue of distribution.

11.2. Threat of substitute products or services

A substitute performs the same or a similar function to an industry's product but by a different means. When the threat of substitutes is high, industry profitability suffers. Substitute products or services limit an industry's profit potential by restricting price elasticity. If an industry does not distance itself from substitutes through product performance, marketing, or other means, it will often reduce profitability and growth potential. The threat of a substitute is high if (Porter, 2008):



- It offers an attractive price-performance trade-off to the industry's product. The better the relative value of the substitute, the more restricted the industry's profit potential becomes.
- The buyer's cost of switching to the substitute is low.

Technological changes have heightened competition for the major labels. The distribution of music over the Internet requires only a single master copy, whereas distribution of music as a physical product requires manufacturing, shipping, and warehousing CDs, audio-cassettes, etc. When music is stored and sold as a computer file, disintermediation (the cutting out of middle layers of distribution channels) occurs (Fox, 2004).

The following elements were identified by leading industry experts as necessary for any new business model, if it is to compete with the freeware offerings in the marketspace. (WEC, 2004):

- The appeal of simplicity (as with the Apple iPod).
- Convenience.
- A filtering function (to direct customers to what they want and/or to personalize it).
- A Peer-to-Peer mechanism or function.
- Possibly new and attractively designed appliances.
- Defined and undefined added value (quality, transparency, pricing structure/model).

By incorporating the above into a new distribution model for South African emerging artists, the current industry dynamics are likely to be altered, as the threat of substitute is high in this case. Emerging models are likely to offer an attractive price-performance trade-off to the industry's product as well as lowering the buyer's cost of switching to the substitute because they are likely to utilize open source software to create online applications which provide a high value, low cost distribution service to the consumer.

11.3. The power of suppliers

Powerful suppliers capture more of the value for themselves by charging higher prices, limiting quality or services, or shifting costs to industry participants. Powerful suppliers, including suppliers of labour, can squeeze profitability out of an industry that is unable to pass on cost increases in its own prices (Porter, 2008).

In the music industry, the record label is the ultimate supplier of records, however, they are also dependent on suppliers of audio equipment, CDs, packaging etc. The retail prices of a CD cannot increase much beyond the purchase appetite of the consumer, and the suppliers of the above-



mentioned items are competitive in their own right. It is usually the artist that bears this cost of internal competition, as contractual arrangements between record labels and artists provide labels with monopoly rights to the artistic output of individual artists, from which the labels can then generate revenues (Fox, 2004).

In the context of an online distribution system for digital music, the physical product is removed, which therefore, by implication, removes to competitive forces previously imposed by physical product suppliers on the artists themselves. This leaves the artists in a more favourable position than before, as essentially they have become the primary supplier of content, and can therefore be competitive in their own right.

For this to take fruition in the South African context, it is necessary that the emerging artists acquire some business skills as part of their education within their music curriculum such that they are able to engage in a commercially competitive fashion.

11.4. The power of buyers

Powerful customers (as opposed to powerful suppliers) can capture more value by forcing down prices, demanding better quality or more service (thereby driving up costs), and generally playing industry participants off against one another, all at the expense of industry profitability. Buyers are powerful if they have negotiating leverage relative to industry participants, especially if they are price sensitive, using their collective clout primarily to pressure price reductions (Porter, 2008).

In the commercial realm of the Internet, a large portion of online activity is browsing for content before buying. This browsing action has in itself a powerful role to play in how content is popularized and ultimately purchased online. The role of consumers in this regard, has an impact on the value chain for the content provider. The following section will deal with the consumer in their role as buyers on the Internet as well as their role in contributing to the popularity of a product online.

11.4.1. Understanding the consumer

Online music distribution takes place in a dynamic environment where many factors are unknown. For example, it is impossible simply to transfer existing knowledge about consumer behaviour from the offline to the online domain. The typical online customer is (still) not comparable with offline customers. Online customers are accustomed to choice and access that goes beyond the physical bounds of a retailer - and as a result, policies that used to work offline do not work online (Schuster and Gilbert, 2005).



The buying power of a consumer is generally measured by the expressible demand for a product as indicated by the amount of money that the consumer is willing to spend on such music products (De Villiers, 2006). De Villiers found that in 2002, the buying power of South African consumers was relatively weak when compared to the world top ten sales value countries. Much has changed since 2002, however, which has resulted in a significant shift in the mindset of the consumer, as music products have moved from the physical to the virtual realm.

In the case of many consumers, traditional album formats have been abandoned in favour of custom burnt CDs or personalised playlists of digital singles, enriched by online chat groups, streamed events, and community features. This means greater choice and flexibility, with consumers able to enjoy music on their terms (i.e. no need to pay for full albums when only a few songs are desired) (Wunsch-Vincent and Vickery, 2005). Seemingly, various forms of P2P services and online music stores are able to sustain a greater breadth of music types, thus potentially better satisfying consumer demand and niche markets. Moreover, control over the way consumers find and buy music is slowly gravitating away from traditional to new patterns, maybe leading to more music genres and a lesser focus on a few music stars (Wunsch-Vincent and Vickery, 2005). It will be valuable to see how the South African music consumer market will react to the second generation business models (as described by Dubosson-Torbay, 2004) where they as consumers are either given the free content or they are able to give an optional amount. This has the potential to greatly increase their buying power as a result of perceived increase in value, resulting in a large shift away from the situation of 2002.

11.4.2. User Contribution

Apart from having ubiquitous access to music, users may become important participants in the whole chain of content creation, marketing and distribution (Wunsch-Vincent and Vickery, 2005). Cook (2008) describes a 'user contribution taxonomy', which divides users into *active* and *passive* contributors who aggregate and leverage various types of input that are useful to others. Aggregation occurs at the following levels:

- 1. Content this would be an aggregation of opinions, expertise, software code, creative expression or social/personal information (Wikipedia, Firefox, YouTube and Facebook)
- 2. *Items for sale* this would be an aggregation of goods, advertising or services (eBay, Google's AdWords, Craigslist)
- 3. Behavioural data this would be an aggregation of buying behaviours, web-linking behaviour or company behaviour (Amazon product recommendation, Google search engine algorithm)
- 4. *Resources* an aggregation of computing capacity and computer sensing capabilities (Skype, Honda's InterNavi traffic information service)



Cook (2008) also identifies a cost advantage as sites enjoy free 'raw materials' as users perform gratis work that companies typically have to pay for, and at the same time they get the benefit of scalability and competitive advantage due to networking effects.

By allowing countless users to contribute to the area of *content* as well as *resources* provides the platform that laid the foundation for the success of Napster and other P2P networking distribution models. It is intended that a new business model for online music distribution should utilize user contribution to achieve the following:

- Increased exposure among social networks where opinions and expertise are freely expressed.
 This will aid an artist to better understand their target market and what elements of their work they could tailor accordingly
- 2. *Increased sales* within certain genres as intelligent recommendations are made to users either via a community or via past interactions with other related content
- 3. Ability to create a directory of services that is maintained by each service provider individually (such as freelance producers, mixers, engineers looking for work etc). i.e. there is no need to host and maintain this content centrally
- 4. *Obtaining leverage off distributed computing capacity* as users work in a peer-to-peer fashion when sharing content
- 5. Aggregating relevant content and resources, such as combining location-based information (e.g. tour schedules) with a navigational API such as Googlemaps to create a real-time information service

11.5. Rivalry among existing competitors

High rivalry limits the profitability of an industry. The degree to which rivalry drives down an industry's profit potential depends, first, on the *intensity* with which companies compete and, second, on the *basis* on which they compete. The intensity of rivalry is greatest if (Porter, 2008):

- Competitors are numerous or are roughly equal in size and power.
- Industry growth is slow. Slow growth precipitates fights for market share.
- Exit barriers are high. Exit barriers, in contrast to entry barriers, arise because of such things as highly specialized assets or management's devotion to a particular business. These barriers keep companies in the market even though they may be earning low or negative returns.
- Rivals are highly committed to the business and have aspirations for leadership, especially if they have goals that go beyond economic performance in the particular industry



Because of the oligopolistic nature of record companies the world over, the competition remains fierce, but out of reach of a new entrant. The growth of the industry is small due to the high levels of piracy and file-sharing; however the barriers to exit are high for these companies, so they remain solvent.

Peer-to-Peer download services are not reliant upon existing music industry infrastructure, particularly in the area of distribution, and also provide consumers with access to free music. This has placed the threat on the industry to 'compete with free' if they are to remain profitable. File-sharing and the increased capabilities of the Internet have crumbled the foundations of the recording industry, which has grown to its powerful state because of the control they have over the physical product. Fox (2004) proposes that access to free music online has redistributed power in the music industry from music labels to individual consumers, by removing the transfer of a physical product.

In the South African context, there are no primary competitors to the iTunes or MySpace business models with the exception of music stores which make their existing merchandise available online. There are no sites, however, which focus on up-and-coming artists, who have no affiliation with a record label who would like to distribute their work. The closest competitor in this realm is possibly H-artbeat Radio, however, they only allow webstreaming, and not downloading or purchasing of music. There is a great opportunity to create a portal for unsigned artists to allow them to distribute their work, under their own licensing agreements. Additionally with the forthcoming increase in broadband infrastructure, and increase in popularity of South African music the market is ripe and ready to accept an Internet-based model.

The following chapter details the salient features of the current international business models to ascertain what features should be included in a model for the South African context.



12. Analysis of Current Business Models

Step 1 of the chosen methodology as proposed by Vlachos et al, 2006 and described in Table 1 is to investigate existing configurations and documenting the current business models in operation. The current business models that have been identified and discussed briefly up to this point have been chosen because of their evident success in the international market, their ability to capture and hold a captive audience as well as their ability to manage the sheer scale of the inventory with which they have been charged.

There are four avenues which need to be addressed when approaching a new business model for online distribution. These, in the opinion of the writer, are the following:

- 1. An online environment that is conducive to sales
- 2. An online environment that is friendly to emerging artists and has wide reach
- 3. A central repository of content which is accessible by both content owners and content consumers, which can provide great value when profiling a consumer's preference for music.
- 4. A value proposition that will engage the consumer and retain their loyalty

iTunes is arguably the most successful online music store in the world, and therefore is a great model to mimic in order to satisfy criterion 1) above. By using this model as a basis for a new model in South Africa, one is starting from a strong grounding. There is an opportunity to use what iTunes has done, but customize it to the South African market, and in doing so, create an endemic model, which is likely to succeed as it has taken the customer into account.

Secondly, MySpace was chosen for analysis because of the wide reach and appeal it has for up and coming musicians, worldwide. This is the single site which most successfully captures the function of item 2) above. As previously mentioned, however, it is not easy for local South African artists to make a name for themselves in the expansive MySpace landscape. It does however still captivate the emerging artist market, and one should therefore heed the successes of this site when re-thinking a local model.

Thirdly, Artspages was chosen as the final model for analysis because of their prowess in managing a vast repository of music content, thus satisfying requirement 3) above. The information that Artspages is able to provide to record companies in terms of management information (such as sales and genre statistics) is extremely valuable in determining a strategy for the future. Online distribution which is led by the artist will require significantly simplified, easy to understand management information that will enable an artist to make wise decisions regarding their position in the marketspace.



By following the example of iTunes, MySpace and Artspages, there is potential to create an entirely new model which performs a (currently) unique function in the music industry, and that is to create a 'one-stop-shop' tool for both musicians and consumers, which profiles only local content, and creates a local traffic zone for e- and m-commerce which will likely benefit the artist more than what the traditional value chain has to offer.

The upcoming sections will give a more detailed analysis of these business models in keeping with the methodology described earlier by Alt and Zimmermann (2001). A comparison of the abovementioned business models can be found in Appendix B.

12.1. iTunes and the iTunes music store

iTunes is Apple's proprietary music player application which performs all the functions one would expect from a music player, such as playing CDs, MP3s, creating MP3s from audio CDs and burning playlists onto audio CDs. In addition it stores content on Apple devices such as the iPod and iPhone. This application runs on both Mac and PC platforms.

The iTunes music store, which is launched from within the application window, allows users to listen to streaming audio, internet radio and podcasts as well as providing an opportunity to purchase music by browsing the store, or by accepting the stores recommendation on content based on previous interaction with the application via the 'Genius' functionality.

12.1.1. Mission

The mission of the iTunes and the iTunes music store is to generate incremental revenues through the positioning of the computer as an 'appliance' in the form of software – one appliance that performs all the functions a consumer needs with regard to purchasing and sampling music online.

12.1.2. Structure

The iTunes music store comprises the following roles and agents:

- *Record Labels* the iTunes store hosts the music catalogue of various big labels, such that consumers have an aggregated view of content, and a wide exposure to many different artists.
- Film and television companies similarly to record labels, iTunes hosts content from different film and television companies which users can then purchase
- *Various independent podcasters* podcasters may list their podcast on iTunes by uploading the podcast URL onto the iTunes store.



- Applications the iTunes store also hosts proprietary applications for use on the iPhone or
 iPod touch. There is a software development kit provided by Apple which enables
 independent developers to create applications to be used by Apple devices and sold on the
 iTunes store (Apple, 2008).
- Consumers consumers are required to log into the iTunes stores of the country in which
 they reside, and then sample or purchase content that is provided by that particular store. The
 US store for example will not allow purchasing from a billing address outside of the US. An
 example of the iTunes store user interface for South Africa can be found in Appendix A,
 Figure 23.

12.1.3. Processes

There are two key processes in the iTunes business model:

- 1. The process to aggregate the content from record companies and legally sell these items online
- 2. The consumer process which allows the easy search and purchase of digital content online.

The figures in the coming sections are an interpretation by the writer of the above processes. For a full view of the iTunes business model see Appendix A, Figure 21.

Content Aggregation

The above process illustrated in Figure 4 depicts the flow of products, services and compensation as well as consumer engagement with the product. The content provided by the iTunes store is aggregated only from approved record companies, largely consisting of majors, with some contracts in place for independents. Therefore, this model does not cater for individual artists to sell their music on the iTunes store if they do not have already have a recording contract with a major company that has a contract with the iTunes store.

The pricing structure is defined by iTunes and not by the content providers, nor the artists. This creates opportunity for pushback from these entities as their revenue is dictated by the iTunes revenue model, and is a set amount for the contractual duration. This provides no leeway for the publishers, artists or labels to dynamically vary their price based on the success of their product. This model is of benefit to iTunes, because it keeps its prices low, and maintains a loyal customer base (providing the right content is provided), but trades off flexibility for the content providers.



iTunes Content Cente \$0.99 **Record Companies Podcasts FREE** Sony BMG Feature length films EMI \$9.99 - \$14.99 **ARTIST** Warner Music TV shows \$1.99 Universal Music Audio books Independents Wide price range **Music Videos** \$1.99 Other content providers iPod games Games, movies, books, \$4.99 TV shows, podcasts Movie trailers **FREE**

Figure 4: Process for aggregation of content - iTunes

Consumer engagement process

The consumer engagement process for the iTunes store is illustrated in Figure 5. The consumer interactions are with:

- Content
- iTunes community
- Apple devices

The success of the iTunes store is largely dependent on retaining a loyal customer base. This means that the consumers will return to the site if they find the music they want quickly and easily. The iTunes store provides easy search functionality and allows users to sample their selection as well as a huge inventory to browse. An example of the iTunes store user interface can be found in Appendix A, Figure 22.

Once the user has decided which tunes they would like, they need to log in. All downloads are encrypted with Apple's 'Fairplay' DRM codec before download. This limits the user to only play this



on an iPod. Additionally, there are security checks built into the payment process which does not allow anyone to purchase from the store unless they have a credit card with a billing address in the same country (as is illustrated by the inability of South Africans to purchase music on the iTunes store in the United States with a South African credit card).

The iTunes store also contains a community element which is aimed at retaining customers and building up brand loyalty by putting users in touch. This community also allows users to gain access to celebrity playlists, and view what ratings other community members have given to iTunes store content.

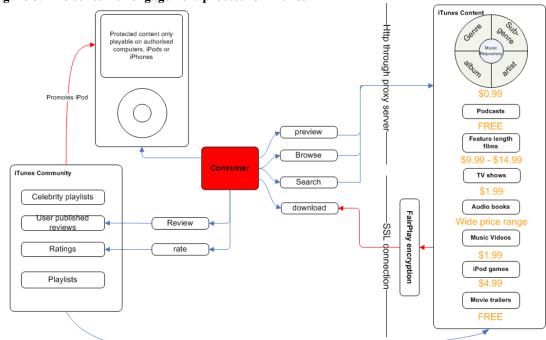


Figure 5: The consumer engagement process for iTunes

12.1.4. Revenues

The iTunes Music Store has been successful, though the store produces little revenue. Apple primarily uses the application to encourage sales of iPod devices (Wunsch-Vincent and Vickery, 2005). The pay-off is assumed to be indirect since Apple gives away iTunes at no cost. This is a benefit for users, since similar functionality of equal quality previously required the purchase of a commercial product. The developers of the software (Casady & Greene) also benefit, since they are remunerated for the license to their code (Wunsch-Vincent and Vickery, 2005).



The store sells every song for 99 cents (US) as a standard marketing position. Out of each 99 cent song, Apple currently pays artists and labels an estimated 65 to 70 cents per song, 9 cents of which they currently pass on to publishers (Saba, 2008).

Developers are able to submit iPhone applications and receive remuneration directly (Apple, 2008). This in itself is an incentive for programmers to provide applications that the public will buy, and illustrates a symbiotic relationship between Apple and the developers which also ultimately benefits the customer. If one were to view artists and producers in this same context as the developers in this example, then one might envision an environment where the artists are remunerated for their work at a rate which the artists themselves choose, and the content provider shares in a profit percentage.

12.1.5. Legal Issues

Apple uses a proprietary codec AAC and a proprietary DRM technology (Fairplay) which it does not license to third party providers (Wunsch-Vincent and Vickery, 2005). This aids them in retaining a loyal consumer base, since they are reliant on Apple to continue using their iPods to play the tunes they have bought from iTunes.

There are no limits on CDs that can be created, and the CDs can be encoded in a variety of formats using iTunes, but without the DRM. DRM-free versions are available for a select number of tracks for a slightly higher price. iTunes libraries can also be shared with other computers on a LAN.

iTunes' survival has, in spite of their success, been under threat numerous times (Saba, 2008) and still continues to face legal action from both publishers and records labels (who demand higher royalties) as well as from the public (who demand that all media players should be able to play iTunes content).

12.1.6. Technology

As mentioned already, Apple has used technology to create applications, devices and software that capture the market, and then retains that market by virtue of the fact that these consumers cannot use their purchase anywhere but on (or with) other Apple products. This is a good business model for Apple, but is not necessarily a good model for the promotion of digital music distribution in general. As has become evident in the literature, the movement is away from proprietary products towards free products (which are interoperable) and community sharing (Wunsch-Vincent and Vickery, 2005; Reece, 2004). Future business models should not adopt this approach to retaining a customer base, because consumers are not likely to be loyal to their brand, unless they are reliant on a device or product that supersedes the iPod in popularity and reach.



12.2. MySpace Music

MySpace is an online community that early adopters helped shape into a music-friendly place, which then took on the name MySpace Music. It has many features traditionally associated with online communities, such as forums, user groups, network structure, and highly customizable user profiles (Liu, 2008).

12.2.1. Mission

MySpace Music aims to use its existing audience and artist base to deliver a well rounded music experience to users. They include the major Indie, and unsigned artist communities as partners, allowing users to enjoy a large and robust repository of audio and music video on the web (Simplyhired, 2008).

12.2.2. Structure

MySpace grew out of the success of 'Friendster', and gradually started adding features based on user demand. One such emergence is user personalisation. This feature emerged because users were not restricted from adding HTML into the forms that framed their profiles; a copy/paste code culture emerged on the web to support users in generating unique MySpace backgrounds and layouts (Ellison and Boyd, 2007).

On the MySpace interface, cultural interests are organized into categories in Social Network Profiles. Five of the six categories displayed by MySpace—general interests, music, movies, television, and books—are shared by Friendster, Facebook, and Orkut (Liu, 2008).

Even though MySpace was not launched with music groups in mind, they were welcomed (Ellison and Boyd, 2007). The MySpace community over time, developed into a place where music groups could connect with their supporters and vice-versa. This is a dynamic not evident in any of the other music sites already mentioned.

MySpace is largely driven by the artists themselves, and it is evident from the number of unsigned artists on the site, that the effort required to market themselves on MySpace is not a major barrier to entry. The marketing opportunities available on MySpace are largely limited to posting items and links onto the artist's page and perhaps on the profiles of those to whom the artist is linked. The majority of marketing occurs offline at live shows, where the listeners are then directed to the MySpace profile page to find out more information and sample the available music content.



Additionally MySpace is a starting point for an up-and-coming artist on a world-wide basis. This makes it difficult for a local artist to target a local audience. Similarly it is difficult for a person browsing for local talent to separate local acts from international acts. It is in this regard that MySpace lacks a profiling element which would allow different user types to view different content, based on their needs and location.

12.2.3. Processes

There are essentially two processes that warrant analysis in the MySpace model. These are:

- 1. the process the artist has to go through to get their content online
- 2. the process that the consumer will go through to connect with the artists and sample their music

For a full view of the MySpace business model see Appendix A, Figure 24.

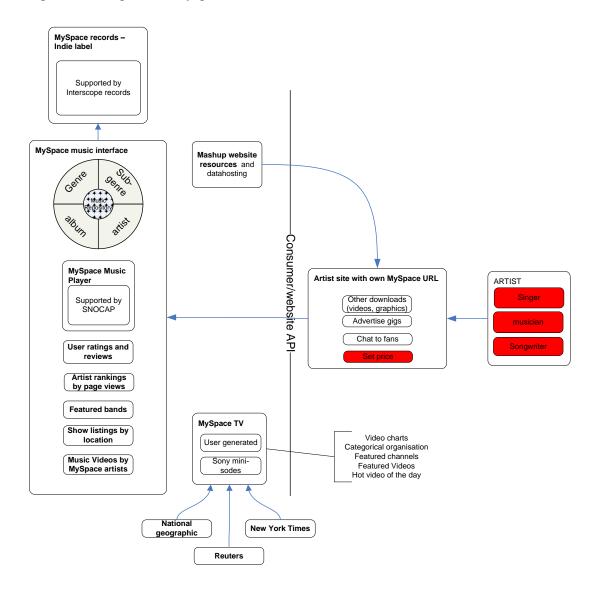
Artist Process

Figure 6 shows the Artist process for MySpace. Artist/musicians simply need to create a profile on MySpace at no cost, before they can start connecting with other users. It is necessary that the fans are also MySpace members in order to access the online community features.. Musicians can freely distribute their MySpace URL to the public, however, and anyone can access and sample their content without creating a user account or profile.

In order to upload music onto a MySpace profile, users need to embed a MySpace music player into their profile page. This then forms the link to the MySpace Music label, which will gives artists access to this record label (at the label's discretion) if they prove to be popular on the site.



Figure 6: Artist process - MySpace



Consumer Process

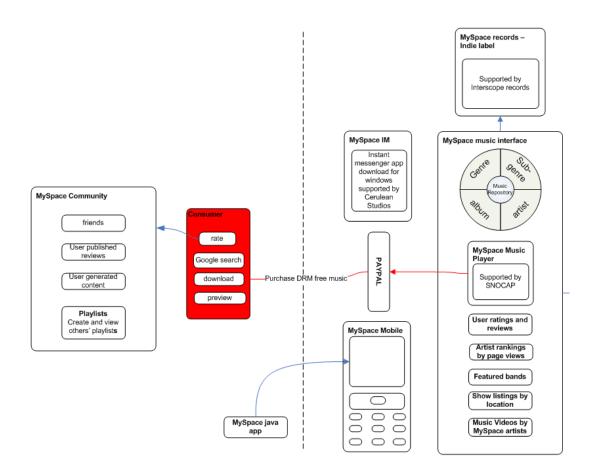
MySpace has only recently allowed fans to actually purchase music on the site. Previously music was only for preview purposes. Now it is merely a case of clicking an icon on the MySpace music player in order to purchase the song, generally by way of a third party provider such as PayPal.

Social media is a highly focal point in the MySpace model. Users of the website may freely browse the profiles of other users. In most cases, however, the user will form his or her own community of friends. Interaction generally takes place within this network. Friends, or 'fans', may listen to the latest tracks through their PC or their mobile phone (courtesy of the MySpace Mobile java application). Friends may also contact each other via Instant Messenger functionality.



The global MySpace Music community is accessible from the MySpace homepage (see Appendix A, Figure 25). This homepage profiles top playlists, user reviews and other user generated content. Consumers are able to access the top reviewed songs of this page, however, this community is not propagated through to the users own homepage. This means that much of this profiled content and exposure for artists will only be seen by those who expressly visit the MySpace music URL. More exposure could be created by allowing the user to select which genres they would like to pull into their 'own' homepages, and access the profiling in that way.

Figure 7: Consumer process - MySpace



12.2.4. Revenues

There is no charge for an artist to create a profile on MySpace and therefore the majority of revenue generated on MySpace comes from advertising. More recently, however, MySpace has added a purchase option to their online music player allowing users to purchase the song they are currently listening to. Additional revenues come from merchandising and concert ticket sales online.

It could be speculated that the MySpace Music business model will mean the demise of per-stream fees and download fees. Music consumption will then be viewed as free marketing. Labels will



compete to encourage song downloads and streams to move those songs up the charts, attracting premium advertisers, merchandise sales and sold-out concerts.

12.2.5. Legal Issues

MySpace does not make use of any Digital Rights Management, but rather compensates their artists from their advertising, merchandising and concert ticket sales.

The primary social concern for MySpace at present is curbing the predatory behaviour of sex offenders who lure under-aged teens into compromising circumstances. This is a concern for all social networking sites, and it is important to note that emerging business models should put sufficient security measures in place to deter such offenders and attract only a legitimate audience – those wishing to buy music online.

12.2.6. Technology

The technology employed largely by MySpace enables users to customize the aesthetics of their homepages. This is done by importing customized HTML programming code into their site, which is automatically generated by third party sites that specialize in this function. All the user has to do is copy and paste this code into a placeholder on their site, and the correct graphics and content is displayed as desired. This gives an artist a great amount of flexibility in building their brand online that mirrors their offline stage image, as well as expressing more of themselves and allowing their listeners to get to know their style much better.

MySpace also combines online technology with mobile technology and instant messaging technology. This is an element that is crucial to any emerging business model, especially in the South African context, where mobile phones are more prevalent than the Internet. By combining these technologies, the online music industry is shifting towards an integrated virtual environment, where music is available on demand from whichever source is desired.



12.3. Artspages

Artspages (located at Artspages.com) is a Norwegian-based company that administers all online functions that a record label requires with regards to distributing music online and tracking and maintaining digital content warehouses.

12.3.1. Mission

Artpages aims to be the digital sales partner to record labels and/or artists. They provide management information to the labels about their online performance of their content in terms of sales. Artspages will also work to ensure digital distribution rights for the labels.

12.3.2. Structure

Artspages functions as an online partner to record labels where they can log in to perform functions of the following nature:

- Access and administer their catalogue
- View daily sales reports
- Add new media

Examples of the above elements can be found in Appendix A: Online catalogue administration (Figure 29), sales statement (Figure 28) and daily sales report (Figure 27).

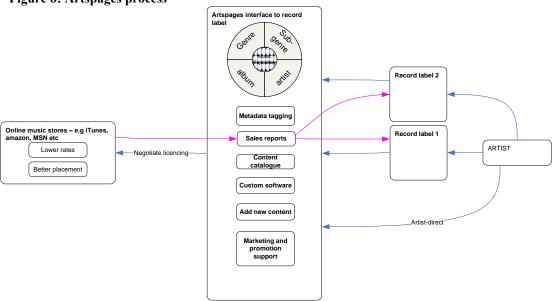
Artspages will also facilitate negotiations between the labels and other digital service providers for favourable rates, as well as adequate placement of the labels' content in the different digital stores. The website is essentially the interface that the record label will use, but the majority of the service provision occurs offline (on the record labels' behalf). Economies of scale are achieved by aggregating many record labels' content and cumulatively pitching it at any given online store.

12.3.3. Processes

Artspages essentially acts as the commercial middle-man between a store like iTunes and a lesser known Indie record label, in order that iTunes might stock the record labels' content, and make sure it will be easily found by prospective buyers. Artspages performs the same role that distributors play in the traditional value chain, but in the online space. The Artspages process diagram is shown in Figure 8.



Figure 8: Artspages process



An individual artist may also enlist the services of Artspages if they are agreeable. By doing so, the artist has access to a wide distribution network, which has historically been an element of the value chain controlled by the record companies. This had always been a major barrier to entry for most artists who wish to distribute a physical product. An artist who is able to utilize the services of Artspage, however, and has a digital product to distribute, would not need to rely on a record label to perform this function for them.

It is evident that Artspages has made a concerted effort to promote lesser known artists, particularly from African countries and to aid them in distributing their work (Adisi, 2006).

12.3.4. Revenues

There is no startup fee (and therefore no barrier to entry) for registering with Artspages, but they will charge a fee for the distribution of content to third parties.

12.3.5. Legal Issues

Artspages encodes all the files that are passed on to third parties, whilst keeping the master record out of reach of the online stores. This ensures a certain degree of artist protection from copyright infringements.

12.3.6. Technology

Artspages is able to custom-develop additional software to meet the needs of the record labels. Their main focus however, is providing software that maintains the metadata of each song (e.g. artist, title, genre, date, etc - see Figure 30), and provides encrypting for each song to third parties.



Appendix B shows a comparative table of the salient features of each of the abovementioned business models.

12.4. Eclecticism in strategy today

Eclecticism (or 'borrowing styles from the past') is a term that accurately describes how natural evolution takes place in the commercial and technical world. By learning from the achievements and mistakes in the past, one is able to define a way for the future, which is driven by current constraints and opportunities (Lazarus et al, 1992).

This chapter has identified the major attributes of existing business models, with the aim of exploiting their weaknesses in order to leverage an advantage in the local South African market – which by its very nature is in contrast to the environments in which the above-mentioned models exist. This, by implication means that none of these models would necessarily work if they were implemented in their current form in the South African market. For one, the technology deployment breadth is in favour of mobile phones, which currently play a minor role in these models; and secondly, the target market is different to those for whom these models were intended. The rural South African market is largely dominated by Kwaito music (Shaw, 2007 p130-131), which does not currently feature on international charts. As such, sites like MySpace really provide too broad a content base for the needs of the majority of South African listeners who enjoy local music.

Additionally, there are many emerging technologies which are very well suited to such applications as digital music distribution that have yet to be fully exploited by any one distribution model. The following chapter examines these technologies to assess their validity and usefulness in the context of a local distribution model.



13. The Influence of Technology

Step two of the chosen research methodology as described by Vlachos et al, 2006, is to assess the influence of technology innovation. There are many recent technologies that have emerged that have the capability of fundamentally changing the way people do business on the Internet. The following is a study of the new and emerging technologies that could be utilized in a future business model for online music distribution.

Some key features of Internet-based tools suitable for music transactions are:

- High speed Internet
- Digital watermarking
- Cloud computing
- Google search
- Web 2.0
- E-commerce and M-commerce

Some additional elements of Web 2.0 will be discussed in more detail:

- Social Media
- User-generated content
- Social networking

These features will be discussed in further detail in the coming sections.

13.1. High speed Internet

A key requisite for the frequent and efficient downloading and streaming of music is a competitive and widespread access to broadband infrastructure (Wunsch-Vincent and Vickery, 2005).

Access to this kind of broadband infrastructure has increased dramatically in recent years. In South Africa (from 2007 to 2008 alone) fixed line broadband subscribers increased by 61.2%, (with a population penetration of around 1%). This indicates that more people have access to the infrastructure that allows for efficient downloading and streaming of music online.

South Africa, although improving annually, is still lagging behind the developed world. For example, Verizon Wireless in the United States boasts maximum download speeds available in the region of 50Mbps, using fibre-optic cabling technology (Verizon, 2008), whereas the current maximum



download speeds available in South Africa on a 3G connection are around 7.2 Mbps (Vodacom, 2008).

It is encouraging, however, that with these kinds of transmission speeds, the capability exists to create further Internet applications that can reap the benefit of this higher capacity network.

13.2. Digital watermarking

Digital watermarking provides a way to imperceptibly embed digital information (that is bound to the original) into both digital (images, video and audio) and conventional (printed material) media content (Sharma and Decker, 2001). Digital watermarks are used to prevent unauthorized use of digital content, such as illegal copying and falsification (Kamiya et al, 2008). Today, more and more record labels and movie studios are relying on audio watermarks to communicate copyright ownership and provide new user experiences (Digimarc, 2008).

13.2.1. Communicating and protecting copyright

The process for digital watermarking is as follows (Quan and Hong, 2008):

- Author (or copyright holder) must embed a personal watermark in the work. This watermark should be robust against unknown attacks and should reveal the ownership. This is such that if piracy does occur, the author can extract his personal watermark and show his legal copyright
- The author should then request a Content Management Server (CMS) to register his work. Unique identifiers will need to be provided such as email address, work information, etc. The CMS then stores the final work in a central database. CMS then employs a Watermark Agent Centre (WAC) to encrypt the author ID and create a hidden 'watermark agent' which is then embedded in the work to prevent illegal copying. This 'mobile agent' is essentially a piece of code that can migrate between hosts on the Internet, and perform remote authentication of digital copyrighted works.

Although the above description is a simplified account of a very complex field of engineering, suffice it to say that there are emerging technologies which are able to track where a digital work is located and whether it is a legal copy or not.

Companies such as Digimarc claim to have the ability to use digital watermarks to monitor play time of music on the radio as well as act as a filter for audio content as it is streamed to the Internet, such



that it can be tracked and reported back to the copyright owner for royalty collection purposes (Digimarc, 2008).

13.2.2. New user experiences

In addition to easily identifying music wherever it lands, digitally watermarked content opens up many new possibilities for enhanced consumer experiences, such as (Digimarc, 2008):

- Ensuring easy access to music on demand by allowing metadata in the watermark to facilitate easy searching
- Linking consumers to relevant information such as information on musicians and where they can be seen live, where/how to buy the song, other works by the same artist
- This technology also facilitates the distribution of music to the listener's mobile phone by providing the listener with the correct information needed to make such a purchase for example the URL where the song is available for download.

New applications are emerging that enable digital devices, such as mobile phones, to 'hear' the music, detect the watermark and link consumers directly to the website of the artist. This opens up a broad range of opportunities for building customer loyalty and adding value around the music (Digimarc, 2008).

13.2.3. Industry solution

The aforementioned company, Digimarc, offers a software development kit, which allows developers to implement the Digimarc software into their own application (Digimarc b, 2008). By utilizing this service, emerging business models for music distribution will be able to tap into a well developed and tested algorithm, and gain the benefits of tracking airplay and Internet play in order to ensure fair compensation of the artists. This concept has not been exploited in any of the existing business models that have been studied in this paper, and therefore presents much opportunity for emerging models to take advantage of this technological development to gain a competitive edge.

13.3. Cloud computing

Cloud computing is a form of distributed computing which allows applications on users' local machines to shift the workload and storage burdens (traditionally carried by the local machine) to a network of computers that make up the 'cloud', and thus share the load. Hardware and software demands on the user's side decrease, resulting in faster and more reliable applications which are not dependant on one single machine. The only requirement on the user's machine is the ability to run the



cloud computing system's interface software, which can be as simple as a Web browser. All other computing functions are performed by the cloud's network participants.

Many other application services are available today, which use cloud computing. Almost any Web site can expose its functionality as a cloud service for developers to use. Photo-sharing sites such as Google's Picasa and Microsoft's Windows Live Photo Gallery do this, for example, as do online contacts applications such as Google Contacts and Microsoft's Windows Live Contacts. One big motivation for exposing services is to make it easier to create 'mash-ups' that exploit the functions of diverse Web applications (Chappell, 2008).

For example, this has been done with mapping services such as Google Maps and Microsoft's Virtual Earth. Both provide cloud-based services that application developers can use to embed maps in Web pages. As is the case with *search* functionality, these mapping services are adjuncts to existing websites that target users directly (Chappell, 2008).

Amazon Web Services is an example of the use of cloud computing that will contribute to a new business model e-commerce platform. Amazon provides the API and data hosting facilities. Programmers need only download the API and customize the front-end to tailor the service to their needs. The advantages of using an established, well-tested platform for custom e-commerce applications are (Amazon, 2008):

- Cost effective pay only what you use
- Dependable a stable platform that has been tested
- Flexible any programming model or platform can be used
- Comprehensive pre-written services for incorporation into a model

Emerging business models should utilize this kind of technology, perhaps not to the extent of actually running applications remotely, but by using other services that 'expose' their functionality to the cloud. For example, one could tap into the payment algorithms of Amazon, and the mapping functions of Google and the licencing functions of a site such as sonicspaza.co.za. This would eliminate the need to develop these functions in-house and would substantially bring down the startup costs of an online distribution system.

13.4. *E-commerce*

As indicated in the literature review, there is a strong movement towards m-commerce. However this does not mean that e-commerce is a thing of the past. There are ever increasing innovative ways of



conducting business over the Internet that cannot be replaced by the mobile phone. These processes can be augmented by a mobile process.

13.4.1. Shop Direct

In a similar way to what Google and Amazon have done by opening up their functionality to consumers, there are solutions available that allow one to attach directly to a website a payment interface that is tested, and stable directly to a website, for a small monthly fee. An example of such an application is Shop Direct, which is a local South African site that offers to take on the e-commerce function of a website. Goldfish (www.goldfishlive.co.za), a very popular local South African band, makes use of Shop Direct to sell their merchandise and records on their website. The customer interface can be viewed in Appendix C, Figure 31.

13.4.2. Paypal

Paypal, which has already been mentioned in this study, is more widely adopted overseas, predominantly in the USA and the UK. Their function is primarily to give their members a safe and secure portal for conducting all of their e-commerce functions online. What this essentially means is Paypal will securely encrypt the member's credit card details and then act as a middle man in all online payments. The member therefore does not have to enter their credit card details online countless times and possibly exposing them to phishing scams and other security risks. Paypal also offers a secure way to wire money to different locations across the globe, acting almost like a bank, but trading in PayPal credit.

Paypal differs from Shop Direct in that it requires the buyer as well as the seller to sign up and become a member. Shop Direct merely performs the administrative task of collecting credit card details, and interfacing with credit control to pre-authorise transactions. South Africans are generally not exposed to many sites that use Paypal as a payment mechanism, and it is therefore recommended to use a site like Shopdirect to collect payment details as it provides a lesser barrier to entry for the consumer, which is likely to aid an easy sales process.

The Paypal customer interface can be viewed in Appendix C, Figure 32.

13.5. **M-commerce**

M-commerce works slightly differently to e-commerce. When a purchase or download is made with a mobile phone, the cost is normally immediately debited to the users mobile phone account. This removes the need for the consumer to laboriously enter credit card details. This provides greater ease



of use and is a streamlined process for mobile content distribution. This is also of great benefit to a country like South Africa in which the larger percentage of the population (the same percentage of the population that are likely to download songs via their mobiles) do not have credit cards, which renders them unable to partake in e-commerce, but they are able to use m-commerce.

Apart from OECD countries like Japan and Korea, mobile phones are not yet major tools for downloading content (apart from small files such as ringtones, daily horoscopes etc.). Concerted research and innovation efforts by different industry players (manufacturers, content providers, etc.) is however ongoing to remedy this situation. Improving audio compression technology now allows ever greater music files to be downloaded onto phones (Wunsch-Vincent and Vickery, 2005).

According to the CIA world fact book, 2008, South Africa is ranked 24th in the world in terms of mobile phone penetration with the total number of users amounting to 45 million of a population of roughly 49 million. Given the statistics of mobile penetration in South Africa, it is important for any future distribution models to contain a mobile component, in order to improve reach. This may not necessarily provide all the features that a fully integrated site contains, but will provide the basic services that emerging artists and/or consumers in a rural area might require such as:

- The ability to upload and download content
- Tag uploaded content with relevant metadata for searchability
- Preview tracks
- Purchase downloads
- Social media elements to drive a viral campaign (a campaign which is largely driven by word of mouth or referral by other people)
- Connectivity to a social medium in order to connect with other users

The current most popular mobile social networking site in South African is MXit with an estimated 5.8 million users (McLachlan, 2007). MXit has a music division called MXit music which enables emerging artists to load their music onto the site to be previewed by other MXit listeners, and made available for download at a price of 250 Moola (R2.50) each. The MXit music user interface can be found in Appendix C, Figure 33.

By using a virtual currency, the problem of micro-transactions with real currency (which is expensive when banking fees are charged per transaction) is eliminated. So it is useful to consider that users of a future music distribution site could use a virtual currency.



13.6. Google search

Google began as a web application which was never sold or packaged, but rather delivered as a service. Customers would then pay (directly or indirectly) for the use of that service. Google is essentially operated by a large, scalable collection of commodity PCs running open source (software for which the source code is freely available) operating systems with applications and utilities that are developed in-house (O'Reilly, 2005).

Google's service is neither a server (although it is delivered by a collection of Internet servers) nor a browser (though it is experienced as such by the user within the browser). Its search service does not host the content that it enables users to find. Rather it creates an index of the Web, which operates in the interface between a Web browser, a search engine and a destination content server. (O'Reilly, 2005)

Google has been included in this section as an 'emerging technology' even though it is a corporation, because of its constant innovation in the online space. The fact that most of its services are free means that any new emerging model can make use of its applications and hosting. One such example of an application is Google Analytics. This open-source software tracks all usage and interaction with a particular website and gives consolidated management reporting on the performance of the site. This is very valuable information, which would be very expensive to build in-house. This management information could be used to gauge an artist's popularity on a website.

13.7. Web services

Web services are software components that communicate using pervasive, standards-based web technologies. Web services are hardware, programming language, and operating system independent because they use open standards such as HTTP and XML-based protocols (Altova, 2006). This architecture allows two remote websites (one of which is the service provider, and the other being the site utilising the service) to communicate service requirements efficiently over existing internet infrastructure, using technology that is universally understood.

There are four technologies that power web services. These are (Altova, 2006):

- 1. *eXtensible Markup Language (XML)* a specification which utilises text-based mark-up which *describes data* in both a human and machine readable form
- 2. Service Oriented Architecture Protocol (SOAP) an XML based method for exchanging data over http, since this is supported by all Web servers and browsers.



- 3. Web Services Description Language (WSDL) an XML-based format for describing web services. A client accessing a web service can read and interpret it's WSDL file to learn about the location of the services and it's available operations
- 4. *Universal Description Discovery and Integration (UDDI)* an XML-based registry that *lists information* about businesses and the Web services that they offer in a uniform way.

The benefits of using web services, as described by Altova (2006) are the following:

- Application and data integration organizations are able to integrate disparate applications
 and data formats with relative ease due to the interoperability that comes from using generic
 protocols.
- *Versatility* They can be accessed by humans via a Web-based client interface, or they can be accessed by other applications and other Web services.
- *Cost savings* Easy interoperability means there is no need to create highly customized applications for integrating data, which can be expensive.

The use of web services has opened up the ability for people to exchange information online, to transact and to communicate efficiently. The power of this ability for real-time service exchange has enabled the revolution of online user engagement that has come to be termed Web 2.0, which will be discussed in detail in the next section. When building Web 2.0 services, the following have been identified as essential (O'Reilly, 2005):

- Support for lightweight programming models that allow for loosely coupled systems
- Syndication of data rather than co-ordination of data
- Design for 'hackability' and 'remixability'

Web services will be beneficial in the creation of an online music distribution model, as it is a cost effective way for the consumer to relay a purchase, or search request to the Web server, which will be hosting the aggregation of content.

13.8. Web 2.0

Web 2.0 is a second generation of services available on the Web that allows people to collaborate and share information online. In contrast to the first generation, Web 2.0 provides Internet-based utilities that resemble desktop applications (Cong and Du, 2007).

The core competencies of Web 2.0 that distinguish them from the previous generation are fundamentally the following (O'Reilly, 2005):



- Services, not packaged as software an example of this is Google search, which is essentially a complex database with a set of tools (for database management) used to provide a service to the user which does not require any software installation.
- Architecture of participation and trusting users as co-developers for example Facebook,
 YouTube and Flickr rely on users to participate and add to the site by uploading, sharing and commenting on the content on these platforms.
- Cost-effective scalability by using site integration or 'mashups' (which will be explained in detail below) many sites can utilize existing code bases which makes scalability more cost effective.
- Software above the level of a single device iTunes is possibly the best exemplar of this principle. This application is able to reach from a handheld device to a web back-end, with a PC acting as a local cache and control station.
- Light-weight user interfaces, development models and business models
- Harnessing collective intelligence for example blogging (which will be discussed in detail shortly) harnesses collective intelligence as a kind of filter. The collective attention of the blogosphere selects for value.
- Consumer self service
- Control over unique hard-to-create data sources that get richer as more people use them for example Amazon.com acquired its original database from an ISBN registry provider, but enhanced the data with publisher-supplied data (such as cover images, table of contents and sample material). Additionally they harnessed their users to annotate the data, which resulted in a much richer database offering to their users.
- *Innovation in assembly* When commodity components are abundant, one can create value simply by assembling them in novel or effective ways. Web 2.0 is able to provide opportunities for companies in order to gain a competitive advantage by harnessing and integrating services provided by others.

The following sections will deal with certain of the above aspects of Web 2.0 which could be relevant when addressing an online music distribution model.

13.8.1. Harnessing collective intelligence

The following elements are considered as mechanisms for harnessing collective intelligence:

- Viral marketing
- Blogs



Viral marketing

Viral marketing, in its simplest form is a virtual replication of 'word of mouth' marketing that has been commonplace in the live marketing environment in the past. It makes use of online users to forward marketing messages to their networks. This was first implemented by Hotmail, whereby at the base of each email that was sent from a Hotmail account, there would be a link for the receiver to directly link to the Hotmail homepage, where the receiver could then sign up for their own account (Montgomery, 2001).

More recent applications of Viral marketing use Web 2.0 tools (such as blogs, twitter, del.icio.us, which will be discussed shortly) to display opinions of users online about particular products. These could positive or negatively affect the promotion of a product or brand. If people in the 'blogosphere' (that is all entities who actively read or post blogs on the Internet) are talking positively about a certain product, then it will likely influence the purchasing behaviour of others as evidenced by the writing of Cook (2008).

In the context of music distribution, if an individual artist would like to reach a large target market, then it would be beneficial to the artist to utilize viral marketing principles when promoting their work.

Blogs

Blogs (short for web logs) are websites that are updated and maintained by an individual user. Updates are usually in the form of commentary, descriptions of events or a collection of graphics or video. Updates are short entries on a variety of topics, often allowing readers to comment, link to posts, and subscribe to news feeds. Initially akin to personal journals, blogs have been increasingly adopted by new media and corporate communications departments as yet another way to interact with users (Cong and Du, 2007).

According to Technorati's 'State of the Blogosphere' report for 2008, self expression and sharing expertise are the top reasons for blogging, followed by networking and gaining entry into the traditional media world. Career advancement and monetary reasons are cited by one in four bloggers as their motivations for blogging. Other reasons include: activism, book publicity, personal satisfaction, self promotion, share my passion and to become known as an expert. (Technorati, 2008)

The Technorati report also indicates that 30% of all bloggers on the Internet have music as one of the topics they blog about. So even if an artist does not want to blog about themselves they need to ensure that there is someone (perhaps one of their fans that has quite a strong following on the Internet) that



is popularizing them online by posting positive things in the blogosphere. A study by Universal McCann (March 2008) (as referenced in Technorati, 2008) indicates that any blog might have a prospective audience of the following world-wide:

- 184 million people have started a blog
- 346 million people read blogs
- 77% of active Internet users read blogs

Artists could be encouraged to write a blog which documents their story and to share this with their listeners online. This allows each fan to feel personally connected with the artist. If a fan feels connected with an artist, they may feel more inclined to engage more actively with that person, and in doing so support the effort of the artist.

13.8.2. Architecture of participation

The following examples which illustrate the architecture of participation will be considered:

- User-generated content sites
- Social Media

User-generated content sites

Another application of the 'architecture of participation' which has been identified as a core Web 2.0 component is User Generated Content (UGC). It is also known as consumer-generated media (CGM) and refers to any material created and uploaded to the Internet by non-media professionals, for example (IAB, 2008):

- comments left on Amazon.com
- a video uploaded to YouTube
- student's profile on Facebook

UGC sites are creating new viewing patterns and social interactions, empowering users to be more creative, and developing new business opportunities (Cha et al, 2007). It is currently one of the fastest growing forms of content on the Internet.

Wikis

In its most basic sense, a Wiki is a collaborative Web site built through the contributions of many individuals. Though not all wikis are open to everyone (as many require some kind of membership or qualification to contribute) they are in many ways the most democratic manifestation of UGC (IAB, 2008).



A wiki is able to perform many of the functions that normally take place in a business environment such as project tracking, discussion logs, project archiving, brainstorming etc. This is achieved by having a centralized server or repository that each member on the network has access to. Each member may contribute content to this repository that can be viewed by all the other members. This differs somewhat from social networking in that it is normally performed within a closed network and for a specific function, such as completing a project collaboratively from remote locations. Some of the functions and benefits of using a wiki are the following, according to Cong and Du, (2007):

- Ability to track online discussions
- Can become a forum for people to exchange ideas
- Can be used as a project management tool to define, manage and then archive projects
- Workgroups are able to brainstorm, make plans, track progress and find out meeting schedules, as well as create documentation online
- Can allow a closer, more interactive, and timelier relationship with clients

An emerging artist may want to use a wiki on their site for collaborating with listeners to identify their needs, such that they might respond accordingly. Artists may also use a wiki to brainstorm ideas along with their fans. An artist may also choose to use a wiki-type set up to communicate important information to their fans, such as gig guides and concert dates.

YouTube

YouTube is a large UGC Video-on-demand site (IAB, 2008). It is essentially a hosting platform for user videos with tools to share these videos with a wider community. Artists can post videos on YouTube of their work, interviews, concerts, etc and distribute these to their viewers and listeners. An artist can also embed a YouTube video into their own site by including the YouTube URL in the HTML code of their content page.

Additionally, an artist can use YouTube to create a dedicated channel. In doing so, an artist can create their own community for content sharing online. Consumers can visit these sites and engage in various forms of branded activity (IAB, 2008). An example of a YouTube channel for Oprah Winfrey can be found in Appendix C, Figure 34.

Social Media

Social Media is an element of Web 2.0 built around the 'architecture of participation' mentioned previously. In order to be successful, online distribution models will likely need to provide a rich and compelling environment around their content to engage, inform, and retain their customers (Wunsch-Vincent and Vickery, 2005). Sharing information online seems to be a means of expressing one's



identity, leading to increased self-esteem, reputation, and respect from others (Van Baalen et al., 2005). The following section highlights the various ways in which these interactions are currently taking place. Aspects that are considered are:

- Personalised Profiles
- RSS feeds
- Topics and tagging
- Social bookmarking
- Polls
- Content rating
- Discussion Forums

Personalised Profiles

Personalised Profiles is a feature of Social Media which allows a user to create their own content page for the particular social networking site they are visiting. This allows the user to create an online presence or personality that is able to communicate with the cyber-world. Generally it will allow the user to display certain information about them, that they would like their social network to see. This could involve an avatar (a graphical representation of their portrait), uploading photos and videos and selected personal information (such as age, gender, preferences, etc). These profiles also create a platform on which to house other web 2.0 features, including blogging capabilities, bulletin boards, comments and news feeds.

RSS feeds

RSS (Really Simple Syndication) was born in 1997 and is the technology used to push out blog updates (O'Reilly, 2005). RSS allows someone to link not just to a page, but to subscribe to it, with a notification every time that page changes (O'Reilly, 2005).

RSS is now being used to inform subscribers not just of notices of new blog entries, but also all kinds of data updates, including stock quotes, weather data, and photo availability. Artists may want to use RSS feeds on their site as a way of updating their fan-base on their latest news. This would aid in keeping consumers engaged and interested in the artists, and drive engagement with their blogs.

Topics and Tagging

Sites like del.icio.us and Flickr, have pioneered a concept that some people call 'folksonomy' (in contrast to taxonomy). This term refers to a style of collaborative categorization of sites using keywords or tags. Tagging allows content to be associated with multiple, overlapping topics rather than rigid categories (O'Reilly, 2005).



Tagging could be used in the context of an online music distribution model to identify a particular song by various keywords. A site that currently employs this methodology is www.sonicspaza.co.za. The homepage of the site displays a 'Tag Cloud' which derives its structure from the availability of content in each genre. The bigger the font size, the more content is available in that genre. The figure below illustrates this concept:

Figure 9: Illustration of a Tag Cloud (source: www.sonicspaza.co.za)

African Music Blues Classical House Electronica Beats, Breaks & Bass Indie & Alternative Jazz Latin Oldies Instrumental & Scores Pop Reggae Religious - Christian Rock South Africa Hip Hop Global Music Acid

Jazz Afrikaans Afropop Cheese Children Chilled Comedy Country Dance Dark Electro Disco &

Funk Experimental Folk Indian Kwaito Lounge Metal Middle Eastern Spoken Punk R&B Religious Other Soul Techno & Electro Trance Trip Hop

Social Bookmarking

Social Bookmarking allows users to save links to webpages that they would like to remember or share with their community. Some common bookmarking facilities are shown in the following table (Howstuffworks, 2008):

Table 3: Common social bookmarking tools

Facility	Purpose	Icon
	-	
Digg	Submit, review and vote on stories and news	
	items drawn from every corner of the Web.	🔐 <u>Digg This</u>
del.icio.us	Pronounced 'delicious', here you can share and	
	store your bookmarks and view others' bookmarks.	del.icio.us
Netscape	Post a link to a site or other content from	
	Netscape.	Netscape Netscape
reddit	Post a link to a site or other content and vote on	
	links posted by other members.	🥰 <u>reddit</u>
Fark	Submit stories and news items on this aggregator	
	and social networking Web site.	F Fark
StumbleUpon	Submit articles, videos, photos and more, while	_
	the site makes recommendations based on your	StumbleUpon
	interests.	



Newsvine	Post content and vote on stories from traditional media Web sites as well as stories from individual contributors.	Newsvine Newsvine
Yahoo! My Web	Save and share your bookmarks and discover new things, all using your Yahoo! ID.	Yahoo! My Web
Furl	Save any page that you find on the Web and share it with others via RSS feed and email newsletters.	Furl
ma.gnolia	Store your bookmarks and search for other bookmarked sites just as you would in a search engine.	ma.gnolia

By using social bookmarking facilities on their webpage, artists are providing the necessary tools to enable their community to locate their content easily as well as share it with their friends.

Polls

Polls are used to get general feedback from the public on a specific question. The question is designed to give multiple possible answers which cover all options. Data of this nature could be very useful for instance if an artist wishes to know what payment mechanism is most likely to work for their music. In this situation, the artist could put a poll on their website which could look like this:

How much would you be willing to pay for a <<artist's name>> song?

- Less than R5
- More than R5
- Songs should be free
- A donation amount >R1
- I would never buy your music

Access to these data would allow the artist to make necessary adjustments to their model in order to suit the requirements of their listeners.

Content Rating

Other content facilities allow users to interact with the site, and the creators of content instead of with their communities. This could be a useful way for an artist to get feedback from their listeners about their music, their site or anything else relating to their interaction. By providing an easy way to give feedback, listeners are likely to engage with these tools.

Consumers can use content facilities to perform the following functions:

• Rate – this would be by way of clicking on a rating score e.g. 4-star rating for good content.



• Feedback – this would allow the user to answer a few quick questions about their interaction with the content. Some tools also allow free text commenting. These data are generally not shared with the public and is usually used as management information by the webmaster of a particular site.

Discussion Forums

In addition to polls, an artist may wish to delve a little deeper into an issue of concern. In this case, the artist could spark a discussion on their site amongst their fans, by using a discussion forum. This would be valuable to the artist if they wish to test the waters on a particular subject – perhaps the use of an ethnic instrument as part of their music, or whether or not to sell merchandise on their site.

13.8.3. Innovation in Assembly

Mashups

In general, mashups exemplify Web services technology, fusing data from two or more Web applications to create an integrated experience which offers a more valuable user experience than the two originating sites alone. Mashup creators pull data dynamically from one source and integrate it with another (Palfrey and Gasser, 2007). Google Maps API is popular in this context, pulling together information for its users from various sites (O'Reilly, 2005). For example, housingmaps.com (combines maps with property data) and Chicagocrime.org (combines crime stats by area) (Anon, 2006). This will allow a user to customize a Google map to integrate additional data to show the visual location of the highest crime areas, for example.

Many people are experimenting with mashups using Microsoft, Google, eBay, Amazon, Flickr, Serena, Facebook, and Yahoo APIs; companies often post their own API so that developers can utilize it in new mashups. The result is a value-added representation of data that makes it easier for a user to synthesize information that is relevant to their application (Palfrey and Gasser, 2007).

The availability of data sources via open APIs increases the innovation potential of building on top of Web services technology. There are several types of innovation occurring above the technology layer (Palfrey and Gasser, 2007):

- Adapting existing business models, or testing new ones
- Combining existing data in novel ways
- Creating new content by analyzing existing data



It would be beneficial for artists to create mashups on their sites which bring various value-adding services to their homepages. For example, an artist might wish to integrate the following into their site to broaden their reach and enhance their capabilities:

- YouTube videos, to display videos of recent performances
- Google maps, to incorporate location data which could give indication as to concert locations and touring venues
- Amazon.com to include a purchasing component for consumers to buy their music

13.9. Social Network Sites (SNS)

In the past, individuals typically had to rely on geographically bounded communities for creating social capital (or social networks). Users of online communities can now seek out a variety of appropriate contacts depending on their specific information needs at any given time (Enders et al, 2009). Ellison and Boyd (2007) define Social Network Sites (SNSs) as web-based services that allow individuals to:

- Construct a public or semi-public profile within a bounded system,
- Articulate a list of other users with whom they share a connection, and
- View and traverse their list of connections and those made by others within the system. The
 nature and nomenclature of these connections may vary from site to site.

On many of the large SNSs, participants are not necessarily 'networking' or looking to meet new people; instead, they are primarily communicating with people who are already a part of their extended social network in the physical world (Ellison and Boyd, 2007).

The public display of connections is a crucial component of SNSs. The friends list contains links to each friends' profile, enabling viewers to traverse the network graph by clicking through the friends lists. On most sites, the list of friends is visible to anyone who is permitted to view the profile (Ellison and Boyd, 2007).

Most SNSs also provide a mechanism for users to leave messages on their friends' profiles. This feature typically involves leaving 'comments' although sites employ various labels for this feature. In addition, many SNSs have a private messaging feature similar to webmail, which is linked to the user profile (Ellison and Boyd, 2007).



13.9.1. Facebook

Facebook grew out of an increase in popularity of networking sites at Colleges and Universities. The primary difference between Facebook and other traditional networking sites, is that because it was initially geared for an audience of students, communities are formed which are based on real-world relationships and interactions existing within a bounded domain (Gross and Acquisti, 2005).

The age-group breakdown of Facebook users as shown in Figure 10, indicates the highest engagement of users are between the ages of 18 and 25 (391 180) and followed closely by 26 to 35 year-olds (287 780) (Facebook, 2008).

By default, Facebook users who are part of the same 'network' can view each other's profiles, unless a profile owner has decided to deny permission to those in their network (Ellison and Boyd, 2007).

Similarly to MySpace, an artist can create a profile page on Facebook dedicated to their band, however, Facebook does not allow for the artist to embed an online music player into their profile. Artists generally create a profile on Facebook to complement their *MySpace* profile, and usually include their MySpace URL when directing their fans to listen to their music.

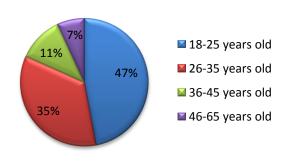
For a user to engage with an artist on Facebook, they would have to 'join' the Facebook group or fan page for that act. In doing so, the artist can post messages to the group, which automatically notify each member of the group on their email address of the message. This email message then includes a call to action for the user to click on a link to the group's page. An example of how a user would browse for an artist on Facebook can be found in Appendix C, Figure 35.



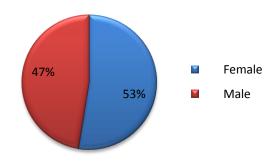
Figure 10: Demographics of South African Facebook users (Facebook, 2008)

Demographic	Number of Users	% of age-group population ³
18+ users	937 520	3.27
Female	479 880	3.16
Male	433 280	3.22
18-25 year old users	391 180	7.94
26-35 year old users	287 780	3.46
36-45 year old users	94 960	1.65
46-65 year old users	57 540	0.79
Single	273 620	-
In a relationship	204 520	-
Married	177 640	-

South African Facebook users over 18



Gender split of South African Facebook users over 18



³ These stats are derived from the Stats SA mid-year population estimates, 2009. (Stats SA, 2009)



14. Legal Considerations

This section on the legal considerations has been included as part of step 2 of the chosen methodology as described by Vlachos et al, 2006. It is imperative to consider the legal implications of implementing the technologies mentioned in the previous chapter.

In order to develop the online environment towards and equitable dispensation for the artist, one needs to understand the legal and economic restraints within which a South African artist would need to operate. Historically, South Africa has lagged behind the western world regarding artist protection and copyright control. The following sections aim to shed light on the current developments regarding copyright law in South Africa.

14.1. Copyright law and the South African context

The music industry has had a long history of legal skirmishes with the developers of new music players regarding their use for illegal copying of music content. The audio cassette and digital audio tape (DAT) are two examples that seemed to work out advantageously for the music business in that they were able to (at least partly) remunerate copyright holders by alternative means. This was achieved through legislation which granted music labels a portion of every sale of blank tapes (Alderman, 2001) in order to compensate them for the forecast revenue loss due to pirated cassette tapes.

In South Africa, however, this legislation was slow to commence. According to the 2006/2007 Annual Report from the Department of Arts and Culture in South Africa (DAC b, 2006), it was intended that a blank tape levy (i.e. blank tapes and CDs would carry a tax used to compensate artists as described above) would be implemented to combat piracy, however in the minister's 'speech for budget vote' 2006, it is evident that this was not to be the case, as it was mentioned that technology has surpassed the law:

It needs to be questioned how local artists are to be fairly compensated in the future as these new technologies referred to in the ministers speech threaten to erode their royalty base. It is easy and cheap to make copies of digital contents, without any loss of quality or features, and to share them instantaneously with many (unknown) people using the Internet or mobile devices. Copyright and traditional enforcement has not yet made provision to exclude non-payers and to control uses of digital contents (Baudry and Rochelandet, 2007).



Primarily legislation concerning copyright should be addressed, as well as a review of the various agencies operating on behalf of the artist, to ensure that the rights of the artist are protected in the best way possible. This is of particular importance regarding Internet related distribution issues, which have previously not formed part of the scope of both South African law, and the local industry in general.

14.1.1. Changes to the South African Copyright Act

Recently the Shuttleworth foundation has called for open review of the South African Copyright Act to give input on changes which accommodate online file sharing and other internet related issues (Shuttleworth, 2008). The foundation set up a wiki which provided resources for understanding the current circumstance of the Copyright Act as well as giving users the opportunity to give input into what should change. Items identified as articles that should be included in that act are the following:

- Webcasting
- Podcasting
- Orphan works works that do not have an identifiable copyright owner
- Traditional knowledge

The outcome of this forum is not yet known, but it is imperative that the current copyright act of 1978 be updated to accommodate the changes in technology and socio-economic behaviour over the past 30 years.

14.2. Needletime

Needletime refers to the right of an artist to receive remuneration when their recorded repertoire is played on radio or in public. Prior to 1965, South African Copyright was governed under the same conditions as the British Copyright Act of 1911. Under this act, musicians (in their capacity as performers) were granted a Needletime right.

The amount of the royalty to be paid in respect of Needletime is determined by agreement between the broadcaster, and the copyright owner (usually a recording company or the performer). The copyright owner, who receives a royalty for the broadcast of a sound recording, is obliged to share that royalty with the performer if that performer would have received a royalty under the Performer's Protection Act (Wood, 2007).



However, Needletime was removed from South African copyright legislation in 1965. The absence of needletime legislation was seen by some as one of the key obstacles to the development of local music and the music industry in South Africa (Wood, 2007).

Recent amendments to the Copyright Act, 1978 and the Performers Protection Act, 1967, have resulted in its re-introduction into South African legislation. This right can impact on income for musicians and expenditure for broadcasters both domestically and internationally (Wood, 2007).

These royalties will be collected from broadcasters and all establishments, such as bars and restaurants that use recorded music in public. This differs from the existing Performing Right royalty in that the Performing Right royalty is paid to the author, composer, and publisher of the music, whereas the Needletime Right royalty is in respect of recorded performances, and not musical works. Therefore the Needletime Right royalty is paid to the actual musicians who performed the material during the recording, and to the record company that made the record. The South Africa Music Rights Organisation (SAMRO) is in negotiation with various interested parties such as SAMPRA (the collecting society for RISA-affiliated record companies) and AIRCO (the Association of Independent Record Companies) to make sure that the system of proper collection of royalties is in place and effective (SAMRO, 2008).

This royalty will provide local musicians with an additional financial incentive to produce more work.

14.3. Digital Rights Management

Access to and utilization of digital contents are difficult to control as they are non-rival goods which have an associated high cost of exclusion (Baudry and Rochelandet, 2007). Digital Rights Management (DRM) is a term used for technologies that define and attempt to enforce parameters of access to these digital contents. Consequently, rights are enforced by the copyright holder through technological protection measures so as to prevent unauthorised access to such digital media or software which would result in an infringement of the rights of the copyright holder (Prabhala and Schonwetter, 2006).

DRM systems typically incorporate encryption, conditional access, copy control mechanisms, and media identification and tracking mechanisms. Watermarking is the technology used for copy control and media identification and tracking (Hartung and Ramme, 2000). DRM allows content owners to distribute securely to authorized recipients and gives them control over the whole distribution chain. According to Hartung and Ramme (2000), this includes:

• Encryption of the content or parts - this is in order to disallow uncontrolled access.



- Decryption key management
- Access control according to flexible usage rules the strength of modern DRM systems is that the usage rules can be adapted to the business models. For example, access can be restricted to certain users, a limited time, or a limited number of accesses. The access right can also be traded, for example, against customer.
- Information or the agreement of the customer to receive advertisements Initial access to the data may even be free (e.g. the first playback of an audio track), while subsequent access has to be paid for.
- Interface to billing systems or mechanisms Since most business models for media distribution involve monetary transactions, the DRM system must be able to trigger those transactions.
- Copy control or copy prevention Depending on the usage rules, no/one/several/unlimited copies of the multimedia data are allowed, with or without the right to produce copies of the copies. The DRM system enforces those copy restrictions. For some usage rules, copy control is difficult to achieve and requires sophisticated technology like watermarking.
- Identification and tracking of multimedia data Since authorized users of multimedia usually have access at least to an analog version of the data (e.g. an audio track played back from a speaker, or a video rendered on a display); they could at least produce copies from that analog output. Thus, analog copies in general can hardly be prevented. For some applications it is a requirement to have the possibility to identify and trace back analog and digital copies of distributed media. This can be done by individual digital watermarking (fingerprinting) of the distributed data and is then also part of the DRM system.

In an environment where an artist is distributing content online, it is of particular importance that content is controlled by the copyright owner as far as possible once it reaches the distribution network to diminish the ability of non-payers to exploit their product.

Some argue that by allowing copyright holders to restrict access to digital media or software under terms which would be currently permissible under copyright law; the implications are not only for legal and personal use but also for future innovation (Prabhala and Schonwetter, 2006).

Conversely, others argue that the ability of content owners to restrict reuse of their works may also lead to a greater number of specialized or personalized options and a wider range of consumer choices. Content owners may offer different rights by designing menus of diverse services and charging different prices for each (Einhorn and Rosenblatt, 2005). This creates opportunity for innovation by the content owners, who are no longer governed by a fixed set of rights.



Additionally, if the content owner is the artist, and they have full control over the distribution of their work in addition to being able to control the rights to this work, the artist is truly able to lead the distribution process in response to the needs of the consumer, without having to rely on any third party. This kind of digital rights management would be in the best interests of the artists who rely on protecting their work to remain viable.

14.4. Compulsory licensing

In addition to copyright, artists should be encouraged to license the utilization of their product, such that they remain credited for the work if it gets re-used. Compulsory licenses, which generate royalties for both the publisher and the writer, are required for the following use:

- *Mechanical license* required each and every time a record is manufactured or copied.
- *Performance license* required to perform or broadcast a musical work in public. This includes recorded works.

In South Africa, the following industry associations deal with licencing of artistic works (Shaw, 2007 p30-33):

- 1. South African Music Performance Rights Association (SAMPRA)
 - SAMPRA issues licences and collects royalties on behalf of its members for the broadcast of sound recordings.
 - Additionally, they license copies of the sound recording for use by broadcasters to upload songs to servers for performance selection.
- 2. National Organisation for Reproduction Rights in Music (NORM)
 - NORM administers mechanical rights and grants licenses to users of copyrighted works
 - Its membership consists primarily of major publishers and some songwriters.
- 3. South African Recording Rights Association (SARRAL)
 - SARRAL administers mechanical rights and grants licenses to users of works that have copyright.
 - Members consist of composers, songwriters and publishers.
- 4. South African Music Rights Organisation (SAMRO)
 - SAMRO administers the performance rights and collects royalties for composers and authors of compositions as well as publishers.
 - Cover includes television and radio broadcasting, public performance, film synchronization, works in a diffusion service and mechanicals.



The negotiation of licences for online music is subject to the territorial nature of copyrights and in many cases, rights are managed on a country-by-country basis. When it comes to online music offerings, both the recording industry and music publishers are developing international clearing systems for certain digital activities (Wunsch-Vincent and Vickery, 2005).

Rumblefish (www.rumblefish.com) is a licencing aggregator in the United States, which pre-clears licencing requirements for commercial music, and then sells these licenses to other businesses that require the music for commercial purposes. The South African equivalent, Sonicspaza (www.sonicspaza.com), performs the same service of aggregating local South African content for licencing to international and local clients. By offering a competitive rate, based on the exchange rate, which is in favour of most international clients, South African artists are able to get exposure to a broader market. This site, however, generally aggregates artists who are already affiliated with a record label, and as such does not service the emerging artist. What is very useful about both these sites, is the diversity with which a business may specify which licence they require. An example of the options available on Sonicspaza can be found in Appendix C, Figure 36.

What remains to be questioned is how does one ensure that the purchasing party adheres to the necessary requirements that will ensure recouping of the artists' royalties for the use of this music? In other words, should someone purchase a synchronization licence for a work. There is currently no measurable way to ensure this. For example, do cinemas keep a record of the number of screenings of the film, and is this information passed on to the respective collections societies, which then should pass on royalties to the artist? There is no automatic way to track how many times a particular work is used and in which context, without relying on human intervention, particularly in an off-line environment.

14.5. **Voluntary licensing**

Voluntary licensing denotes additional licensing options that a copyright owner may wish to grant a licensee. One such methodology for creating and preparing these licences is through the Creative Commons concept.

14.5.1. Creative Commons

Creative commons is a free online licensing methodology which lets authors, scientists, artists, and educators to easily mark their creative work with the freedoms they want it to carry. Applying a Creative Commons licence to a work does not give the artist the same, similar or alternate protection



to registering a copyright. Creative Commons licences apply in addition to and on top of an existing copyright.

All jurisdictions allow some use of copyright material without permission, such as 'fair use' although these vary from country to country. These are not dependent on a licence and so cannot be affected by it. Thus, regardless of the jurisdiction a user is in, a Creative Commons licence does not affect a user's right to use or allow use of content under copyright exceptions (Creative Commons a, 2008).

The options that Creative Commons provides for licensing creative works are as follows (Creative Commons a, 2008):

- 1. *Attribution* allows users to copy, distribute, display, and perform a work with copyright, and derivative works based upon it, but only if they give credit the way you request.
- 2. *Non-commercial* allows a user to copy, distribute, display, and perform a work with copyright, and derivative works based upon it, but for non-commercial purposes only.
- 3. *No Derivative Works* allows users to copy, distribute, display, and perform only verbatim copies of a work that has copyright, not derivative works based upon it.
- 4. *Share Alike* allows others to distribute derivative works only under a licence identical to the licence that governs a work with copyright..

Creative Commons does not allow the licensor to collect royalties for the use of their work for public performance. The following is stated in the legal wording of the license:

It would be necessary to include a licensing mechanism to help artists identify and 'legalise' what rights they would like their work to carry as part of an online distribution model that would allow the user to collect royalties on their work for its use in public performance. Thus the restriction of Creative Commons on royalty collection would be a disadvantage when designing new digital distribution methods that are largely led by the artist. The other licensing functions that Creative Commons provides (attribution, non-commercial, non-derivative works and share-alike) are useful to an artist, and could thus be worked into a business model without the use of Creative Commons as such.

Kusek and Leonard, 2005 (p131) suggest that copyright holders could join together and voluntarily offer blanket licenses for music on digital networks. This would not require any changes to the current copyright law, and can be done by simply creating a large 'pool of money' generated by online file



trading, and then determining a fair way to split it up (Kusek and Leonard, 2005 (p132). This pool of money could be created in the following ways:

- 1. *Taxation of bandwidth* this would be administered by the ISP and this fee would then be passed on to the rights holders
- 2. Taxation on digital media players e.g. iPods, CD burners etc.
- 3. *Taxation on content* this would be a blanket tax on all content and would effectively act as a levy which nullifies online piracy

14.6. Laws Pertaining to Social Networking Sites

In the United States, the two most important statutes to consider when discussing the legal liabilities and obligations of the social networking sites are Section 512(c) of the Digital Millennium Copyright Act and Section 230 of the Communications Decency Act (Fayle, 2007).

The sections of the US Digital Millennium Copyright Act that refer to principles that are relevant to the South African context are documented as follows:

14.6.1. Section 512 of the Digital Millennium Copyright Act

Section 512(c) removes liability for copyright infringement from websites that allow users to post content, as long as the site has a mechanism in place whereby the copyright owner can request the removal of infringing content. The site must also not receive a financial benefit directly attributable to the infringing activity.

14.6.2. Section 230 of the Digital Millennium Copyright Act

Section 230 of the Communications Decency Act immunizes websites from any liability resulting from the publication of information provided by another. This usually arises in the context of defamation, but several courts have expanded it to cover other sorts of claims as well.

If a user posts defamatory or otherwise illegal content, Section 230 shields the social network provider from any liability arising out of the publication. Websites that, in whole or in part, create or develop contested information, on the other hand, are deemed 'content providers' that do not benefit from the protections of Section 230.

The risk associated with allowing users of an online system to post comment, or content is thus negligible. It should however be noted that the webmaster of such a site should regularly monitor the



status of the site in the 'blogosphere' to curb any indiscretion that may prove to be damaging to the brand.

By incorporating a social networking aspect into a digital distribution model for purposes of popularizing content, it is particularly important for artists to monitor what is being said about them online. This is in order to react to positive feedback as well as to amend negative or dishonest discussion. The artists would then essentially act as the webmaster to their own content.



15. Identifying Missing Roles

Step 3 of the chosen methodology as described by Vlachos et al, 2006 is to identify the missing roles within the current industry environment. Three leading industry business models have been studied, which are currently successful in the operating environment in which they exist. These models, however, are functioning primarily in first world markets, and are therefore not directly translatable into the South African market which operates under different demographics and economic conditions. Adaptations, combinations and additions to these models that would better serve the local market can be found by identifying attributes of the afore-mentioned business models that fall short of meeting a local need.

Elements of a new business model emerge from finding innovative ways of meeting these needs as well as potentially enhancing the current features identified in the existing business models. Additionally, a holistic approach of combining the attributes of these industry models that are complementary to each other (and to the task of distributing online content) and adapting these attributes to suit the local market also reveals further features of an emerging business model.

This section will consider which attributes are currently lacking in the current business models and how other potential attributes can be combined in a new business model. This will be done with a view of some local South African music distribution models currently being exploited in the mobile environment, with the aim of identifying if there are possible synergistic relationships that can be formed.

All attributes discussed in the coming sections should be viewed in light of how they will ultimately contribute to the primary function of a new business model for the distribution of the music online for the South African market. Discussion will direct focus on the absence of these attributes in the current models, or the applicability of existing attributes to a new architecture.

15.1. Accessibility

Given the aforementioned challenges that South Africa faces with regards to Internet accessibility and competition for market share with international artists; it is not surprising that the stiffest competition in this market is between the mobile phone operators (MTN's XPloaded, Vodacom's MusicStation), and mobile content offerings like MXit.

Additionally a trend which is evident in the above-mentioned providers' offerings is a prevalence of performance-based rewards given to users. This reward is of a nature that enables and empowers the



artist to enter the music industry in a professional capacity. An example of such a reward is offering the artist a recording contract if they perform well on the provider's platform (receiving numerous downloads, driving web-traffic to their website, etc.)

15.2. Mobile phone integration

MySpace is currently the only model studied that has a mobile component. Arguably, a mobile component is the single, most important tool available to reach the greatest proportion of the population. As mentioned in section 9.8, the highest access to telecommunications is through mobile phones in South Africa. Mobile phone integration into a new business model would extend the reach of the artist to the majority of the population, as opposed to a minority with fixed line broadband access. With this in mind, a mobile component should mimic the online site, in a simplified form. All core functionality available on the website should also be available on the mobile platform where applicable.

Streamlined functions that allow access to the core functions of the website such as registration, upload, download, search and rating should be able to be initiated through the mobile platform, such that reliance on full web access is not required and depth of reach is maximised.

15.3. Artist led distribution

Neither iTunes nor Artspages take direction from the artists themselves. These business models are centred on revenue generation for the company itself, or derived sales as a byproduct of activity on their site. Any direction that they do take from the artist is done through a record company who is representative of the artist population at large. The only site that allows the artist any form of control over their content and the distribution thereof is MySpace.

Artists who represent themselves online are able to take advantage of many online tools, create value for themselves using existing content and engage with networks of users. These artists have access to a large network of potential buyers, but are also at risk of not being able to uniquely position themselves among other competitors in similar genres in order to convert their online position into sales. This gap in marketing knowledge could potentially be narrowed by giving artists access to well designed and structured processes which assist them with creating an online presence which differentiates them within the market environment. Innovation in this area is required in order to translate sound marketing principles into an easy-to-implement framework which artists can utilize.



Innovative tools should not be viewed as a replacement for an entrepreneurial spirit or cognitive awareness. As such artists, who do not take ownership of their distribution or take an active role in defining their online strategy; who rely entirely on the model to make them a success, will not necessarily find virtue or favour in an online distribution model of this nature.

15.4. Identifying a new role for record companies

Allowing the artist to drive the sales process in response to consumer needs has implications for the record companies, who are currently the major drivers of sales and strategy in the music industry. As such ways of forging symbiotic relationships between the artist and the record labels, where neither party is dis-intermediated may lie in the behavioural characteristics of a new distribution model. The record companies may find this model of interest if they were to receive some benefit from it. A possible benefit to the record companies would be access to the large volume of data generated by traffic on the site such as:

- The most popular artists which would aid the record companies with identifying talent much like their current A&R function.
- The most influential users within a particular social network this could aid record companies in pushing marketing material, or merchandise on receptive users based on the reputation of other users.

A suggestion for a symbiotic relationship between artist and record company may be to take on record labels as investors in this new model, whereby their budget allocated previously to A&R would be used to fund the maintenance of the website whilst giving them access to the growing pool of data generated by online activity. The record company may also wish to take on the administrative functions of maintaining the daily functioning of the platform.

15.5. Integrated approach to connect artist to consumer

The business models studied all service particular target markets. For example, iTunes serves the consumer, Artspages serves the record companies and mobile content providers and MySpace serves the artist and the consumer to some extent. As artists start to obtain more control over their distribution in response to consumer needs, by implication the primary relationship is between the artist and the consumer directly. As such, this model needs to service both of these target markets respectively. Each of these entities have entirely separate desired outcomes from this model – artists desire popularity and high sales, consumers desire quality content at affordable rates. This model needs to be able to efficiently service both of these requirements in a largely autonomous fashion, as human intervention in this process would be labour intensive and unsustainable. Integration with other



successful partner websites which specialize in the functions listed in Chapter 13 (such as e-commerce, m-commerce, social networking and blogging) would provide a cost-effective means for providing a very high level of holistic service to consumers and artists alike.

15.6. Automatic content tracking and royalty payments

An area which has not been evident in any of the business models studied is a mechanism for tracking the use of content and linking this with an automated payment system which channels the royalties generated towards the correct entities by way of a nominated bank account for each royalty recipient. Ultimately this system will not be able to track offline activity with a high level of confidence, but may be able to offer a user interface for the capture of this data by third parties that would ordinarily be administered by a collection society (such as SARRAL or NORM). This would then by implication dis-intermediate the collection societies to a certain extent. Innovative methods of restoring these entities into a new value chain created by the direct-to-consumer power shift need to be identified in order to receive buy-in and support from these entities, which are of sizeable influence currently in the local music industry.

15.7. Flexible e- and m- commerce options

iTunes and MySpace offer standard payment options for purchases made on their respective websites. In the case of iTunes, however, checks on the IP address of the host connection will determine if the billing will be processed or not. If the transaction originates from an unlisted country (as decided on by iTunes themselves) it will be cancelled, regardless of the origin of the credit card.

Users should have the flexibility to purchase using their credit card from anywhere in the world, providing local legislations such as FICA are adhered to. Additionally, micropayment strategies need to be included which allow the use of a virtual currency. This will allow users of the platform to purchase virtual currency in bulk which reduces the number of micro-payments processed on credit cards monthly, and the subsequent commission charges on each transaction to service providers. This virtual currency could also be viewed as a reward for engagement on the site – for example, higher purchase results in higher earn rate of virtual currency.

M-commerce options should be included which allow the user to bill a purchase to their mobile phone account. Similarly virtual currency strategies could be implemented in the mobile arena as suggested in section 9.8 and currently implemented by entities such as MXit.



Consequently users will be able to have flexible payment options using either their credit card, virtual currency or a combination of both. It may also be beneficial to identify a partner who already has a well established virtual currency (such as First National Bank's eBucks programme) and allow consumers to use this currency to purchase content as per agreement with the partner.

15.8. Dynamic business model adoption

MySpace is the only model discussed which services the artist. With regards to selling their product, however, there are limited options available. They are able to set their price, and take payment. The artist should be in a position to choose how they would like to sell their content, and choose a payment option which suits their needs; whether it is increasing the price as demand increases, or offering a set number of downloads at no cost. The options presented in section 9.7 should be available to the artist.

The presentation of these options to the artist is also of importance, as the ramifications of this choice directly influence their earning power. The options should be simply displayed and explained to the artist using points of reference that are applicable to their environment such as genre, popularity, establishment etc. The artist should then only have to answer a basic set of questions about how they view their chance of success, and their current position in the industry in order for a suitable model of payment to be recommended to them based on these inputs.

15.9. Exploiting Web 2.0 technologies

Although a number of the new technologies discussed in Chapter 13 are being utilized in some way in the three business models discussed, there is still ample opportunity to exploit more of these in a way that will enhance the position of a particular artist online. MySpace has an element of mashups associated with it (in that artists can enhance the layout and look of their homepages), however there is wider application for emerging technologies, which could enhance the interactivity of the user with the artist's brand. For example the addition of Googlemaps to the artists page and interactivity with third party vendors who expose their services to the artist via the web, for a small commission as described in section 13.8 (Mashups).

Content rating could be used in a new distribution model, and more interaction could be engineered between the existing social networking sites like MySpace, Facebook and the artist's own online space. Additionally by building up a large database of local, South African content, artists who are successful on this platform could be channelled by using web-services through to a larger,



international platform such as iTunes to get exposure to a wider audience. International agents looking for South African content specifically would also have access to a wide variety of local content.

15.10. Personal contact

As discussed in light of the 'blogosphere' and other social networking tools presented in section 13.9, personal interaction is what drives much of the engagement with many of the most popular SNSs. The ability of a website-user to contribute to and receive a response from a site community gives rise to a sense of purpose and placements in a virtual world, where users feel they can impact on the environment around them. MySpace is the only model discussed that incorporates blogging into the user-interface. Artists should be able to keep a blog online to give them the opportunity to personally input into what is being said about them, or even their genre online. Twitter could also be used in a complementary fashion.

15.11. Generating revenue

Most of the currently operating websites in the arena of music distribution operate largely on profits generated by advertising revenue, or on commission-based sales. Social Networking Sites like MySpace function only on this revenue stream (except for those music purchases made via MySpace Music).

It is unlikely that the scale of social networking sites can be supported indefinitely by advertising revenue alone. Some additional revenue stream models are (Enders et al, 2008):

- Subscription models a website offers its users content or services and charges a subscription fee for access to some or all of its offerings
- *Transaction models* where a company receives a fee for enabling or executing a transaction by the sale of a 'virtual-based' item or by the sale of third party content.

For each of the above revenue models, Ender's et al (2008) identified three key drivers of revenue:

- 1. The number of users on a platform
- 2. The users' willingness to pay for a specific service
- 3. The level of consumer trust.

These additional revenue streams may find application in a new distribution model if there is a large user base that will be willing to pay a monthly subscription to the website. This may either be consumers, if the offering is attractive enough to attract and retain consumers on a subscription basis,



or record labels may pay a subscription to access the data from the site, in order to identify new talent and identify other marketing opportunities.

The transaction model is applicable in terms of the sale of third party content. Virtual-based items could be introduced as part of the social networking component of a new distribution model, if the consumer base is accepting of this kind of commerce. The transaction model requires a high level of consumer trust. According to Van Baalen et al. (2005), users need to have trust in both, the product and the firm, before they are ready to execute transactions.

This chapter has aimed to highlight potentially missing roles in the distribution models that have been studied in the previous chapters, from a South African perspective. The following chapter will pull together these roles with other functions of a digital distribution model into a coherent set of processes, the purpose of which is to serve the local South African market needs specifically and operate within the current constraints of this market.



16. Towards a New Business Model

Phase 3 of the chosen methodology as described by Vlachos et al, 2006 is to define the desired change. This is comprised of steps 4 and 5 which detail how a new business model is defined as well as an analysis of the key elements of the proposed new business model. The proposal for a new business model will be documented according to the methodology indicated in Alt and Zimmerman (2001), in conjunction with that presented by Osterwalder and Pigneur (2002) as previously discussed in Chapter 7.

The model does not address certain tax, legal and commercial implications which would require negotiation within the industry to arrive at suitable terms of agreement.

16.1. *Mission*

'Mission' is the first element of analysis under step 1 of the methodology of Vlachos et al, (2006). This is in order to identify the core purpose of a new model. The mission of this model is to develop a new model which incorporates elements of the three international models that have been studied that are transferable to the South African market. Additionally, it aims to address all the identified missing roles identified in Chapter 15.

The ALCD model essentially functions as a 'Internet platform' which provides web services to artists, consumers, record labels, advertisers and other service providers alike. It is envisioned this would function as an Internet site that has a uniquely South African URL. Artists would then be able to **URL** create their own appended to this (much like MySpace) for example www.newmusicsa.co.za/johnnysband. In addition, technological advancements as documented in Chapter 13 should be incorporated to allow sales to be driven by the artist, exploiting the benefits of 'viral marketing' as enabled by the Internet.

16.1.1. Overall Vision

The overall vision of the ALCD distribution model is to empower artists to distribute and market their own work essentially without the involvement of traditional record companies.

16.1.2. Target market

Currently there are many role players in the music industry value chain. In any new business model, all these role-players will need to feature in some way, albeit playing a larger or smaller role. What is proposed by the ALCD model is primarily a way for artists to connect with other service providers



and consumers. This model is centred on improving the financial position of South African artists, whilst fuelling a healthy level of competition and service provision among the remaining role-players. Whilst this may negatively impact other industry role-players like the record companies, it may provide incentive for these entities to pursue other avenues of revenue generation within the music industry that compliment the model presented herein. Whilst we acknowledge that this model is primarily serving the artist, we cannot ignore that it is the consumer that dictates the success or failure of any consumable product. It is for this reason that this model should be equally serving both the artist *and* the consumer.

16.1.3. Strategic goal

The *strategic goal* of implementing such a model in the South African context would be to challenge the current industry architecture in a manner which facilitates growth in the music industry, by giving new artists the opportunity and the skills to be innovative in their delivery of content. It is not the intention of this model to provide such a complicated interface that would prove to be a barrier to entry for these artists, who are generally averse to commercial ventures of their own, but rather to educate, equip and thus empower them with how to use the interface to their advantage. It is thus imperative that the complicated inner workings of the model remain hidden from the users, with a focus on the outcomes.

The model aims to protect emerging artists from exploitation by allowing them to drive their own distribution process in a customizable fashion. Additional support for Digital Rights Management will be implemented to reduce the risk of piracy.

This model also needs to form a crucial link between other role-players in the industry, and provide a common meeting place where vested interests might be nurtured and mutually beneficial relationships established.

16.1.4. Value proposition

The *value proposition* of this model is largely in favour of the artist and the consumer. By making use of new technology (such as cloud computing and social networking), the artists will be able to generate value for themselves by directly accessing the income generated from their work, over which they will have complete control. The artist will have control over how their pricing model will work as well as who gets access to their data. They will in return be given market intelligence relating to their performance and public perceptions on the platform, which will help them to tailor their work to meet the consumers' needs.



Record companies will be given the option to access the data (with the artists' consent) generated by this model via a subscription service, or other suitable arrangement. This will give them insight into which artists will sell records and which will not. They then have the option to approach artists for a contractual partnership in the form of a record deal. This model has removed the record companies from the centre of the business to the periphery, but has not excluded them completely.

Additionally, web 2.0 features like mashups and social networking sites will allow the artist to further add value to the consumer experience on this site by providing location based aggregation of all content on the network, e.g. a Google maps view of all concerts in given region. Consumers can then embed these tools into their own Facebook or MySpace profiles which will lend further exposure to the artists.

16.2. Structure

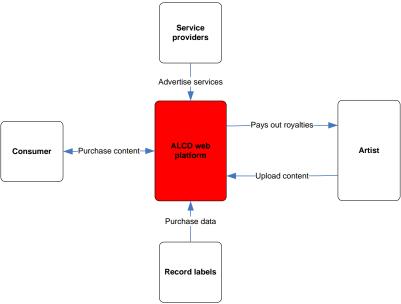
Strategy determines a resultant structure, and structure determines which roles and agents constitute and comprise a specific business community. Currently the following issues are in need of being resolved in the current South African context:

- 1. Artists have content that they cannot develop and sell easily without a recording contract.
- 2. Consumers find it difficult to locate local content, and the pool of available content is small relative to that of international talent.
- 3. Record labels would benefit from a reduced A&R budget if they could be given market intelligence relating to the most popular artists online. Record labels could use this as a proxy for possible successful artists.

It is proposed that one platform is developed that pulls all of the above agents together in a central location to solve the above-mentioned issues. Thus, the structure of the ALCD distribution model, in its most basic form, is as follows (Figure 11):



Figure 11: The ALCD distribution model structure



This structure aims to solve the questions posed as follows:

- Providing a central repository of content that is easily accessible by artists, where they can make their music available to the public
- Providing one central repository of all South African local emerging content, which is easily searchable by the public, and has a simple purchasing process
- Displaying advertisements to the correctly profiled individuals to grant exposure to the service providers
- Sell performance data to record labels to aid in A&R functions for the top performing artists
 on the site.

16.2.1. Activity configuration

This model is described as being 'artist led' and 'consumer driven'. This is in contrast to the current situation and the situation of the past where the industry has been largely led by the record company marketing. The success of peer-to-peer networks displayed what power the consumers have in the value chain, and as such, going forward, the role of the consumers in driving the competition between artists should be taken into consideration.

Artist-Led

The model is described as being led by the artist, because they are the party responsible for actually *creating* the content, displaying it for public sampling and purchasing, as well as responding to consumers changes in trends and tastes.



Consumer-Driven

It is recognised that consumers have the power to seek alternative sources of content should this model not satisfy their needs. It is therefore of critical importance that the 'collective voice' of the consumer is recognised as the driving force behind the strategy of this model. The consumers drive the marketing strategy of the model which in turn drives the production of content, which is the creative process that is lead by the artist.

16.2.2. Partner network

Partner networks are comprised of commercial relationships between firms of different specialties who share a common business interest. Fleisher and Bensoussan, 2003 (p65) discuss the benefits of firms engaging with and utilizing the services of partner networks. It is argued that the firms can then focus on their core competencies in the value system configuration and rely on partner networks and outsourcing for other non-core competencies and activities.

The ALCD model is largely reliant on this type of configuration, and can in essence be described as a partnership that aggregates many service providers and technologies, thereby allowing the core focus of the model to exist around promoting artists and nurturing local music. The other functions that actually make the model work such as search functionality, e-commerce solutions and data hosting are outsourced to entities that are well known for their technical skills in these particular areas. For example – it makes sense to outsource the search functionality to Google, and the e-commerce platform to Amazon as these are well and truly tested and are robust platforms dedicated to performing a particular function better than anybody else.

16.2.3. Resources and assets

The resources needed to develop and sustain a model of this scale would typically be fulfilling the same functions as a traditional record company, however all functions would be performed through a web-platform as opposed to offline. Thus these resources would largely be sought from the IT sector. This would be web developers, database programmers and front end designers. It would also be necessary to have certain Java development skills in order to configure the complex back-end workings of the web platform, as well as to facilitate web services integration with the partner network.

A large amount of data hosting in the form of web servers would be required, as well as a very high bandwidth transmission line to efficiently serve all the outgoing content to the users to prevent traffic overload. There would likely need to be a team of people who would take care of the overall strategy



of the website to ensure it is always current and offering what the consumers demand, as well as remaining on the leading edge in the face of potential competitors.

Marketing personnel would also be required to take this platform to market in such a way that both the artists and the consumers are captured. It would be advisable to employ various entities to act as agents for the site, who would be available to coach new users on the workings of the site. These agents would advise on in depth matters relating to royalty calculations, regulations, and other administrative functions. This would likely necessitate a call centre to handle day to day queries about the site.

A legal team would need to be involved, as the music business is highly legalized and there are many copyright and other issues that are likely to arise as a result of a site such as this. It would be wise to have a legal person prepare the terms and conditions of this website that would protect the users of the site, as well as absolve the owners of discretionary acts out of their control. Legal representation would be needed when an artist is signed by a record label due to their success on the website. This would also likely aid them in securing a more favourable royalty from the prospective record company if they have some bargaining power from a legal point of view.

16.3. Relationship capital

Relationship capital is what the firm creates in the customer to satisfy him/her and generate sustainable results (Osterwalder and Pigneur, 2002). This comprises of:

- 1. Information strategy defines the strategy relating to handling of customer information.
- 2. *Feel and Serve (distribution channels)* this defines how the customer is reached and through which channels.
- 3. Trust and Loyalty

16.3.1. Information Strategy

The information strategy for the ALCD model is to personalize interaction with the users and profile content relating to the users based on the information that is known about them. In the case of consumers, this would be using the information they enter when they register for the site to determine what they are likely to purchase, and then respond by showcasing this type of content accordingly. Consumer interaction and behaviour should be tracked and logged so as to build a pool of market intelligence which drives strategy to provide a richer user experience.



In the case of the artist, it would be facilitating their success-strategy as far as possible on their behalf. For example, when the artist is choosing how they would like to be paid for their work, the site will recommend a payment model that is suited to them based on sound fundamental strategic principles (as described by Porter, 2008). This does not pre-suppose any commercial or strategic knowledge and assists the artist with various administrative functions. Artists need only provide information relating to their content in order for the platform to provide the correct tools for them to set up their online model.

This could also further be expanded to include more management functions for the artists, like providing generic components for them to use on their homepages that typically would be of use to a self-managed artist. For example this could be as simple as downloading a widget which accesses the artist's email and calendar application (such as Outlook), which can then provide a planning service to the artist for tours and concerts. Additionally this may include management reports that are mailed to the artist monthly, containing recommendations based on their current site performance. For example, if they are performing particularly well, they might be encouraged to change their pricing option to a fixed price rather than a donation amount.

16.3.2. Feel and Serve (distribution channels)

The distribution channels used by the ALCD model are largely reliant on viral or social networking. Where traditionally the distribution channels were limited to physical stores only displaying the end product, there is now an opportunity to engage the consumer much earlier on in the creative process of making the music. Artists have the option to pre-release a certain number of un-finished recordings to the public, perhaps even just for sampling and not download, in order to gauge feedback and allow some input from the consumers.

Over and above internet distribution, the artist also has the mobile phone networks upon wich to leverage. The aim of this is to provide a simplified service akin to the online platform via a mobile network, with a wider reach than the standard Internet.

16.3.3. Trust and loyalty

Fleisher and Bensoussan, 2003 (p92) observe the following behavior arising from loyalty:

- Loyal customers incur a lower direct operating cost even though the initial marketing costs in customer acquisition are significant
- Loyal customers will pay more for superior value that they feel they can rely on by virtue of their prior experience



• Loyal customers tend to purchase higher volumes over time as their confidence in the firm (artist and supporting personnel) grows.

By utilizing community networks to promote their music, artists are benefiting from an already existing trust relationship between friends. As discussed earlier, social networking sites like Facebook are largely a mirror view of the real-life community relationships that people hold. Therefore, by penetrating these networks the artists will likely also be trusted if their peers recommend their work.

Additionally, consumers need to build up a form of trust relationship with the website itself. For example, the users of the site will come to expect a certain level of service from the site, which then needs to be maintained if the consumers are to be kept happy. By maintaining consistency whilst providing enough stimulating content that is regularly changing and meeting their needs, the consumers will develop a loyalty to the site and their trust will develop simultaneously.

16.4. **Processes**

The processes described herein are intended to be a generic view of a possible business model for the online distribution of music which focuses on linking the artist and the consumer directly - both of whom will have a higher value proposition than in the traditional value chain. Each process is described individually. For a complete overview of how all these processes work together as a business model, please refer to Appendix D.

16.4.1. Artist

The artist is responsible for primarily creating musical content. As previously described, the artist in the context of the 'firm' implies that there are multiple functions that are performed by multiple people within the 'artist process'. These functions can broadly be described as being the following:

- Creation of the musical content.
- Setting up of a website within the ALCD platform, with a direct URL that can be marketed to consumers.
- Uploading of content onto the site with sufficient metadata tagging (for genre, tempo, mood, etc) to enable efficient search abilities.
- Managing the social media interactions with fans, and working to create a 'personal presence' on the website that fans can relate to.
- Efficient advertising space to advertise gigs and tours.
- Setting up a cost structure that is suitable to the content being uploaded (this will be discussed further in section 16.5.1).



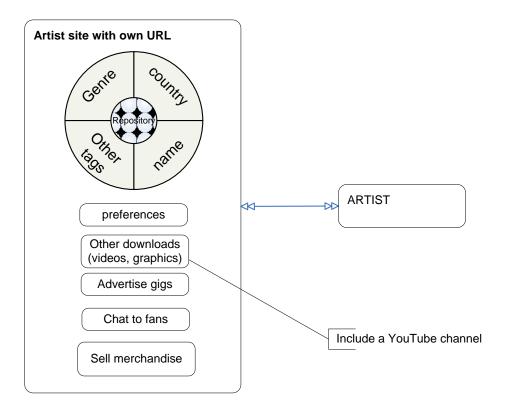
- Utilising social media technologies to increase interactivity and engagement with fans
- Creating and selling merchandise online.

Many of these functions that are to be performed by the artist should also largely be facilitated by the distribution platform to which they subscribe. For example, this platform should provide the e-commerce functionality and scope for creating mashups. There should also be a generic template available for those musicians who do not wish to enlist the services of a web developer to assist in designing their webpage.

There should also be (as a standard on all artists' sites), a space dedicated to advertising. The platform will aggregate all content and metadata and the site managers will hold the relationship with all advertisers. The site managers should be able to reserve the right to allocate advertisements to suitable artists that display the required attributes, fan-base, etc that the advertiser requires. All revenue received should then be passed onto the artist with a commission payable to the site owners (see profit model section for more detail).

The figure below illustrates the artist process.

Figure 12: The artist process





16.4.2. Consumer

Consumers would be required to register with the site if they wanted to purchase any content. They should be allowed to browse and sample content without registering. However in order to track trends and communicate in a personal way to the consumer, it is necessary to know the demographics of these users.

The consumer would then interact with the site by searching for content that they prefer, viewing artists' profiles and ultimately purchasing content. Given that there will be social networking tools available on the site, the consumer would then be encouraged to share content with their network as well as to comment on their experience by way of a blog if they own one.

The consumer would also be able to leave personal messages for the artist and rate their content that they have either purchased or sampled.

Purchase merchandise

The consumer process is illustrated in Figure 13 below:

rate

search

Consumer

download

preview

Google maps gig
guide

Chat to artists

- 110 -



16.4.3. Record Companies and Performance Aggregators

As described by Kusek and Leonard, 2005 (p136) record companies will be able to test-market artists more efficiently (by viewing their proven performance online) and subscribe to this dataset that will empower their investment choices. This would happen automatically as an output from the 'Performance Aggregator'. This would also address the issues raised in section 15.4.

The Performance Aggregator would take such information as:

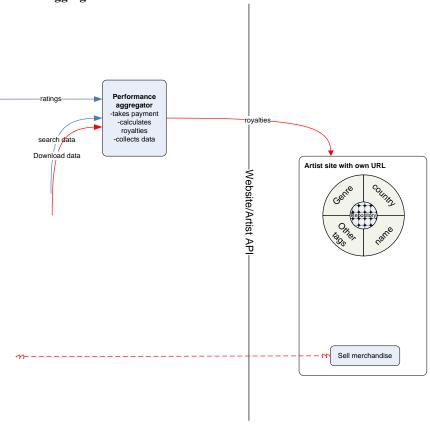
- number of views
- number of sales
- number of search hits
- number of clicks
- number of previewed samples
- genre performance, etc

It would aggregate all this information into a consolidated form that tracks the trends on the website, as well as an individual's performance. This 'engine' will also be responsible for calculating which royalties are owed to each artist for tracks that are used online (as identified by a digital watermark), as well as apportioning payment to both the site owners and the artists when a sale is put through the e-commerce platform associated with the site as described in section 15.6.

The figure below (Figure 14) shows the interactions between the artist and the Performance Aggregator.

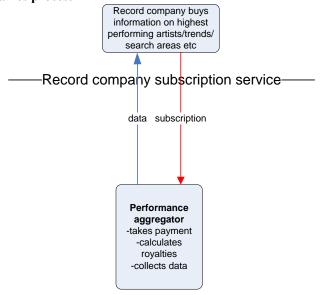


Figure 14: Performance aggregator



The figure below (Figure 15) shows how the record company could interact with the performance aggregator.

Figure 15: Record companies process





16.4.4. Mobile

Although a large amount of functionality is targeted at a web platform for the ALCD model, it is imperative that there should be a mobile counterpart in the form of an application for each mobile platform as described in section 15.2. This would have to encompass all the basic features of the site such as browsing, sampling and purchasing but tailored to the mobile environment. Payment would be by way of charging the consumers airtime balance or a monthly bill. This would still require the user to register with the website (via mobile) such that accurate management information could still be collected about those users interacting with the model from these access points.

This solution boasts a simpler, more streamlined process than the website view, and is thus suited to lower LSM markets, which predominantly don't have internet access except via their mobile devices.

The process for integrating mobile devices into the model is shown in the following figure (Figure 16):

Mobile functionality:
-search
-download
-preview
-rate
-chat or IM
-purchase

Figure 16: Process for integration of mobile devices

Social Media

Figure 17 below indicates how the social media aspect of the ALCD model could work. Consumers collectively form a web community as soon as they start contributing to content online, or sharing

java app

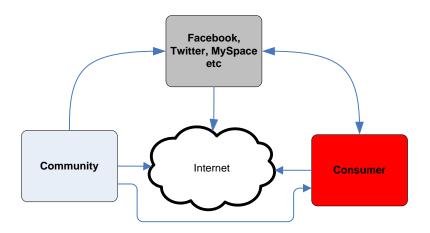


content with other users. They may do so by using various existing platforms (such as Facebook, Myspace, Twitter etc) or by posting blogs or comments directly to the site.

The social media process of the ALCD model is largely open to the consumers' preference and the site should not aim to be prescriptive in any way as to which platforms should be used. The option for as many as possible, however, should be included to allow consumers the freedom to publish to their desired social networking platform as they wish. This is in keeping with the recommendation of section 15.10

The site should include a tracking functionality which aims to identify comments in the 'blogosphere' relating to the site or content on the site. This could be used to inform the performance aggregator.

Figure 17: Social media process



16.4.5. Content aggregator

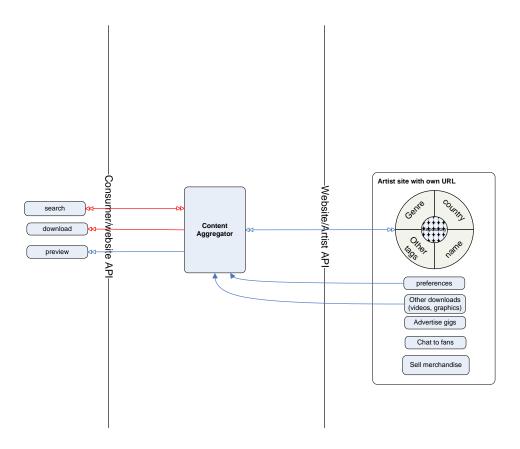
A content aggregator shown in Figure 18 is needed in order to properly warehouse all content that is uploaded onto the site. This will force certain metadata fields that are necessary for coherent classification of content, but it will also include many optional fields which artists may fill in to further refine the ability to be located in the online space.

The content aggregator should also be linked to efficient search functionality. For example, if the site was to employ the Google search applet into the website, this applet would need to interface into the content aggregator, and access all the indexing functions of this repository.



When a consumer searches and finds the desired content, the content aggregator will need to release the required content in the required format to the consumers, given that the appropriate payment has been received.

Figure 18: Content aggregator



16.5. **Revenues**

The cost and profit models are largely reliant on negotiations that would need to take place between all partners and investors that may potentially have a commercial interest in this model. The following two sections will deal with a concept that can be used by the artists themselves to establish a cost structure for their content that is based on fundamental strategic principles. This is in agreement with the recommendations of Chapter 15. A concept for providing a profitable model for the platform as whole is also presented.

16.5.1. Cost structure

An adaptation of Porter's strategy space is used to present an elegant way for artists to choose their payment mechanism. It breaks down the decision for the artists into two very simple questions, for which their answers can be on a continuum between two defined extremes:



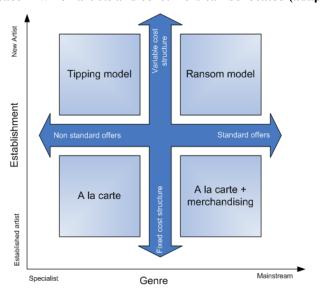
- 1. How popular is your chosen genre?
 - Lower extreme: I'm in a very specialist genre (e.g. Hungarian dance music)
 - Upper extreme: I'm in a very popular genre (e.g. hip hop)
- 2. How well established are you as an artist?
 - Lower extreme: I'm a new artist with no fans
 - Upper extreme: I'm a mainstream artist with many fans

This strategy space is presented in Figure 19. The artist should be able to interactively gauge where they think they fit between each of these extremes. The first question would position them on the x-axis in the figure below, and the second question would position them on the y-axis. Judging by the end position on the x-y plane below, the costing algorithm should be able to suggest a cost structure that is suitable to the strategy that an artist in that position is advised to pursue.

Artists in the upper left quadrant might be advised to use a Tipping model (seek to give away their music at no cost, or for a tip) until they have established a fan base, after which point they may move down the y-axis towards and A la carte model. Other variations of the models described on page - 34 - may also be incorporated into this strategy space.

The artists should have the flexibility to position themselves anywhere in this strategy space, but the use of this strategy space is not prescriptive. Whichever method they choose will impact on how they are paid for content that is consumed by the public. This calculation of payment will occur in real-time as options change.

Figure 19: Strategy space in which artists and consumers can be located (adapted from Porter, 1985)





As described by Kusek and Leonard (2005) in section 14.5, all revenues generated by the sale and use of content originating from this site should go into a central pool which will serve as the basis for royalty payouts. The ALCD platform should have remote access to these funds to distribute accordingly among those who are generating the revenue for the site.

How much should be paid to any particular artist will be according to how they perform online, how many viewers they attract, how many sales they incur as well as how their content is used elsewhere on the web.

People that wish to use the content elsewhere on the web will need to purchase a license for this purpose. The license holder will be billed a royalty fee, for each use of the content online which is then handed over to the artist (as tracked by digital watermarking).

If the artist has a contractual agreement with another entity in the value chain to which royalties are owed (for example a publisher), the apportioned royalty should be stipulated as part of the costing structure, and automatic payment should occur to the designated party in the same manner as the artist's royalty.

16.5.2. Profit model

The ALCD model should not rely on advertising revenue alone but rather have additional income sources such as subscription collection and revenue generated by a 'virtual item'. The virtual item is in order to differentiate the user of the platform from his or her community (Enders et al, 2008).

The artists that make use of the site should not have to pay any fees for the use of the platform since initially they may not necessarily be profitable, especially if they are operating in the upper left quadrant of the strategy space presented previously. Commission—based profit sharing on incoming revenue would allow the artists to only start paying for the platform once they have the revenue to do so.

Enders et al, 2008 identified the number of users on a platform as being one of the key drivers of revenue. This is especially applicable if using advertising revenue for profit. Higher traffic volumes also create exposure to more artists if cross-marketing principles are incorporated into the model.

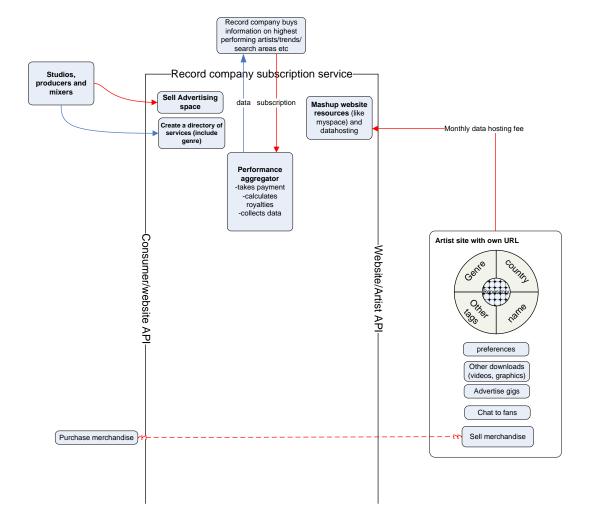
The richness of data that would come from having a large database of musical content, as well as trending data from the consumer behaviour, and artist performance on the site would be valuable information for record labels that are searching for emerging talent. As mentioned in Chapter 15, this



model could exploit this fact by allowing access to this information via a subscription service for record companies.

Figure 20 illustrates how revenue could be generated by this model as discussed. Additionally it illustrates how various service providers in the industry (such as studio owners or producers) can advertise their services on this platform.

Figure 20: Profit model





16.6. Legal issues

The ALCD model aims not to utilise any proprietary hardware or software (hardware or software that requires particular brands of playback devices or operating systems etc), as the aim is to reach as many people as possible with the content on the site. This is in stark contrast to the proprietary model that iTunes uses. The ALCD model is able to serve content in whichever format is desired across all computer and mobile platforms. The most common format will be MP3, and this should be the default option, however AAC, WMA, WAV and other formats should also be accommodated.

16.6.1. Licensing of artistic works

The ALCD distribution model performs all the licensing functions (relating to the online sale of copyrighted content) on behalf of the artist. There are several third party licensing websites that can perform this task whilst integrated into the ALCD portal such as Creative Commons or Sonicspaza. The artist will be able to choose what kind of rights they are willing to give to users of their music. Artists will be given the same flexibility as with their costing structure to decide which licensing option is best for them.

Other implications relating to tax, contractual and publishing agreements will not be investigated further, as these are dependent on the specific architecture that is adopted by a working model and who the role-players are.

16.7. **Technology**

Delivering a comprehensive online music experience requires robust hosting and aggregation infrastructure. Wunsch-Vincent and Vickery (2005) advise that distributed networks are needed to ensure that buffering is kept to a minimum, with co-location networks meeting the needs of a geographically separated audience.

Additionally, this platform will need to make use of the latest technologies that are in market circulation regarding social networking to foster community and peer-engagement with both the content and the artists who profile themselves on this site.

This model has taken certain technological concepts and moulded them into a set of processes that work together to provide a service to the artist and consumer alike. These processes have been described intrinsically, however the impact on the external environment has not been considered. The following chapter aims to examine the extrinsic reaction and impact on the external environment as a result of this model.



17. Impact of Technology Innovation on the External Environment

Stage 6 of the methodology described by Vlachos et al (2006) is to estimate the impact of technology innovation on the external environment. Firstly, the impact on the key industry role players will be considered before identifying which new roles have emerged. Lastly trends that are likely to emerge from this business model will be identified.

17.1. Affect on key industry role players

This new business model approach has implications for the members of the traditional value chain. Each of these entities will be discussed individually.

17.1.1. Publishers

Publishers acquire revenue from the sale and licencing of copyrighted works. As such they are the least likely to be negatively affected by a strategy change in distribution. If the model succeeds in automating the payment of royalties to all involved parties, the model may benefit publishers who will receive real-time payment for the use of their content as opposed to awaiting payment through a collection society.

17.1.2. Artists

Unsigned artists stand to benefit the most from this business model. They have the ability to drive their own strategy and collect the resulting revenue directly, with no obligation to a record company. If they become successful on this platform, they have the potential to be approached by a record company, who has seen their proven success, for a record deal. At this point, the artist (coming from a relative position of strength) is likely to be able to negotiate better terms on their contract.

17.1.3. Record Companies

As a result of this business model, record companies are in a position to either adopt new strategies of online distribution themselves, or to act in opposition to online distribution. Although many record companies have in fact adopted online distribution strategies, they are only offering access to their catalogue which is a limited number of signed artists.

Consumers, who are interested in finding new and exciting local artists, would benefit more from an offering that acts as an aggregator of content in one central place. As such, the limited inventory on a record label's website serves only a small market segment.



17.1.4. Distributors

Distributors are likely to be the most negatively affected by online distribution strategies. They will not be completely dis-intermediated as there is still a demand for the physical product (although this is diminishing). Distributors should be encouraged to diversify their business interests to include distribution of other physical products, or they could be encouraged to become investors in a model such as the ALCD model here-in presented.

17.1.5. Consumers

The consumers of digital content may differ somewhat from the population of physical content consumers. The online consumers will have the ability to influence the popularity of their chosen artists by using online social media functionality presented in this study. They will have a direct link to the artist as well as the opportunity to give input into the artist's creative process. They will also have access to flexible payment options and reasonable pricing schemes with the knowledge that the majority of their payment will go directly to the creative entities, and not to intermediate corporate entities such as distributors and record companies.

17.1.6. Collection societies

Those societies responsible for the collection of royalties on behalf of the artist may wish to buy into the ALCD model. The content that is purchased online that is later used elsewhere online will automatically (by way of licensing and digital watermarking) generate royalties to be paid to the applicable parties. The offline domain will still largely be administered by these collection societies; however, there will potentially be a large amount of revenue passing through this online payment scheme of which the collection agencies could potentially lose out on.

17.1.7. Support services

Existing support services like marketing, legal, financial, etc. would remain part of the value chain, with a shift of focus onto the online arena. Marketing and legal services would remain essentially unchanged, and a core team of resources would still be needed to maintain the web platform, ensure it is functioning correctly, and provide a fast and efficient service to the artists, consumers and other users.

17.2. **New roles**

The nature of the proposed business model is to create commercial activity online. By implication, the physical value chain is represented in a new form in a virtual environment. As such new roles are largely of a virtual nature or related to creating this virtual platform.



17.2.1. Investors

Many of the previously active role-players whose roles are less prominent in the online counterpart, may choose to invest in this new platform. Alternatively if there is a lack of conglomerate support, external investors may be required to provide the start-up capital necessary for the production of this platform. Internet Service Providers may also be considered as likely investors as they are providers of the bandwidth needed to run this platform.

17.2.2. Developers

Web designers and developers will be needed to create and maintain this platform on an ongoing basis. Much of the platform will stem from user generated content, but the hosting and data servers need to be administered by skilled professionals. These developers will need to interface with the mobile development environment in order to provide a similar mobile service to that which is available online.

17.2.3. Support staff

There is a role for supporting the platform on a daily basis. Tasks may include:

- Reviewing and evaluating content
- Compiling trend reports on online activity
- Acting as a 'seed' for social media interactions (posting stimulating topics for discussion etc)
- Listening to user feedback for continued improvement
- Overall strategic guidance of the platform
- Marketing of the platform offline and online

17.3. New trends

The trends that are likely to emerge from this model in a 'best case' scenario are the following:

- Artist led distribution of unsigned musical content
- Provision of content that meets a requested or identified need as communicated to artists and the community online by the consumer
- Artists may begin to distribute their unique URL for this platform as opposed to MySpace, as the consumer will find more value in the proposition
- Online music sales should increase in the local market
- Increased competition between artists in similar genres, which results in greater drive for differentiation and associated improvement in quality
- An increase in the diversity of genres the record labels are prepared to produce, based on proven popularity online



- Increase in the number of local musicians who see more value proposition in this line of work than in the past
- A willingness of consumers to pay the appropriate price for quality content and a consequent reduction in online piracy and illegal file-sharing.



18. Conclusion

This study begins with a view of the music industry both past and present, with an emphasis on the distribution of musical content. The shift from retailing in the marketplace, to trading in the Internet 'marketspace' has had huge negative implications on members of the supply chain directly reliant on the physical package of the audio recording. The subsequent apparent redundancy of the suppliers, distributors and retailers has negatively impacted many role-players, but it has also provided opportunity for artists in that they are no longer necessarily reliant on the ability of record companies to provide these services to them. With the medium of delivery and distribution shifting from the real world to the virtual world, the cost of production has decreased substantially, allowing artists to fund their own product development, and lead their own distribution. In order to target the correct potential buyers and create a sustainable online product, a business model is required which brings all the aspects of new technology, e-commerce, global networking and product promotion together in a coherent and productive way.

This study aims to present the elements of a possible working business model for the distribution of digital content. It focuses on the artist as the creator of the content, and the buyer as the consumer of the content. Given the data presented in chapters 9-17, the following can be concluded:

- Record companies are no longer the primary industry drivers. Consumers drive the demand for content and suppliers need to respond accordingly (Chapter 9).
- Technology has enabled artists to become producers, suppliers and distributors in their own right.
- South Africa is set to receive increased broadband availability which is a primary enabler of an online distribution model. This will allow the South African market to mimic first world markets, and start building online business models that have elements of the global models that have formed the basis of this study (Chapter 9).
- Web 2.0 trends and social networking have impacted the way in which people interact online.
 Consumer-generated content forms a basis for the majority of Web 2.0 related activity. A culture of online sharing, collaboration and integration allows artists to create high value, reliable online platforms for low cost and wide reach. Artists are positioned well to use this form of interaction for promoting, disseminating and enhancing their content (Chapter 13).
- South African artists who distribute content online may use flexible licensing techniques and digital rights management technologies such as digital watermarking to protect their content online (Chapter 14).
- iTunes, MySpace and Artspages are the three international business models that have been studied as benchmark platforms for content distribution (Chapter 12). As discussed in Chapter



12 and 15, none of these platforms entirely suit a local model for promotion of emerging artists content, however many features of these can be combined along with new technologies which allows a unique local business model to emerge which responds to the local climate and needs of local content providers.

- Many role-players in the traditional value chain may need to change their role in the music industry as they adapt to the changing climate of e- and m-commerce. (Chapter 15)
- An online business model for music distribution in South Africa would simply not have enough reach to have a high level of engagement without the integration of a mobile telephony component (Chapter 15)
- A new trend of artist led distribution may emerge if the implementation of this model is successful. The local industry can benefit from an increased pool of content, heightened competition and a general increase in consumer engagement with local music.

17.4. Further research

Future studies should aim to address the following issues not resolved in this research:

- 1. A plausible DRM technique for automated royalty payments.
- 2. Legal, financial and economic restraints and opportunities afforded by Internet and mobile Internet music applications.
- 3. Profitability analysis of development for this model, and seeking cost effective solutions for large capital requirements that are not self-sustained by this model.
- 4. New technologies that can enhance the functionality of this model which aids the direct-to-consumer philosophy of this model.
- 5. Innovative methods of re-architecting displaced roles from entities in the traditional value chain.
- 6. Market analysis to evaluate the level of success and sustainability of the ALCD model.



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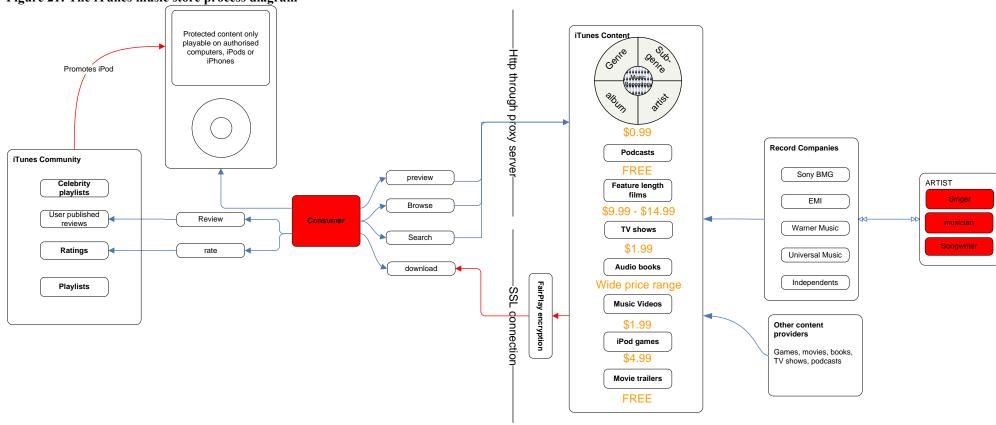
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Appendix A: Current business models

Figure 21: The iTunes music store process diagram





This screen shot below of the United States iTunes store user interface serves to illustrate what is available to the international market for purchase. This is for comparison with Figure 23:South African iTunes store user interface which only supports the purchase of iPhone applications.

Figure 22: The United States iTunes store user-interface









My Store: South Africa 💠

Copyright (2008 Apple Computer, Inc. All rights reserved. | Privacy Policy | App Store Terms | | About Us Partner with iTunes | iTunes Affiliates | Purchase History



Figure 24: The MySpace model process diagram

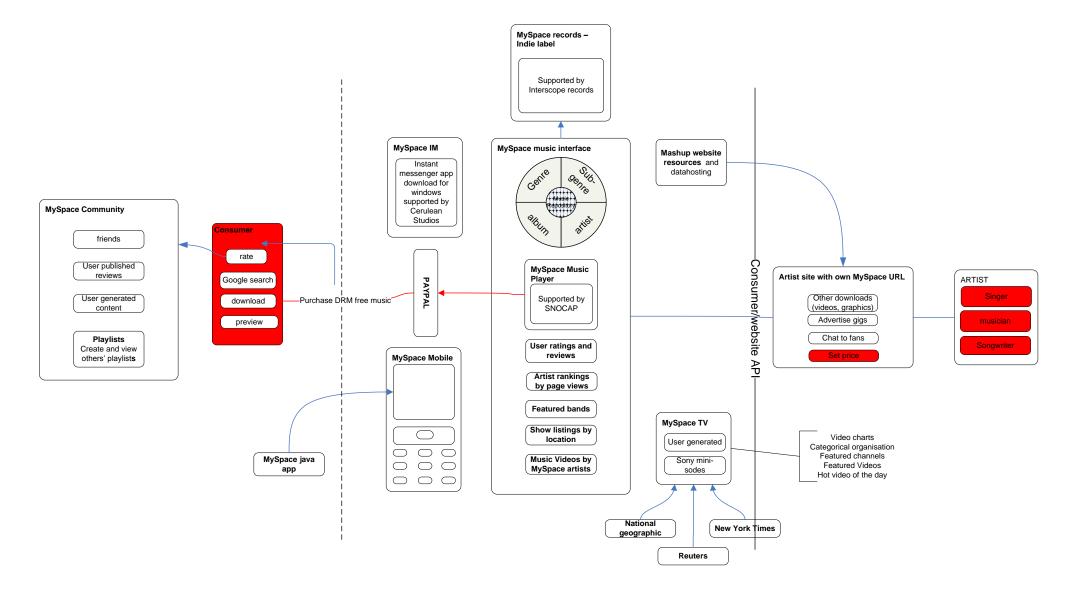


Figure 25: MySpace Music user interface (Source: http://music.myspace.com/)



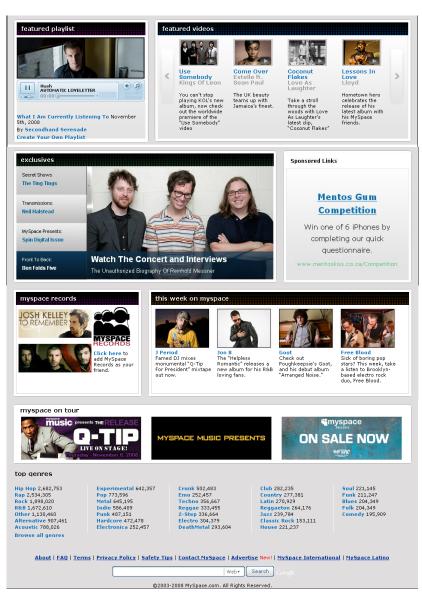


Figure 26: Artspages model process diagram

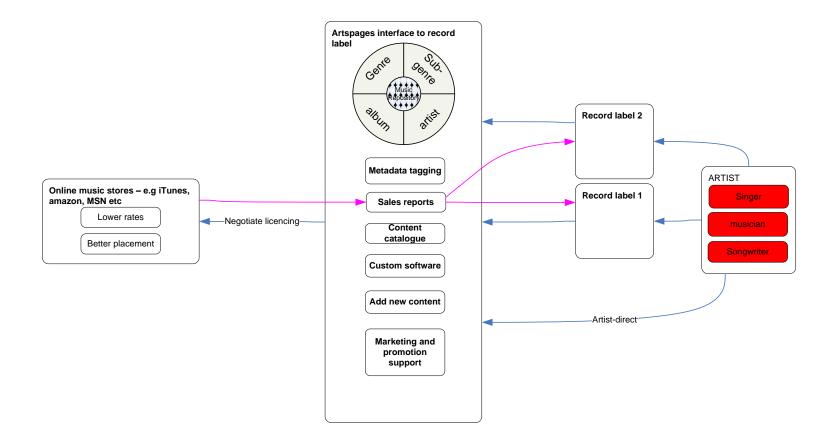


Figure 27: Artspages daily sales report (http://www.artspages.com/)

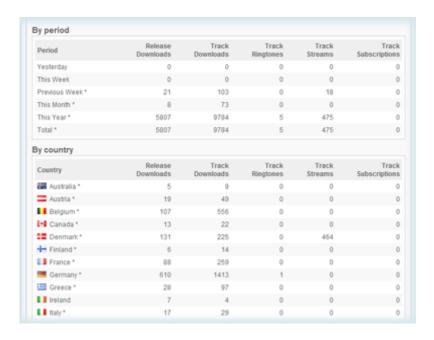


Figure 28: Artspages sales statement (http://www.artspages.com/)

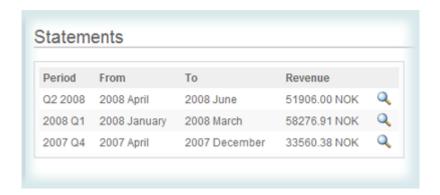




Figure 29: Artspages online catalogue administration (http://www.artspages.com/)

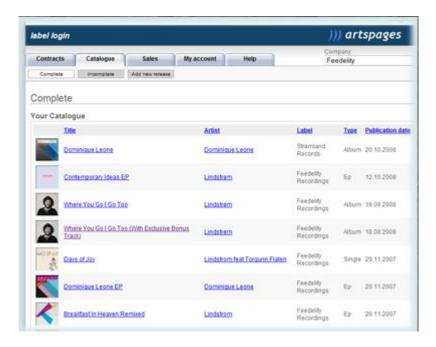
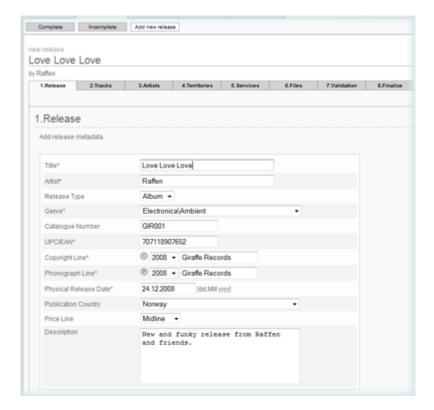


Figure 30: Artspages interface for uploading metadata, cover art and audio (http://www.artspages.com/)





Appendix B: Comparison of existing business models

Table 4: Comparison of features of iTunes, MySpace Music and Artspages

	iTunes	MySpace Music	Artspages
Augmentation features	 Games Movies Books TV shows Podcasts Music videos 	 Music videos Chat Advertising space for artist Record label TV (video charts, featured channels, featured videos) 	Metadata taggingSales reportsCustom software
Barriers to entry for artist	Need backing of recognised label	No barriers, only Internet connection needed	 Artists can go through record labels or independently Non discriminatory
Catalogue administration	 Done by iTunes in-house Replication of catalogues of all current labels under contract 	Maintained by users in a central database which is searchable. Metadata tagging is limited to genre selection	Metadata tagging is detailed and allows highly specialised searching capabilities
Copyright protection	High	Low	High
Digital Rights Management	AAC codec	Artist defined - normally nonexistent unless signed with MySpace Music record label	All content is encrypted before transfer to third parties
Direct artist compensation	None - via record deals	Direct compensation from online sales unless signed with MySpace Music record label in which case record deal obligations are met	none - performs administrative service functions only



Disparity of audience	Wide - all available genres on display	All encompassing, artist can appeal to anybody on the Internet	Generally utilised by content providers and not the general public
Ease of use for consumer	Easy to use	Not a very streamlined process. Sometime requires download of software to purchase. Sometimes content not available	Customisable customer interface
International compatibility	Limited to countries identified on a list	Available to all countries with Internet access	Available to all countries with Internet access
Live music promotion	No	Yes	On request
Loyalty of customer base	High	Medium	High
Management reporting	Unknown - as part of service level agreement with record labels	None	Core focus of business
Market reach offline	iTunes store promoted largely offline as a sales drive for the iPod	Artists promote their MySpace URL at live concerts and on promotional material	Very little
Marketing and Promotional support	A lot of support for popular artists Little support for less popular artists	Artists are self promoted	On request
Mobile application	iPhone applications	Mobile access	none



Payment methods	Credit card only (from countries on access list)	Credit card only (all types)	On contract basis
Personalisation	Limited	Highly personalised in terms of: Layout Design Audience Privacy settings	Development on request
Pricing flexibility	None – determined by the iTunes store and is standard across all music	Flexible	Charge for service
Primary relationships	 Record labels (big 4) Well known independents Consumers 	ArtistsListeners/consumers	 Record labels artists other independent managers of music content online music stores
Sampling	Available on all content	Available on all content providing artist has uploaded the content correctly	None
Search ability	Efficient search in known genres	Search results are absolute i.e. searches for a word yield all fields containing that word	Only available to customer under contract
Social media	RatingCelebrity playlists	 Social network Chat Personalised profiles Friend/artist search Ratings, postings 	none



		BlogsReviews	
Source of content	 Record labels (big 4) Well known independents Artspages 	Web community users	 Record labels Artists other independent managers of music content
Stand-alone application available	Yes	No	Custom built
Support for unsigned artists	No	Yes	Yes
User account	Only for consumer	For artist and consumer	For user only (record label or artist)



Appendix C: Emerging technology interfaces

Figure 31: Shop Direct customer interface (http://www.shopdirect.co.za/)



Figure 32: Paypal customer interface (https://www.paypal.com) Sign Up | Log In | Help | Security Center Search **PayPal** U.S. English 🔻 Business Products & Services Developers Send Money Get Started Request Money Financial Products Developers Account login 👸 The safer, easier way to pay Email address for the things you love What is PayPal? PayPal password How we keep you secure Log In How you checkout faster Forgot your email address or password? New to PayPal? Sign up. Pay With: Top questions Send money and buy online Sell online → Why use PayPal when I have credit cards? Checkout more quickly when you shop > <u>Sell on eBay</u> and get paid quickly. → What can I do with PayPal? > Start accepting credit cards on your Send or request money from friends and → Is PayPal free to use? > Discover all the ways to get paid online. Pay without revealing your credit card or Sign up bank information. Sign up



Figure 33: MXit Music customer interface (http://www.mxitmusic.co.za)





Figure 34: Oprah Winfrey's Youtube channel (http://www.youtube.com/user/OPRAH)

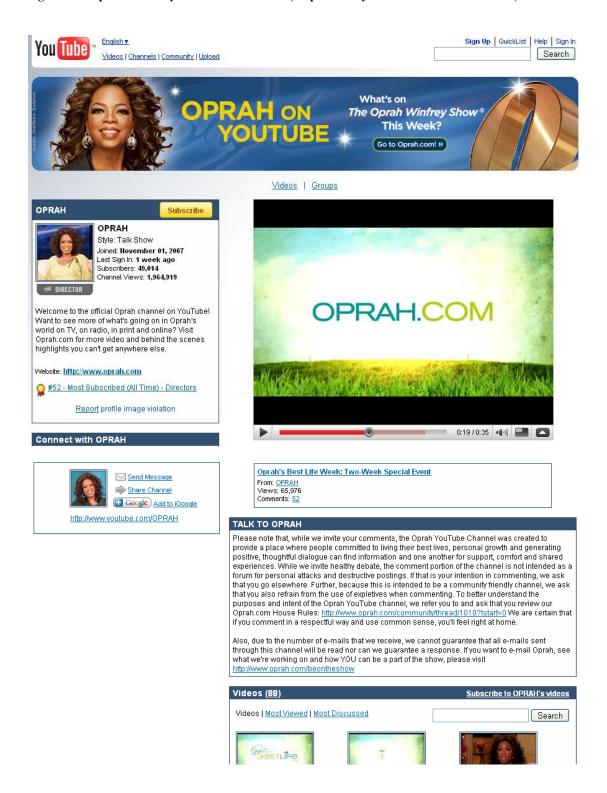




Figure 35: Facebook Music Groups (http://www.facebook.com)

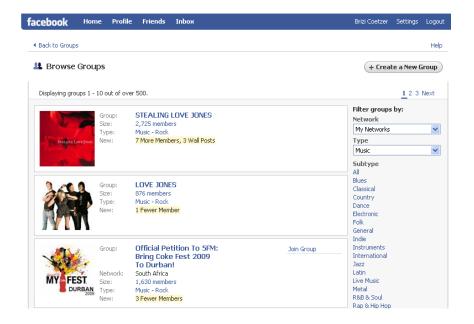
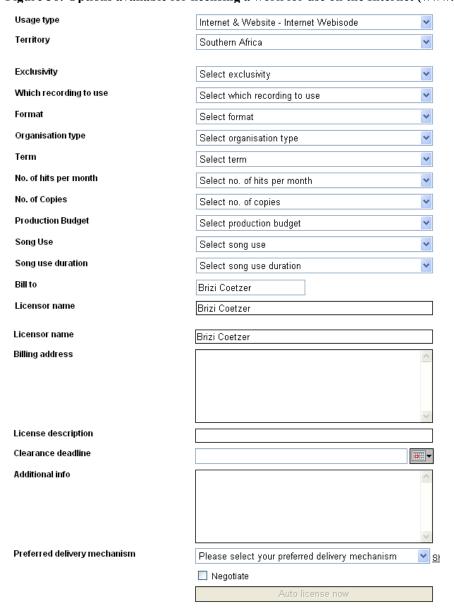




Figure 36: Options available for licensing a work for use on the Internet (www.sonicspaza.com)





Appendix D: An overview of the core elements of the ALCD model

