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Abbreviation

AOL	America Online
BEM	Big Emerging Markets
BMG	Bertelsmann Music Group
CBS	Columbia Broadcasting System
CD-DA	Compact Disc – Digital Audio
CVP	Customer Value Proposition
DAT	Digital Audio Tape
DRM	Digital Rights Management
EMI	Electric and Musical Industry
etc.	et cetera
FLAC	Free Lossless Audio Codec
GEMA	Gesellschaft für musikalische Aufführungs- und mechanische Vervielfältigungsrechte
IPR	Intellectual Property Rights
LP's	Long Playing Records
MCA	Music Corporation of America
MD	Mini Disc
PTFE	Polytetrafluorethylen
RAM	Random Access Memory
RCA	Radio Corporation of America

RIAA Record Industry Association of America

UMG Universal Music Group

Kurzfassung

Durch dramatisch sinkende Verkaufszahlen innerhalb der letzten zehn Jahre kämpft die Musikindustrie mit einem unaufhaltbaren Einbruch der Umsätze. Die Entwicklung des Internets und der damit verbundene technologische Fortschritt haben neue Wege geebnet, Musik zu konsumieren. Die Entwicklung mobiler mp3 Player, CD-Brenner, sowie schnellen und kostengünstigen Internetverbindungen hat das Verhalten der Konsumenten maßgeblich verändert. Musik kann nun direkt aus dem Internet auf unterschiedliche Medien geladen und an nahezu jedem erdenklichen Ort genutzt werden. Es ist höchste Zeit für die Musikindustrie auf diese Veränderungen zu reagieren. Die vorliegende Arbeit definiert den Begriff des Geschäftsmodells (Business Model), geht auf die Innovation des Geschäftsmodells (Business Model Innovation) näher ein und stellt die Geschäftsmodelle mittels Taxonomie (Business Model Framework) gegenüber. Etwaige Barrieren und Widerstände werden im Anschluss daran analysiert. Die Musikindustrie stellt den nächsten Schwerpunkt dieser Arbeit dar. Mittels geschichtlichem Überblick wird der Werdegang der Musikindustrie von ihrer Entstehung bis heute dargestellt. Dies dient als Basis für die traditionellen Geschäftsmodelle, die teilweise bis heute noch zur Anwendung kommen. Die Analyse von innovativen Geschäftsmodellen und die Anwendung der Taxonomie in der Praxis stellen den Kern dieses Kapitels dar. Abschließend findet auch das Datenschutzgesetz Erwähnung.

Abstract

The falling sales figures and the associated revenue collapse within the music industry call for a major change. Due to the digital revolution and the gaining importance of personal computers (PC's) as well as the Internet new ways to distribute music appeared. The technical development including broadband Internet, facilitated the progression of digital distribution offering music for little or no money. Music can now be downloaded in virtually no time on a legal or illegal basis. Unsurprisingly, the majority of downloads offered for free are cases of copyright infringement. Getting the desired music just in time without any delay or effort for free via illegal downloading is the problem the music industry is facing right now. It is needless to say, that most of the customers and even some artists welcome this development. The digital age has introduced a new era of how music is being distributed. Downloads, as well as digital communities, are undoubtedly the future of the music industry. This master thesis examines the basic element of each company, the business model. It will define the crucial elements as well as potential improvement. Since the music industry is seeking for changes within their own business model, new ways to distribute music on a legal basis are indispensable. By that all the entrepreneurs involved within the value chain, might benefit. All the alternative distribution strategies will be based on the traditional value chain in order to make them comparable.

1 Introduction

This master thesis takes on the task of analyzing the business model underlying the digital music industry. By analyzing the digital music industry, desirable ways of distributing music are discussed and checked in terms of viability. The information gathered within this thesis concludes in proposing a business model capable of dealing with the changes in this industry within the last two decades. The next section formulates the problem statement and is followed by the objective of this work.

1.1 Problem statement

Nowadays the increasing competition between the “Big Four” record labels Vivendi/Universal, Sony BMG, AOL - Time Warner and EMI, as well as new communication technologies that create new opportunities in distributing music, call for new business models. This manifests itself in dramatically dropping CD-DA sales and the declining popularity of physically owning a CD-DA of a certain preferred artist or band. Reasons being the price of a CD-DA, which is rather high because of an extensive value chain linked with distributing, as well as the possibility of downloading the content via Internet for a lower price or even for free. “The digital technology has upset the degree of control copyright holders have historically maintained over the use of and access to music (Petrick, 2004, p. 4).” New ways to prevent individuals from illegally accessing digital music, pirating or any peer-to-peer proliferation are necessary to stop the tremendously declining sales. Different attempts to break down the value chain to a certain amount of necessary individuals involved will be analyzed and enriched with actual price ratios in order to determine the potential benefits for the customers. This is necessary to define possible channels of distribution applicable to the music industry that might help overcome the fatal situation this industry is currently experiencing.

1.2 Objective of this work

This master thesis focuses on business model innovation and its importance in the digital music industry and will consist of the five parts discussed in this paragraph. It shall be noted that

the use of the term Digital music within this work just relates to distributable music and not any sort of live performance, concert or appearance.

1. The first chapter acts as the introduction to business models with the linked value creating processes underlying them. It is followed by a definition of business model innovation, starting with five circumstances that require a change of business model, as well as four key aspects for business model innovation. Then a business model framework (BMF) tries to classify possible business models. Opportunities and barriers will discuss three crucial points concerning business model innovation namely experimentation, effectuation and organizational leadership.

This approach was chosen in order to get a fundamental insight into the way companies generate value through their business models. Since the business model is an unattended but still indispensable field, it is necessary to get a comprehensive overview on how it works. This thesis tries to find a uniform definition.

2. The second chapter analyzes the digital music industry itself. It starts with a historical overview including the development from the starting point in the early 1890s until now. Then, a definition of the digital music industry narrows down the term in order to define its relevance. This includes several examples and options that are currently in use. The traditional music distribution discusses distribution strategies from the long playing records (LPs) to the compact disc (CD-DA) and analyzes the value chain necessary for alternative distribution strategies.

Again this approach was chosen to get a uniform definition for later chapters. Due to different terms and definitions of digital music, it was necessary to narrow down the usage within this thesis. The traditional music value chain with all the contributing factors and the linked costs accountable for pricing will help to discover potential savings within the value chain. The information gained then facilitates analyzing possible distribution channels.

3. The third chapter picks up the topic of intellectual property rights (IPR). It will analyze potential methods on how to implement digital rights management (DRM) into the digital music business model.

Since there are many restrictions concerning the distribution it is inevitable to include the legal foundation of IPR. Since IPR is the umbrella term for DRM, DRM will be discussed in greater detail.

4. The fourth chapter summarizes the information by defining three distinct distribution strategies.
5. The last chapter concludes the information gathered within the previous chapters. Then the results of the research are discussed leading to potential improvement and practical suggestions for business models in the digital music industry.

2 Business model – What is a business model

The following chapter defines the term business model. This is followed by a definition of business model innovation, a business model framework and the opportunities and barriers linked to business models. A uniform taxonomy that can be applied on business models in general concludes the chapter. The definition of business model is necessary to unify the different approaches in the literature in order to get a basis for further research within this thesis. Since business model innovation that has not changed its importance within the last decades, and is lacking a definition, it is of overriding importance to fill this gap. Nevertheless, no innovation opens up opportunities without creating barriers. After defining the important aspects of business models, a framework facilitates the comparability as well as the classification of different business models.

2.1 Business model: A definition

This chapter tries to define a concept of business models by unifying the information gathered in the literature. “Every company has a business model, whether they articulate it or not (Chesbrough, 2007, p. 12).” Business models are “...at heart, stories – stories that explain how enterprises work (Magretta, 2002, p. 4).” Therefore creating a new business model is like writing a new story. Since every new story might somehow be a variation of an old one, each new business model is based on the generic value chain underlying all businesses (Magretta, 2002, p. 4).

The development of personal computers and spreadsheets changed the way business models were generated. Now every decision can be ripped apart, new data can be implemented and tested and changes can be analyzed on every aspect of the whole. Needless to say, a spreadsheet is just as good as the estimates being made to fill it and the success lies in continuous optimizing and adapting. Before this development most of the successful business models were more or less created by accident than by intense analyzing and testing (Magretta, 2002, p. 4f).

There are several driving forces that catapulted business models into the public awareness within the last decades:

- The emerging knowledge economy
- The growth of the Internet and e-commerce
- The outsourcing and offshoring of many business activities
- The restructuring of the financial service industry around the world

In the centre of these considerations is the change of the way in which companies generate value for themselves. Independent of the business sector, there are certain elements to evaluate the quality of a business model (Teece, 2010, p. 174).

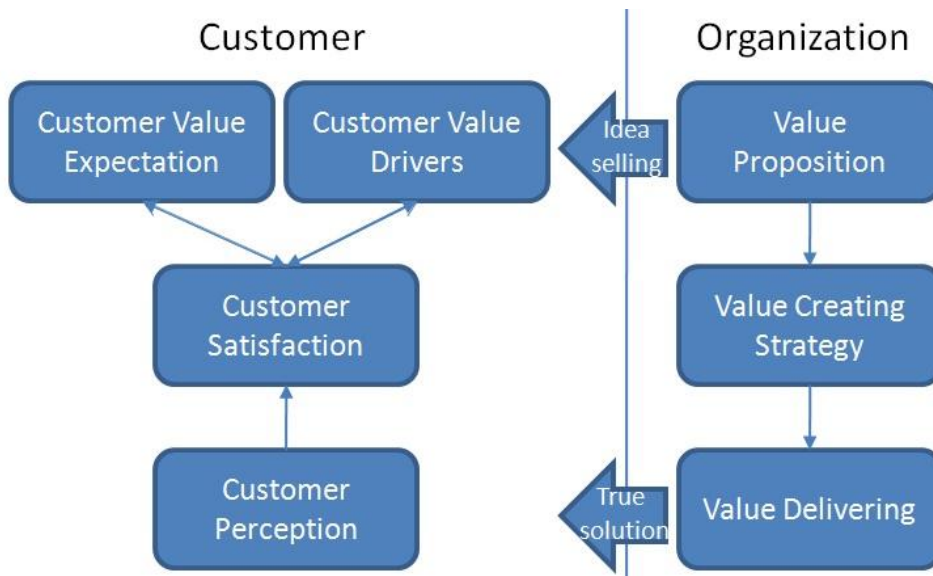
Johnson, Christensen, & Kagerman within their work defined four interlocking elements underlying every business model: the customer value proposition (CVP), the profit formula, the key resources and the key processes. These four elements together are responsible for creating and delivering value within a business and are discussed within the next paragraphs (Johnson, Christensen, & Kagerman, 2008, p. 60).

2.1.1 Customer value proposition

The key issue for every company is finding a way to create value for customers. This can be achieved by offering a solution to solve a problem in a given situation. There are some essential tasks linked to this process. The company needs to get an understanding of the problem as well as the processes necessary to find a solution to solve it. Once the company has got a substantial solution the offering can be designed. There is a coherence of how important a problem is to the customer and the level of customer satisfaction with current options. With rising importance of a problem the customer satisfaction with current options declines, which therefore implicates potential improvement. Also the price plays an important role with CVP namely the lower the price the greater the CVP (Johnson, Christensen, & Kagerman, 2008, p. 60).

Figure 1 depicts a CVP in detail.

Figure 1. Customer Value Proposition



Source: own creation based on McMann, 2011

Figure 1 indicates the importance of an optimal balance between the promise and the delivery of a product or service. The organizations value proposition must affect or influence the customer value drivers. When the customer has been won over with the idea, the organization must then deliver what it had promised (McMann, 2011).

As discussed by Anderson, Narus, & van Rossum, 2006 there are three kinds of value propositions: all benefits, favourable points of difference and resonating focus. Based on their work these three propositions are discussed in the next few points.

- **The all benefits kind**

Most of the managers just list all the benefits that might be delivered to the customer when creating a new customer value proposition. Nevertheless, this 'just benefits' way of thinking is the one that requires the least knowledge of customers and competitors and by that the least effort. That could lead to benefit assumptions that might not deliver any benefit to the target customers at all. Another major disadvantage is that the claimed benefits might just match the competitors claimed benefits and by that neglect the few genuine differences. This leads to a focus on the points of parity rather than

the points of difference and by that to a point where the customer is indifferent to certain options (Anderson, Narus, & van Rossum, 2006, p. 2).

- **The favourable points of difference kind**

The favourable points of difference implicate that the customer has an alternative. However, knowing that there is a point of difference between two offers doesn't necessarily imply that the customer is aware of the value of the difference. Since there is mostly not just one point of difference, determining which alternative delivers the greatest value is challenging. Without explicitly knowing what the customer needs it will be difficult to figure out points of difference that create the most value for target customers (Anderson, Narus, & van Rossum, 2006, p. 2f).

- **The resonating focus kind**

The resonating focus value proposition is the third type of value proposition. This approach is focusing on a customer value proposition that is superior in few elements, which are captivating the target customers. By that a need to demonstrate and document the value created with this few unique elements arises, which has to be communicated in a way that persuades the potential customer. There are some significant differences from the favourable point of difference types. First, this type prefers quality not quantity, since it concentrates on the one or two points the customer values most. Second, the crucial proposition does not just consist of points of difference it also may include a point of parity. This might happen when the customer needs a point of parity to even consider a supplier offering in order to compare it to existing products (Anderson, Narus, & van Rossum, 2006, p. 3).

Table 1 briefly summarises the crucial elements of the three kinds of value proposition.

Table 1. The elements that matter most to target customers

VALUE PROPOSITION:	ALL BENEFITS	FAVORABLE BENEFIT	RESONATING FOCUS
Consists of:	All benefits customers receive from market offerings	All favourable points of difference a market offering has relative to the next best alternative	The one or two points of difference whose improvement will deliver the greatest value to the customer for foreseeable future
Answer the customer question:	“Why should our firm purchase your offering?”	“Why should our firm purchase your offering instead of your competitor’s?”	“What is most worthwhile for our firm to keep in mind about your offering?”
Requires:	Knowledge of own market offering	Knowledge of own market offering and next best alternative	Knowledge of how own market offering delivers superior value to customers, compared with best alternative
Potential pitfall:	Benefit assertion	Value presumption	Requires customer value research

Source: Anderson, Narus, & van Rossum, 2006, (p. 4)

As seen in the last paragraphs, the ‘all benefits’- attempt is the least favourable of creating value followed by the points of difference value proposition. The last type with the resonating focus value proposition is the most adequate (Anderson, Narus, & van Rossum, 2006, p. 3).

2.1.2 Profit formula

The profit formula defines how value is generated within the company. It consists of the revenue model, the cost structure, the margin model and the resource velocity (Johnson, Christensen, & Kagerman, 2008, p. 60).

- The revenue model designates the amount of money that could be generated by multiplying the price by the volume. By that, the volume can be deducted from the market size, purchase frequency, etc... (Johnson, Christensen, & Kagerman, 2008, p. 62).

A firm's revenue model does not necessarily consist of one single revenue stream. Due to the fact that there could be different products and services provided, different revenue streams linked to different pricing models can be unified in a single revenue model (Osterwalder & Pigneur, 2002, p. 7).

- The cost structure defines how costs are allocated. This might include not just costs of key assets but also direct and indirect costs as well as economies of scale (Johnson, Christensen, & Kagerman, 2008, p. 62).

Hence, the cost structure sets a price tag on each activity that is associated with costs for the company. Since the firm's interest lies in its core competence and activities, some cost-saving might be possible within the value creating processes (Osterwalder & Pigneur, 2002, p. 8).

- The margin model tags each transaction with a certain price in order to yield the desired profits (Johnson, Christensen, & Kagerman, 2008, p. 62).
- The resource velocity represents the need to allocate the resources in order to support the target volume (Johnson, Christensen, & Kagerman, 2008, p. 62).

Profit as an economic indicator has an additional function in this case. It also indicates whether the model is working and in particular working as predicted, if not the model could be re-examined or even changed completely (Magretta, 2002, p. 5).

2.1.3 Key resources

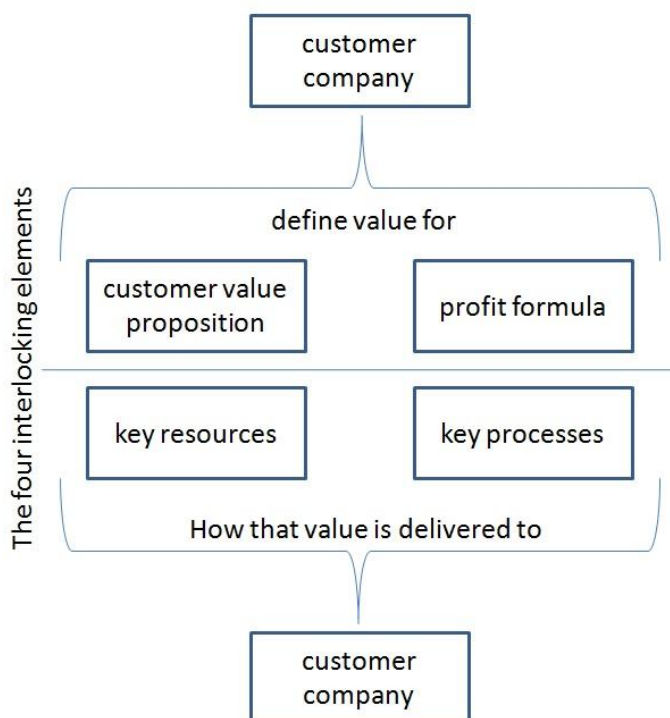
The key resources are all elements necessary to deliver the value proposition to a certain customer. This includes people, technology, products, facilities, equipment, etc. and can be summarized as a type of customer management (Johnson, Christensen, & Kagerman, 2008, p. 61). The essence is how those elements create value not just for the customer but also for the company, as well as how they interact with each other (Johnson, Christensen, & Kagerman, 2008, p. 61).

2.1.4 Key processes

Such key processes can be operational or managerial processes responsible for getting the value in and out of the company (Johnson, Christensen, & Kagerman, 2008, p. 61).

All these four elements described within chapter 2.1 and their interaction within each other, are responsible for successful businesses and are illustrated graphically in Figure 2 (Johnson, Christensen, & Kagerman, 2008, p. 61).

Figure 2. The four interlocking elements

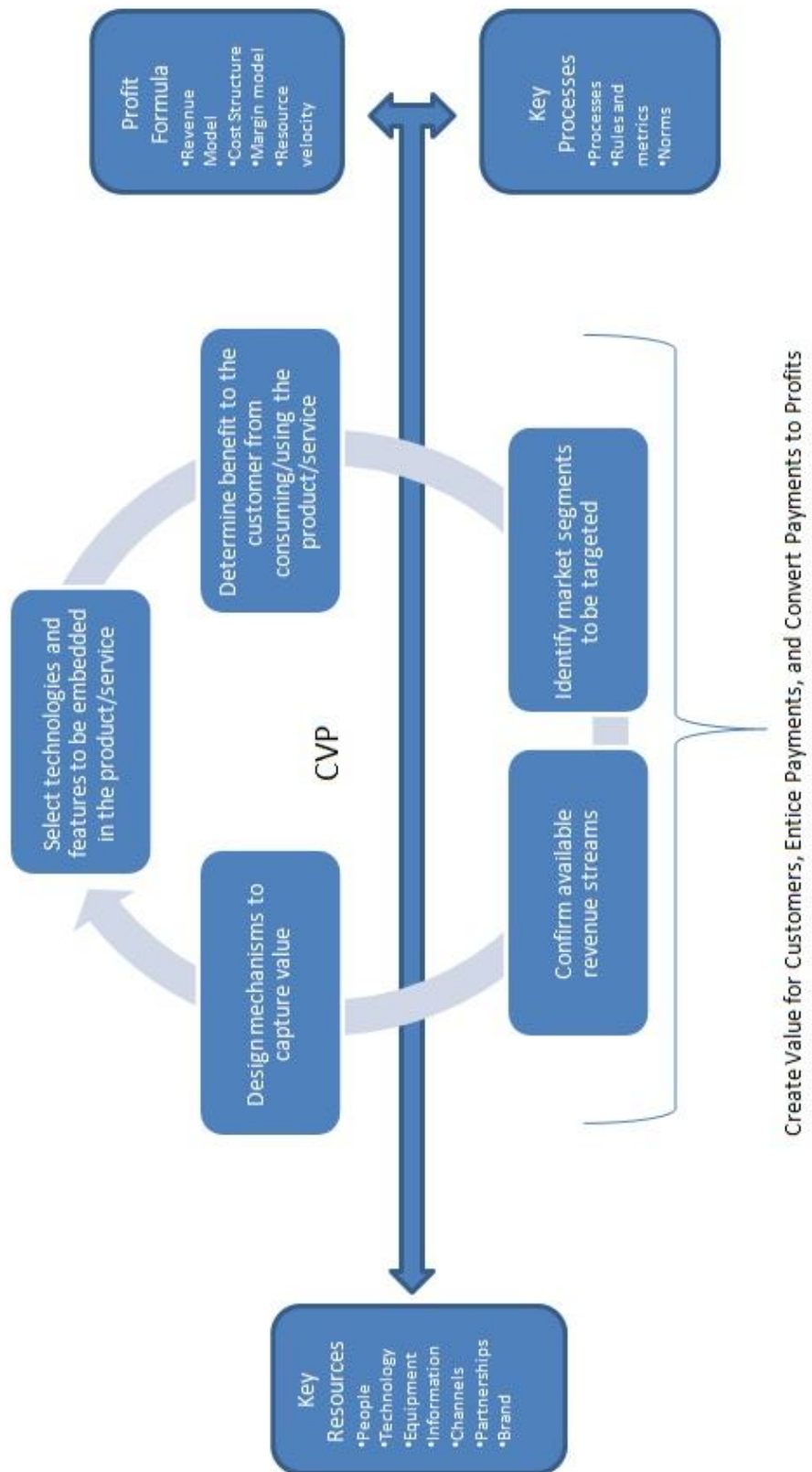


Source: Johnson, Christensen, & Kagerman, 2008

As illustrated in Figure 2, it is getting clear, that on the one side the customer value proposition and the profit formula are defining the value for the customer and the company, whereas on the other side the key resources and the key processes define how the value is delivered on the other side. All these four elements are interacting with each other, therefore changes within one of those elements affect the other and by that unfortunately the whole business model (Johnson, Christensen, & Kagerman, 2008, p. 61).

Figure 3 combines the attributes of the customer value proposition with the other three interlocking elements described within chapter 2.1.

Figure 3. The elements of successful business model



Source: own creation based on Johnson, Christensen, & Kagerman, 2008 and Teece, 2010

2.2 Business model innovation

The essence of each company is its business model and the role of the business model for an innovation is “...that the technological core of the innovation is embodied in an economically viable enterprise (Chesbrough & Rosenbloom, p. 25).” If the existing business model fulfils that criterion, minor adjustment will be necessary. If not, the business model needs to be innovated. That might happen when the four interlocking elements (customer value proposition, profit formula, key resources and key processes) discussed in the last paragraphs need to be changed significantly (Johnson, Christensen, & Kagerman, 2008, p. 64).

The act of innovating can be defined as “...employing existing resources in a different way, in doing new things with them, irrespective of whether those resources increase or not (Schumpeter, 1934, p. 68).”

2.2.1 Five circumstances that require a change of business model

This subchapter discusses five possible circumstances that lead to a change of business models. Each of the circumstances will be illustrated by an example.

- **The opportunity to address through disruptive innovation**

Disruptive innovations can address new customers that are seeking for new solutions. There are various reasons why customers have unmet needs. The focus is set on large groups that are not sufficiently served through the market (Johnson, Christensen, & Kagerman, 2008, p. 64f). One example for such large groups might be the big emerging markets (BEM). Since there is a potential need for certain products but due to low income a missing purchasing power (Johnson, Christensen, & Kagerman, 2008, p. 64f).

Ratan Tata of Tata Group did see the potential of providing a safer alternative to motor scooters. Since the cheapest car available in India costs more than five times the price of a scooter just a few people could afford one. Tata did see the potential of providing an affordable, safer and family-friendly alternative to the conventional scooter. With his idea to create a car that fulfils all that needs, Tata could reach millions of people incapable of affording a conventional car. In the same way Ratan Tata did realise that

his idea could not be implemented with the existing business model. An all new business model was generated best to meet the challenge (Johnson, Christensen, & Kagerman, 2008, p. 61).

- **The opportunity to capitalize on a brand-new technology**

Sometimes new technologies fail because of the use of out-dated business models that do not fit the product. By bundling a new technology with a new business model new opportunities to capitalize open up (Johnson, Christensen, & Kagerman, 2008, p. 65). Another way might lie in applying an existing technology to a whole new market which can be seen in cross-industry innovation (Johnson, Christensen, & Kagerman, 2008, p. 65).

One example for wrapping a new business model around a new technology can be seen with Apple and their portable music players. Apple launched their portable music player together with a web-based software called iTunes. With iTunes music can be bought and simultaneously transferred onto the mobile device. By that Apple did not just create value from the device itself but also from the service it delivers (Hesseldahl, 2008).

One example for applying a brand-new technology to a whole new market might be Gore with its PTFE technologies. Gore as a textile manufacturer focused on the core characteristics of its product, which are high isolation capabilities, thermal resistance, inflammability and UV resistance. With these core characteristics in mind new industry sectors opened up and Gore applied this technology in industrial, medical and electronic products (Enkel & Gassmann, 2010, p. 260).

- **The opportunity to bring a job-to-be-done focus**

Most companies focus on products or customer segments, which lead them to advance existing products over and over again. The job-to-be-done focus is concentrating on fulfilling an entirely unsatisfied customer need, which enables a change in industry profitability (Johnson, Christensen, & Kagerman, 2008, p. 65).

One example is the package delivery market that FedEx entered. The aim of FedEx was not in competing with lower prices, different or additional services or even better marketing but with fulfilling the customers need to receive packages faster and more reliably compared to the competitors (Johnson, Christensen, & Kagerman, 2008, p. 65).

- **The need to fend off low-end disrupters**

By producing goods or delivering services that fulfil the basic idea in an adequate way with a lower price, companies can gain a competitive advantage. Companies like Tata in the automobile industry that offer a product with the same functionality but with a much lower price influence the competing companies in the market (Johnson, Christensen, & Kagerman, 2008, p. 65).

- **The need to respond to a shifting basis of competition**

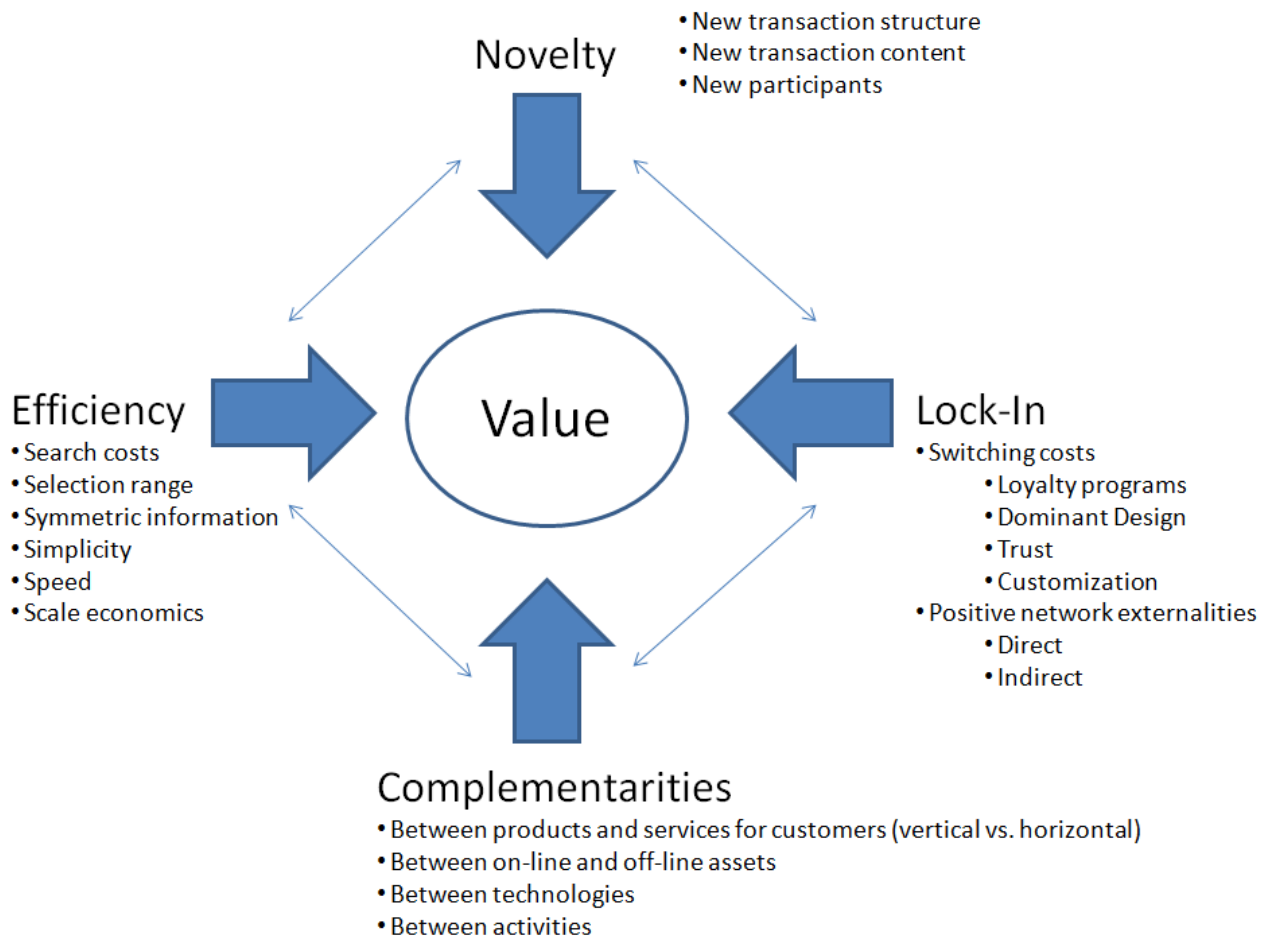
Due to changes in competition and new products coming up, companies need to respond. What is defined as an acceptable solution might change over time. Constant advancement is necessary in order to keep up with the market (Johnson, Christensen, & Kagerman, 2008, p. 65).

Hilti, a traditional power tool company was facing a shifting basis of competition and changed its business model in part. Low-end entrants with products that were good enough were gaining market-share. Hilti needed to respond and shifted into the service industry by providing a leasing service for their tools (Johnson, Christensen, & Kagerman, 2008, p. 63ff).

2.2.2 The four key aspects of business model innovation

The next figure illustrates the four key aspects namely novelty, lock-in, complementarities and efficiency responsible for business model innovation (Chesbrough, 2010, p. 358).

Figure 4. Sources of value creation in e-business



Source: own creation based on Amit & Zott, 2001, (p. 504)

The following part is based on the work of Amit & Zott and discusses the elements of Figure 4 and their interdependencies within each other. The central point of the figure is value creation since it is of great importance for the strategic management, as well as entrepreneurship fields (Amit & Zott, 2001, p. 509).

1. Complementarities

Complementarities occur when a bundle of goods creates a greater value than the sum of the goods being distributed separately (Amit & Zott, 2001, p. 504).

- There are complementarities between products and services for customers on a vertical or horizontal level. Vertical complementarities are within the company such as after-sales services whereas horizontal complementarities are provided by partner firms and enhance the value of the core product (Amit & Zott, 2001, p. 505).
- There are complementarities between on-line offerings and off-line assets too. A customer that purchases products or services online via e-retail, values after sales services too. Such off-line assets are influencing the decision to purchase a certain product or service. This might include for instance the advantage of returning or exchanging products via a local retailer (Amit & Zott, 2001, p. 505).
- There are other advantages in offering complementary goods. Some goods might not be directly related to the core product but still offer a certain benefit when combined. By offering side products additional value can be generated (Amit & Zott, 2001, p. 505).
- By capitalizing among complementary activities additional value can be created. These activities can include different technologies and services. Combining different technologies might reveal hidden value (Amit & Zott, 2001, p. 505).

Efficiency gains due to information technology impel the discovery of complementarities and by that hidden value. Vice versa, complementarities may also increase the efficiency by offering additional value for the customer (Amit & Zott, 2001, p. 505).

2. Lock-in

Lock-in is a mechanism that prevents the dissatisfaction of customers as well as partners that might switch to competing companies. The value is created by the customer's motivation to repeat transactions and the loyalty of strategic partners in terms of maintaining and improving the alliance (Amit & Zott, 2001, p. 505).

- Lock-in through special loyalty programs should be mentioned first. Loyalty programs try to bond customers and partners with special services or prices. Once a certain trust is formed, customers and partners are more likely to remain loyal (Amit & Zott, 2001, p. 506).
- Furthermore, "..., firms can develop dominant design proprietary standards for business processes, products and services... (Amit & Zott, 2001, p. 506)".
- Trustful relationships might be a way to lock-in too. This could happen through various actions such as special sale or return programs or special payment standards guaranteeing safe money transactions. Once a customer develops trust in a certain product or company the loyalty might be elevated and by that avoiding a switch to a competitor (Amit & Zott, 2001, p. 506).
- Customization of products, services or information might be another way to accelerate lock-in. Once a customer is used to a certain amount of personalization it might inhibit a potential change to a competitor. This also facilitates a more personalised after sales service and by that the loyalty which can be summarized as a positive feedback loop (Amit & Zott, 2001, p. 506).
- Positive network externalities are positive consumption externalities. The utility of a single user increases by the amount of others consuming that same good. This is also known as a direct network externality. There are also indirect network externalities that emerge through a positive feedback loop of some kind such as a hardware-software paradigm (Amit & Zott, 2001, p. 507).

The efficiency features as well as the complementary products might influence the attitude of the customer. If customers are attracted by either the efficiency features or the complementary products or maybe both, they might stick to a company which therefore enhances lock-in (Amit & Zott, 2001, p. 507).

3. Novelty

Since value creation is more commonly used with innovation and by that in a more common form including new products and services, new methods of production and many more, there is a need to mention the way value is generated. Business models are responsible for the structure of transaction which therefore generates value. By innovating business models, new value can be generated (Amit & Zott, 2001, p. 508).

- Due to the development of virtual markets the transactional content gains importance. The complexity of the Internet opens up endless possibilities of innovation. Companies can easily incorporate new products and services into their portfolio (Amit & Zott, 2001, p. 508).
- Another important point is the first-mover advantage. Innovative business models brought to market first are not just creating value but also developing brand awareness and reputation for a company (Amit & Zott, 2001, p. 508).

Novelty and lock-in are connected in two different ways. Novelty can attract or retain customers which more or less influences lock-in and being first to market increases the potential of creating value before others do. The complementarities influence the novelty as well, since the main innovation is mostly defined by complementary products and by that might lead to better decisions and potential efficiency gains (Amit & Zott, 2001, p. 508f).

4. Efficiency

Efficiency, how it is used in this thesis means to imitate rather than innovate. That implies a need to do things similar to competing companies but doing them in a more efficient way (Zott & Amit, 2007, p. 185f). A way to analyze the performance of such efficiency-based

business models lies in concentrating on the transaction costs. Minimising the transaction costs and simultaneously maximising the performance yields in efficiency gains. The key of minimising the transaction costs could be in having transactions aligned with appropriate governance structures with extensive transaction design. There are however many ways of reducing transaction costs. This could be achieved through diminishing uncertainty, complexity or information asymmetry. By reducing coordination costs and transaction risk the transaction costs could be kept within certain limits (Zott & Amit, 2007, p. 185f).

There is however a conflict with the traditional way of how management is done. Since managers show a tendency to resist experiments with business models because of the possibility of threatening their on-going value to the company some barriers occur that will be discussed in later chapters (Chesbrough, 2010, p. 358).

As seen in the last paragraphs there are many reasons requiring a change or even a new innovative business model. History shows that an impressive innovation is just as good as the business model used to create value out of it. Offering a captivating value proposition linked with a business system that satisfies the customer with an appropriate quality at a reasonable price might be the only way to achieve sustainable profit (Teece, 2010, p. 186). Nevertheless, changing the model is not necessary in every case since minor changes or small improvements in the manufacturing process won't call for innovating the business model. Here minor adjustment by lowering the price and extending the market will be sufficient to capture value. The more radical an innovation is the more effort is necessary to create value and therefore changes within the business model might be inevitable (Teece, 2010, p. 186).

2.3 A business model framework (BMF)

This chapter concentrates on the architecture of business models. It will prove that each business model is factorable and will describe a taxonomy that dismantles the business model in order to make it comparable and will be based on the work of (Morris, Schindehutte, & Allen, 2005, p. 729).

Following six types of business models are described in order to allow a classification based on (Chesbrough, 2007).

2.3.1 One standard framework for characterizing a business model

There are certain options to characterize a business model. The framework used in this thesis consists of three increasingly specific levels of decision-making. This attempt is necessary, since the framework should be applicable to firms in general with different business models. These levels are foundation, proprietary and rules. Together with these three specific levels, six basic decision levels are considered expanding each of the levels (Morris, Schindehutte, & Allen, 2005, p. 729).

- Within the foundation level there is a need to make general decisions about the business itself (Morris, Schindehutte, & Allen, 2005, p. 729). This definition needs to be substantiated and checked in order to be internally consistent. Due to the more or less superficial definition a comparison with other ventures is prohibited. Furthermore, an identification of a uniform model might be useless and therefore not of interest in this level (Morris, Schindehutte, & Allen, 2005, p. 729).
- The proprietary level accelerates the development of unique combinations within the decision variables in order to gain competitive advantages (Morris, Schindehutte, & Allen, 2005, p. 729). By transforming the framework into a customizable tool different settings can be checked. This might help the organization to concentrate on how value can be generated in each of the six decision areas. Nevertheless, the usefulness is limited which necessitates the third level (Morris, Schindehutte, & Allen, 2005, p. 729).
- At the centre of the third level rules help designing guiding principles and disciplines to business operations that have been elaborated within the first two levels (Morris, Schindehutte, & Allen, 2005, p. 729).

As mentioned earlier there are six basic decision areas considered within this framework. The four interlocking elements discussed within chapter 2.1 are incorporated into six questions. The next table is illustrating the six questions with the associated interlocking element.

Table 2. Six basic decision areas and the linked interlocking elements

Question	Interlocking element
1. How will the firm create value?	→ Customer value proposition
2. For whom will the firm create value?	→ Customer value proposition
3. What is the firm's internal source of advantage?	→ Key processes
4. How will the firm position itself in the market-place?	→ Key processes
5. How will the firm make money	→ Profit formula
6. What are the entrepreneur's time, scope and size ambitions?	→ Key resources

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

Combining the three specific and six basic decisions in one model is the next logical step, although each of the questions has to be simplified as illustrated in the next table.

Table 3. Simplifying the questions

Question	Simplified question
1. How will the firm create value?	→ Factors related to offering
2. For whom will the firm create value?	→ Market factors
3. What is the firm's internal source of advantage?	→ Internal capability factors
4. How will the firm position itself in the market-place?	→ Competitive strategy factors
5. How will the firm make money	→ Economic factors
6. What are the entrepreneur's time, scope and size ambitions?	→ Growth/exit factors

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 731)

Now that the questions are transformed to a certain business area, it is essential to define what subject areas are associated to each question. The next table focuses on these fields.

Table 4. Examples for each of the six questions that underlie a business model

	Predefined set of options
Factors related to offering	<ul style="list-style-type: none"> ➔ Primarily products / primarily services / heavy mix ➔ Standardized / some customization / high customization ➔ Broad line / medium breadth / narrow line ➔ Deep lines / medium depth / shallow lines ➔ Access to product / product itself / product bundled with other firm's product ➔ Internal manufacturing or service delivery / outsourcing / licensing / reselling / value added reselling ➔ Direct distribution / indirect distribution (single or multi channel)
Market factors	<ul style="list-style-type: none"> ➔ Type of organization (B2B, B2C or both) ➔ Local / regional / national / international ➔ Where is the customer located in the value chain; upstream supplier / downstream supplier / government / institutional / wholesaler / retailer / service provider / final consumer ➔ Broad or general market / multiple segment / niche market ➔ Transactional / relational
Internal capability factors	<ul style="list-style-type: none"> ➔ Production / operating system ➔ Selling / marketing ➔ Information management / mining / packaging ➔ Technology / R&D / creative or innovative capability / intellectual ➔ Financial transactions / arbitrage ➔ Supply chain management ➔ Networking / resource leveraging
Competitive strategy factors	<ul style="list-style-type: none"> ➔ Image of operational excellence / consistency / dependability / speed ➔ Product or service quality / selection / features / availability ➔ Innovation leadership

	<ul style="list-style-type: none"> ➔ Low cost / efficiency ➔ Intimate customer relationship / experience
Economic factors	<ul style="list-style-type: none"> ➔ Pricing and revenue sources: fixed / mixed / flexible ➔ Operating leverage: high / medium / low ➔ Volumes: high / medium / low ➔ Margins: high / medium / low
Growth/exit factors	<ul style="list-style-type: none"> ➔ Subsistence model ➔ Income model ➔ Growth model ➔ Speculative model

Source: Morris, Schindehutte, & Allen, 2005, (p. 730)

Now all the information is incorporated into one model that characterizes a business model. The next table illustrates this model.

Table 5. Standard framework for characterizing a business model

	Foundation level	Proprietary level	Rules
Factors related to offering	Processes the value offering of a firm and the nature of the product/service mix.	Within the proprietary level the objective lies in finding and applying unique approaches to at least one of the components defined in the foundation level.	After having defined certain characteristics and goals in the previous two levels, it is time to define a basic set of operating rules. These rules need to be modified depending on the foundation and proprietary level.
Market factors	Deals with the type and scope of the market in which the firm operates and therefore competes.		
Internal capability factors	Deals with the skills and attributes that can be summarized as the core competences that might surpass the competitors.		
Competitive strategy factors	Focuses on how the organization intends to achieve an advantage over competitors. Due to a variety of analyses, points of difference must be identified that can be maintained.		
Economic factors	This partially provides an insight into the way profits are generated and should list up associated sub-components.		
Growth/exit factors	Different types of ventures vary in many ways. Examples are subsistence (survive and meet basic financial obligations), income (stable and on-going income stream), growth and speculation (demonstrate venture potential before selling out) models.		

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 731)

After the theoretical design of one business model taxonomy it is necessary to apply it to an example out of the digital music industry in order to prove its usability. Because of that, Apple's iTunes was chosen and applied to the model as illustrated in the next table.

Table 6. Business taxonomy using iTunes as an example

	Foundation level	Proprietary level	Rules
Factors related to offering	<ul style="list-style-type: none"> • Selling product with service, mixed • Standardized offering • Broad line • Internal manufacturing or service delivery / value added reselling (apps and music) 	<ul style="list-style-type: none"> • Interdependency, one won't work without the other • Keep it simple • Don't get too complex • Keep the value within the company 	<ul style="list-style-type: none"> • Products and services should not get too complex • Products should not get too expensive
Market factors	<ul style="list-style-type: none"> • International B2B and B2C • Broad or general market • Customer is at the end of the value chain 	<ul style="list-style-type: none"> • Managed the evolution from a national to an international selling company • Offering products for people listening to music and watching TV • iTunes is a plug and play software and the iPod a plug and play device 	<ul style="list-style-type: none"> • Staying up-to-date at all times
Internal capability factors	<ul style="list-style-type: none"> • Production and operating system • Selling and marketing • Technology, R&D 	<ul style="list-style-type: none"> • iTunes is easy to use and to understand • Since the iPod won't work without iTunes -> very good selling and marketing position • Core competences of Ap- 	<ul style="list-style-type: none"> • At least four new products are launched every year.

	and creative innovation capability	ple are: technology, R&D and innovation	
Competitive strategy factors	<ul style="list-style-type: none"> • Product and service quality as well as features • Innovation leadership • Experience 	<ul style="list-style-type: none"> • Apple satisfies customers through product and service quality and it's features • Stands out with a unique innovation performance • Long experience since 1976 	<ul style="list-style-type: none"> • Continue selling stylish products with a high quality and good functionality
Economic factors	<ul style="list-style-type: none"> • Pricing and revenue sources: fixed • Operating leverage: medium • Volumes: high • Margins: high 	<ul style="list-style-type: none"> • Relatively fixed pricing (special student program) • Since it's in the market for some time just medium operating leverage • Sells millions of products • High-price-segment 	<ul style="list-style-type: none"> • Maintain the prices of one single in the iTunes shop lower than \$1.29
Growth/exit factors	<ul style="list-style-type: none"> • Growth model 	<ul style="list-style-type: none"> • Constant growth of value through constant investment 	<ul style="list-style-type: none"> • Constant rate of market growth

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 731)

Business models evolve out of a very basic level of foundation to a more detailed and extensive proprietary level and will end in the articulation of rules that guide operations and ongoing growth (Morris, Schindehutte, & Allen, 2005, p. 733).

The next chapter classifies different types of business models in relation to their development levels.

2.3.2 Business model framework - a classification into six types

The business model framework is a model that classifies possible business models into six types. By using the BMF companies can easily evaluate where their current business model is ranked and develop future steps to advance it (Chesbrough, 2007, p. 13).

- Type 1 is referring to an undifferentiated business model. Most companies just do their business without articulating a specific business model. Companies operating on Type 1 business models more or less just compete on price and availability which implies that the amount of customers is limited (Chesbrough, 2007, p. 13). Companies capitalising on Type 1 business models are selling commodities. Within a historically grown structure no change might be necessary to deliver the value to the customer. Examples might be restaurants, bars and many more (Chesbrough, 2007, p. 13).
- Type 2 is implying some differentiation in the business model. Within this type the first steps towards targeting customers more specifically are done. That offers the potential to serve the products in more specified and by that less swamped market segments (Chesbrough, 2007, p. 14). A reason for Type 2 business models might be a lack of key resources that are necessary to preserve a differentiated position. Examples might be companies with so called ‘one-hit wonders’ that are not succeeding with successful products (Chesbrough, 2007, p. 14).
- Type 3 is referring to companies that develop a segmented business model. The advantage of this type is that the company is able to compete in different market segments at the same time, which increases the own value (Chesbrough, 2007, p. 14). This leads to a higher profitability and the ability to invest in future products and technology in order to overcome the one-hit wonder syndrome. One major draw-back is that these business models are assailable to technology and market shifts (Chesbrough, 2007, p. 14).
- Type 4 is concentrating on business models that include an external awareness. Companies are now looking further beyond the edge and by that open up for external ideas and technologies (Chesbrough, 2007, p. 14). This enables the company to acquire external ideas and technologies through relationships with outsiders such as suppliers or

other companies. By using external know-how money can be saved, the time to market can be reduced and the risk of a new product or process can be shared (Chesbrough, 2007, p. 14).

- Type 5 relates to companies that integrate their innovation process in the business model. Now the business model integrates in a way that it plays a key role within the company, which is sort of the initial point for business model experimenting (Chesbrough, 2007, p. 14f). Significant resources are invested to get an understanding of the purchase patterns of the customer to analyze unmet needs or find opportunities in the market. A special focus is also set on the supply chain in order to progress new ideas or simply reduce costs. First experiments with alternative distribution channels or potential business models are conducted in order to improve the value generation (Chesbrough, 2007, p. 14f).

- Within Type 6 business models the key suppliers are becoming business partners and by that sharing both the technological and business risk. Type 6 business models are more open, adjustable and flexible than the other types (Chesbrough, 2007, p. 15). Experimenting with one or two other business models is an essential characteristic. Several forms of experimenting with business models can be conceivable:
 - “...utilizing corporate venture capital to explore alternative business models...
 - ...utilizing spin-offs and joint ventures to commercialise ideas outside the current business model...
 - ...create internal incubators to cultivate promising ideas... (Chesbrough, 2007, p. 15).”

By generating a platform that integrates the business model throughout a value chain other companies can be attracted to invest their resources. Therefore no additional investment from the platform maker is necessary but still the value increases (Chesbrough, 2007, p. 15).

Once the appropriate type is identified improvement can be achieved by looking at the attributes of the next type of the framework offering guidelines for potential advancement. At any of the stages discussed in this sub-chapter, companies need to keep up with the competition by sustaining and innovating their business models. The gathered information leads to studying this question more in depth in the next chapter (Chesbrough, 2007, p. 15).

2.4 Opportunities and barriers

Companies invest inconceivable amounts of money in exploring new ideas and technologies. Technology itself has no value until it is commercialized through a business model. Somehow the companies have little if any ability to innovate the value creating business model. Since the same technology could yield different returns by using different business models, it is advisable to reflect on the current one (Chesbrough, 2010, p. 354).

This chapter discusses the opportunities and barriers linked to business model innovation. The three following subchapters discuss three points essential in the consideration of alternative business models.

2.4.1 Experimentation

There are some principles and parameters for effective experimentation mostly applied while innovating products and processes, equally applicable with business models. One major principle is the accuracy of the experiment, which implicates that it needs to bear upon a representative market and the attached conditions (Chesbrough, 2010, p. 360).

“Trying out an alternative business model on real customers paying real money in real economic transactions provides the highest fidelity (Chesbrough, 2010, p. 360).” When experimenting or testing there are certain parameters to be considered:

- The cost of conducting the test
- The time required to obtain feedback
- The amount of information learned from the test

There are two possible negative outcomes of the testing, namely failure and mistake. Where failure can lead to useful learning, mistakes happen when experiments are poorly designed and hence do not lead to any learning at all. So designing the experiments accurately and by that providing a high accuracy can lead to intensive learning (Chesbrough, 2010, p. 360). The costs and the required time to elaborate the information gathered should not exceed a certain level in order to learn from failures and by that conduct new experiments until a suitable business model is found (Chesbrough, 2010, p. 360).

2.4.2 Effectuation

Effectuation is quite the opposite of causation. The advantages of effectuation are diverse. It is not about studying information that already exists (Chesbrough, 2010, p. 360f). New business models call for new data to be generated because the existing might be insufficient, hence not useful. Ambitious opportunities mostly lack data necessary to justify any actions regarding the business model. New data is just generated through extensive testing (Chesbrough, 2010, p. 360f).

Mapping tools can help by offering a perspective for both the current and the potential business model (Chesbrough, 2010, p. 361). Managers can make assumptions on possible implications of conducting changes within the business model. Furthermore, mapping tools can assist the management with communicating new models to others (Chesbrough, 2010, p. 361).

2.4.3 Organizational leadership

Another crucial principle is leading change in an organization (Chesbrough, 2010, p. 361). Innovating business models requires intensive testing. This also includes testing actions between operations, engineering, marketing, sales and finance, which might lead to conflicts within these functions (Chesbrough, 2010, p. 361). New business models often seem unfamiliar and by that could influence the experimentation negatively. General managers of specific businesses could be another driving force for business model innovation because of their substantial authority. Since general managers rotate from one position to another within two to three years there is a lack of time to do experiments and by that creating a new business model (Chesbrough, 2010, p. 361). Companies should have strategic agility in order to innovate their business model. This calls for leadership meta-skills such as monitoring the environment, maintaining unity within the leadership team and most importantly the ability to provide resources to promote business model innovation (Chesbrough, 2010, p. 361).

The additional processes of finding new ways to create value through business models need to be realised while concentrating on the well-being of the current businesses. This could be summarised as the organisational problem because of the co-existence of two business models. The shifting from one business model to the other is, needless to say, another delicate moment with both consequences for the involved managers as well as the business model

itself. That implicates that jobs are at risk, which therefore could inhibit managers from being innovative in that sense (Chesbrough, 2010, p. 361).

In order to advance business model experimentation, effective governance is a requirement since the information gathered through experimenting must result in actions. The last points prove that business model innovation is linked with some barriers that can be overcome and might lead to groundbreaking opportunities (Chesbrough, 2010, p. 362).

3 Digital music industry

Based on the business model definition, the following part emphasises on the music industry. The importance of business model innovation due to the development within the past decades is also shown. Starting with an overview of the development of the digital music industry this chapter discusses the traditional music distribution model and alternative distribution strategies and finishes with the legal foundation of intellectual property rights.

3.1 The music industry - A historical overview

All started during the famous ‘patent wars’ during the late 1890s and early 1900s. In that time the phonograph and gramophone were invented and various patent holders took their cases to court in order to gain monopoly control. This suppressed the early development of the recording industry in the United States (Bishop, 2005, p. 444). Up to now, such radical innovations often control the associated market. This implicated that in order to build up a recording industry, patent ownership was necessary. After a turbulent decade of patent war the three main players concluded on sharing the ownership. The resulting oligopoly consisted of Edison, Columbia and Victor. By merging to some sort of joint venture the first step towards the current music industry was made (Bishop, 2005, p. 444).

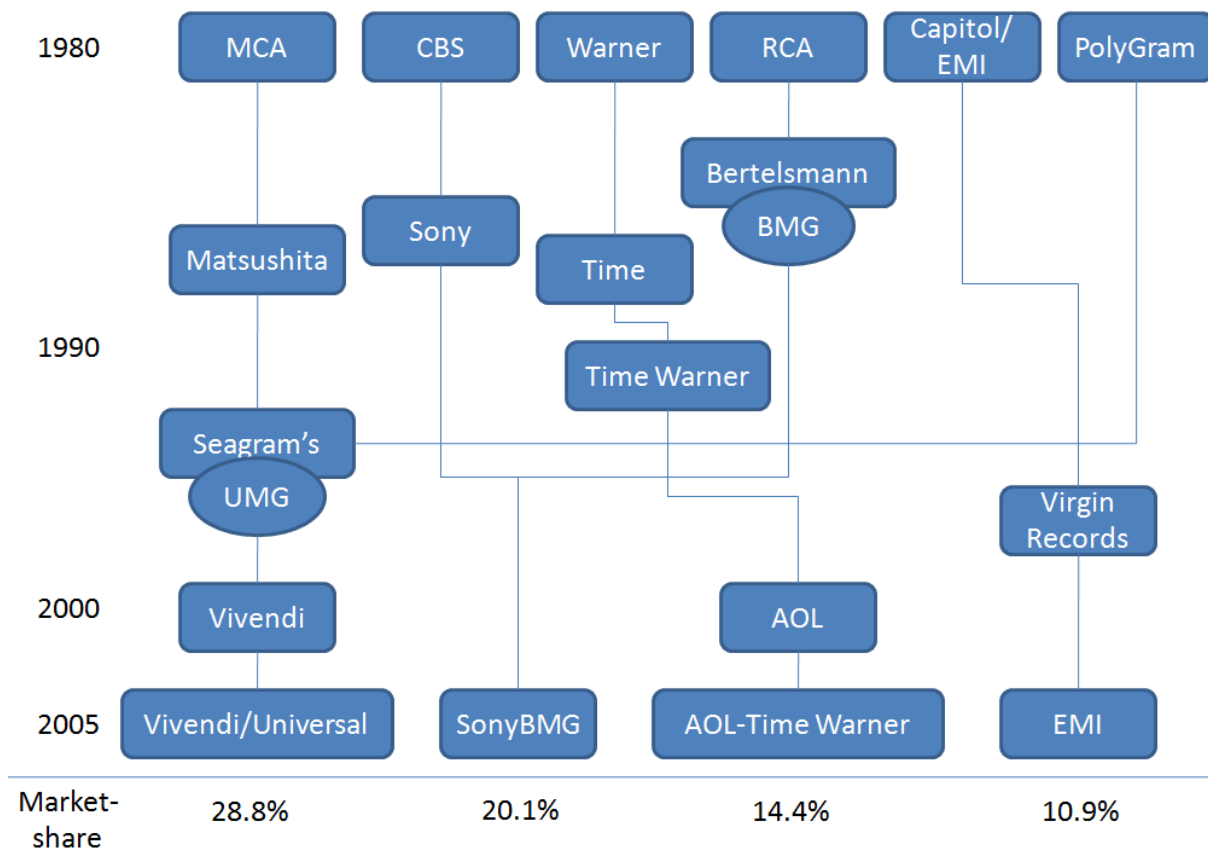
More than one hundred years later patents haven’t lost importance but yielded to copyrights hence the relevance of ownership has not changed. Needless to say the growth of the music industry is entangled with both monopoly building and technological advancement. Now the monopoly struggles seem somehow ridiculous compared to the problems linked with the technological development within the last decades (Bishop, 2005, p. 444).

One thing has significantly changed over time. The shared ownership and the linked common goal developed into a separate desire to capture the ‘lion’s share’ of the worlds music markets by each of the competing companies. All the development of the past hundred years did lead to four major labels (Vivendi/Universal, Sony BMG, AOL-Time Warner and EMI) through a series of acquisitions and mergers (Bishop, 2005, p. 444f).

In 1952 the Record Industry Association of America (RIAA) was founded with the mission to promote strong intellectual property protection and prevent illegal music distribution (Rupp & Estier, 2003, p. 2).

The next figure illustrates the industry consolidation throughout the last 25 years.

Figure 5. Industry Consolidation 1980-2005 and market share



Source: own creation based on Bishop, 2005, (p. 448) and Prodhan, 2008

The ‘big four’ account for nearly 75 per cent of the whole music industry with Vivendi/Universal being the world’s largest collection of record labels with a market share of close to 29 per cent (Prodhan, 2008).

As stated earlier, technological advancement does influence the way in which music is being consumed. The digital technology is not just changing the way music sounds it is changing everything from the point of creation till it is consumed (Hughes & Lang, 2003, p. 180).

Right now the recording industry is facing dramatically declining CD-DA sales even though the music consumption increased tremendously over the past few years. The music industry is alive and the way music is consumed is changing, enabling the consumer to both legally and illegally consume music (Kusek & Leonhard, 2005, p. 193f).

„Music is an information good, and specifically, an experience good, whose true value to a customer is revealed only after its consumption (Gopal, Bhattacharjee, & Sanders, 2004, p. 3).” This attempt might be one reason for declining CD-DA sales. Ordering a CD-DA without having the option to listen to it before and by that decide whether to buy it is a major disadvantage. Some artist managers go as far as saying that CD-DAs have become more a part of the marketing of an artist than an income stream (Smith, 2007, p. 2).

There are however many myths concerning the music industry. First and foremost of these is that the music industry is dying. More music has been consumed within the past years despite declining CD-DA sales. Needless to say, the recording industry is just a minor part of the music industry. Nowadays the music industry is gaining popularity with both legal and illegal digital music distribution (Kusek & Leonhard, 2005, p. 193f).

3.2 The digital music industry

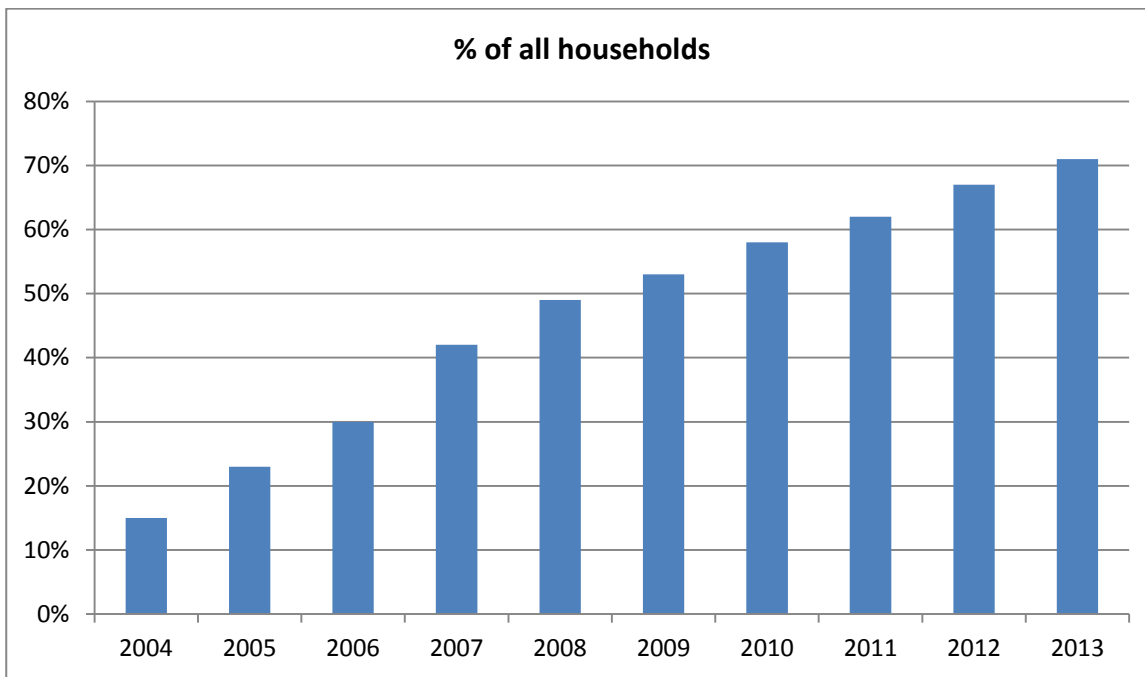
Due to the rise of digitization and the Internet, the music industry has been facing major changes within the last decades evolving into the digital music industry as it is called nowadays (Bockstedt, Kauffman, & Riggins, 2004, p. 1).

In 1994 Fraunhofer ISS released the first software MPEG 1, Audio Layer 3 (mp3) encoder and about one year later the first real-time software MP3 player. By that moment it was clear that this new technology would have the potential of changing the music industry in a way nobody would have imagined. People could now save the music on their computers in the mp3 format and digitally listen to it, making the CD-DA unneeded. This was just the starting point because with computers offering just limited storage space and Internet connection speed of less than 28.8Kbps it took some time for people to realize the importance and the full potential of mp3. In the late 90s due to some improvement of MP3 software as well as in Internet connection speed, the first peer-to-peer music sharing networks evolved. The most

important and successful was Napster with more than 80 million registered users at its peak. This signified the digital music revolution (Collard, 2007, p. 1).

Due to the development of broadband internet connections, digital music distribution was promoted. The next figure shows the broadband penetration within the EU27.

Figure 6. EU27 broadband penetration, historical series and forecast



Source: TERA, 2010, (p. 37)

Starting with 15 per cent in 2004, broadband internet has spread rapidly within the last years and is about to reach more than 70 per cent of all households by the end of 2013. Increasing broadband penetration might also implement broadening the potential market for the digital music industry (TERA, 2010, p. 37).

Within the first years of digital music the retail sales of recorded music dropped dramatically but somehow the popularity of digital music grew. New mobile devices that were able to play digital audio formats were increasing the popularity of digitally-formatted music (Bockstedt, Kauffman, & Riggins, 2004, p. 1f).

Together with a device called iPod and computer software called iTunes, Apple entered the market. Within just one year Apple more than quintupled its customers, starting with 861,000

in July 2003 to 4.9 million in March 2004. Since then the importance of digital music and its strategic necessity became clear and CD-DA sales were decreasing enormously. One thing is clear; the digital music format is here to stay and is increasing its importance by becoming the preferred product choice of many music customers (Bockstedt, Kauffman, & Riggins, 2004, p. 1f).

The next figure illustrates some of the current digital music providers and the linked pricing strategies for both song purchase and subscription services.

Figure 7. Digital music providers



Source: own creation based on Bockstedt, Kauffman, & Riggins, 2004, (p. 40)

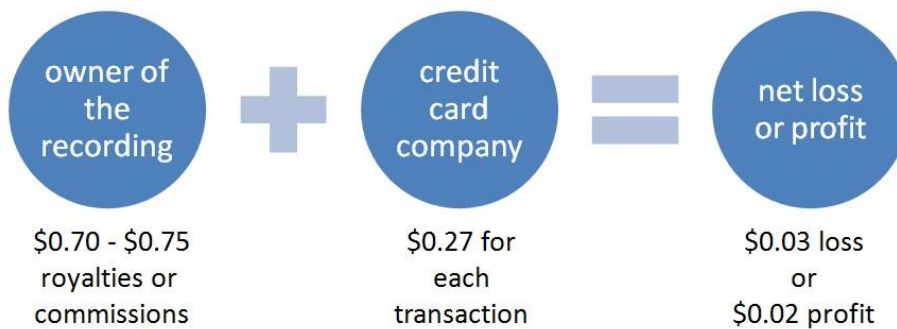
The basic pricing strategies are similar industry wide and vary from about \$0.99 per song to \$9.99 per album. The option of streaming music with a monthly fee is just offered by one provider in our case namely Buy.com and is priced at around \$10/month with limited or unlimited streaming options (Bockstedt, Kauffman, & Riggins, 2004, p. 2f).

There are however differences concerning the quality of music that can be downloaded. Different file formats varying from mp3, for near CD quality to FLAC (Free Lossless Audio Codec), for studio quality can be found at eClassical.com (eClassical).

It might be interesting to analyze the value chain within digital music providers. There are two factors that play an important role when buying digital music online. First, how does the provider get the music and second, how is the customer paying for consuming the music (Bockstedt, Kauffman, & Riggins, 2004, p. 2f).

The next figure shows a typical single priced at \$0.99 and the allocation within the value chain consisting of the owner of the recording and the forms of payment. This example uses credit cards as the form of payment even though there are certain other forms of payment that could be used on this part.

Figure 8. Loss or Profit with \$0.99 singles



Source: own creation based on Bockstedt, Kauffman, & Riggins, 2004, (p. 2f)

With a loss of \$0.03 to a profit of \$0.02, this business seems not very profitable, since even the costs of providing the music are left out in this model (Bockstedt, Kauffman, & Riggins, 2004, p. 3f). There are three possible ways of improving the profitability in this case. The first might be price negotiation with the owner of the recording in order to get better prices. The second might be changing the form of payment in a way that minimizes the cost linked to each transaction. The last but not least favourable is changing the prices of the song which could lead to a reduction of demand and therefore to a reduction of profits (Bockstedt, Kauffman, & Riggins, 2004, p. 5).

There are three pricing strategies applicable on information goods such as digital music. It is versioning, bundling and fixed-fee pricing. The latter has been discussed before with the subscription services. Due to bundling the customer does not necessarily need to buy a fixed album. The customer can select songs he might want to listen to and bundle them to one comparable virtual album priced like an ordinary one. Bundling as a way of personalization is one useful way of generating additional value with digital music providers (Bockstedt, Kauffman, & Riggins, 2004, p. 6f). Different prices linked to different versions are the last pricing strategy. This could be illustrated by BMG Germany that began testing a new pricing model within its physical CD-DA market. Within this model there are three versions, a €9.99 low quality version without any cover art, a €12.99 medium-quality version and a €17.99 high-quality version with different benefits such as bonus tracks and online extras. Versioning like this can be, and already is implemented within the digital music providers (Bockstedt, Kauffman, & Riggins, 2004, p. 6f).

The next chapter will discuss the traditional forms of music distribution based on the value chain underlying it.

3.3 Traditional music distribution – The non-digital way

Historically, musicians were always depending on the support of a record company to foster success. Once the artist signed an exclusive contract, the autonomy was gone and the record labels were acting as monopolies for their artist's content. Royalty fees and retail prices were set depending on the willingness to pay rather than the quality of the music. In the early 60s the prevalent medium for recorded music distribution was the single. The single meant the initial point for mass music consumption. Up till now record labels still release albums but nonetheless singles are the production focus. This development is certainly influenced by the price of one single too (Bockstedt, Kauffman, & Riggins, 2004, p. 3).

Within the mid 60s music distribution with long playing records (LPs) gained importance for the record companies. More dedicative fans could now get additional content such as bonus tracks for slightly higher prices because of the first music bundles. Again the prices were set based on the willingness to pay rather than the quality of music. As a result not every release yielded to profits for the music label or the artist. Because of less successful and popular re-

leases, some albums and singles needed to make up for the losses (Bockstedt, Kauffman, & Riggins, 2004, p. 3f).

Nothing has changed and the digital music industry still follows its consistent pricing mechanisms. After the LP was out-dated, several different media for distributing music were invented. These include tapes, tape cassettes, digital audio tapes (DAT), compact discs (CD-DAs), and mini discs (MDs) (Zhang, 2002, p. 2ff).

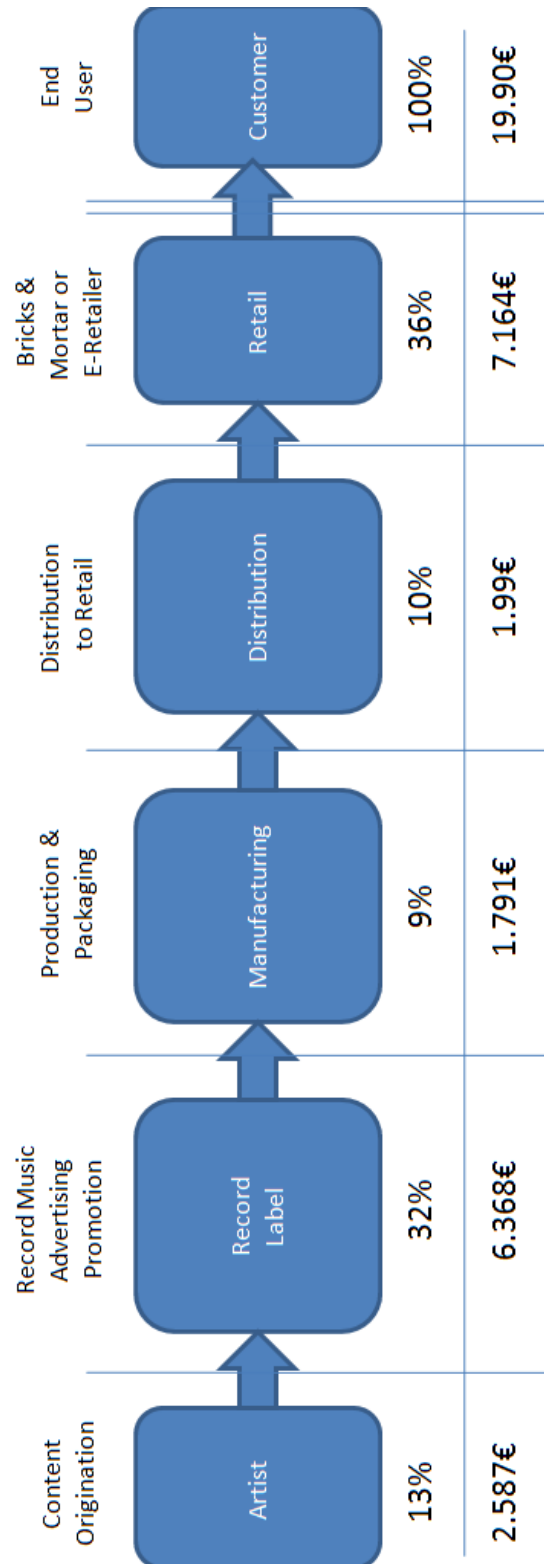
The way music has been distributed just changed marginally within the last decades. Its value chain consists of the following six partials.

1. Content originator, namely the artist
2. Record label, responsible for recording, advertising and promoting the music
3. Manufacturing, creating the media (Tape, DAT, CD-DA, MD)
4. Distribution to retail
5. Retail distribution to customer
6. Customer

All these interacting together represent the value chain of the traditional music distribution (Fischbeck, 2000, p. 4).

The next figure depicts the value chain of traditional music distribution as well as the profits linked to each group.

Figure 9. Traditional Music Distribution Value Chain & Distribution of Profits



Source: own creation based on Fischbeck, 2000, (p. 4)

As illustrated by the last figure the content originator just gets a very small piece of the value generated by selling CD-DAs. Record labels and retail represent the biggest part in this value chain with 32 and 36 per cent together taking up more than two-thirds of the whole value chain (Fischbeck, 2000, p. 4).

Since there are other options to distribute music, the next chapter focuses on alternative distribution strategies.

3.4 Alternative distribution strategies in the digital age

This chapter discusses different strategies for distributing digital music. Therefore the traditional music distribution value chain with the distribution of profits will be used in order to get comparable results. Since some of the information is missing, this part of the thesis is based on assumptions, which rest upon the traditional value chain. The different strategies are based mainly on Premkumar (2003).

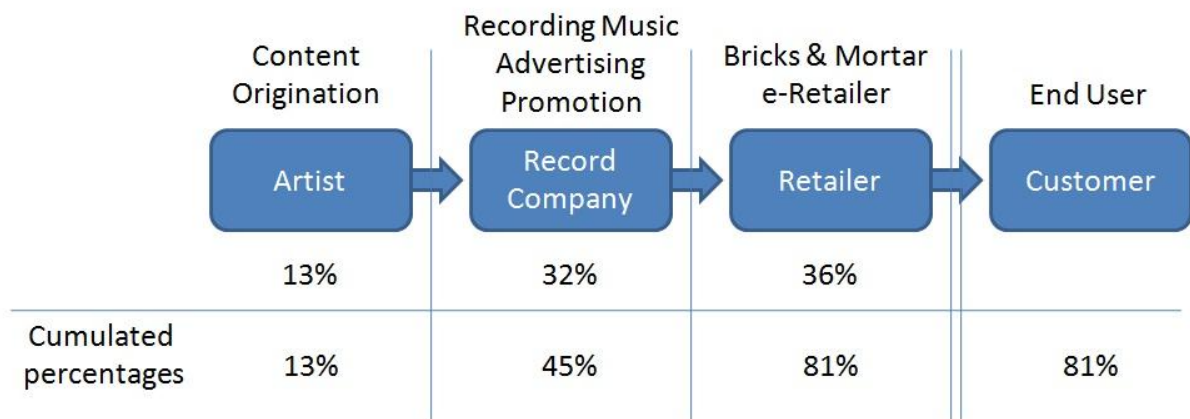
Every statement concerning cost savings and cost saving potential within this and subsequent chapters takes on the assumption, that each reduction within the value chain and the associated cost saving are directly passed onto the customer. By reducing the costs, the price will be reduced by a similar amount. This attempt was chosen in order to get comparable results.

3.4.1 Record company – retailer – customer

This business model might be the first step towards digital distribution since this model is missing aspects of manufacturing and distribution. The music is digitally distributed directly from the record label, where it is produced, to the retailer where it is offered to the customers. Due to this direct distribution copyright protection can be ensured. A potential customer can either purchase an album or create an own CD-DA with the desired songs. Then the CD-DA is packed and delivered as usual or downloaded and stored on the computer (Premkumar, 2003, p. 91f).

The next figure pictures the value chain and the distribution of profits.

Figure 10. Record Company - Retailer - Customer



Source: own creation based on Premkumar, 2003, (p. 91)

Due to the missing manufacturing, distribution and inventory costs, the end user can expect a cost-saving of about 19 per cent to the traditional model. The music could also be downloaded which would again reduce infrastructure and retail costs but in the same way generate costs for servers and high-bandwidth Internet connections in order to assure appropriate download time. Due to the development of the Internet within the last ten years the costs for servers as well as high-bandwidth Internet have fallen sharply and can be disregarded. Nevertheless, there are some drawbacks attached to this strategy: firstly, customers need to invest time to create their own CD-DA; secondly, the potential cost-savings and difference to existing strategies might be low. When considering all the advantages and disadvantages this distribution strategy might be ruled out by more adequate strategies (Premkumar, 2003, p. 91).

Considering previous assumptions, the business model is analyzed based on the business model framework discussed in chapter 2.3, which is illustrated in the next table.

Table 7: Analyzing business model 1 using the business model framework

Business model framework	Business model
How will the firm create value?	→ Selling individually compilable music in the form of Digital music and CD-DAs
For whom will the firm create value?	→ The customer can now download or create a personalised CD-DA
What is the firm's internal source of advantage?	→ Reduction within the value chain and some potential cost-saving
How will the firm position itself in the marketplace?	→ Cheaper music
How will the firm make money	→ Selling both Digital music and CD-DAs
What are the entrepreneur's time, scope and size ambitions?	→ Hardly any growth potential

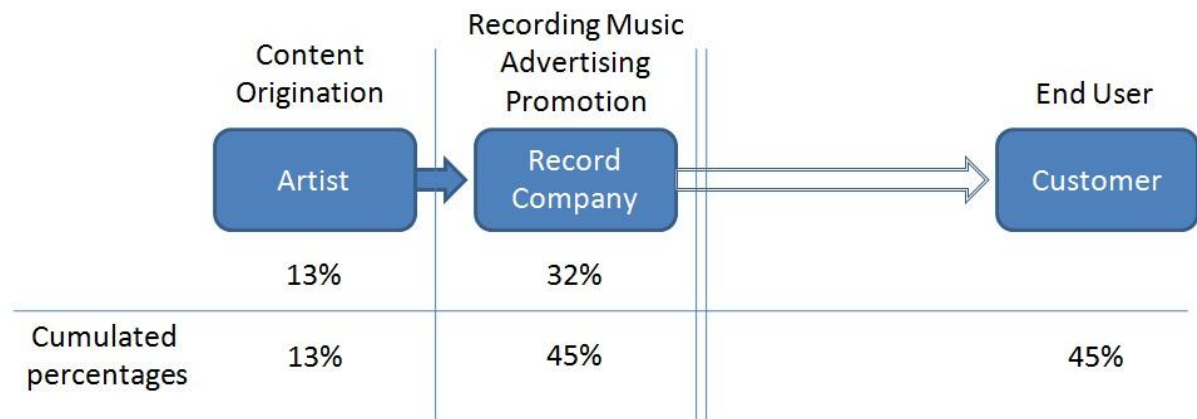
Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

One example for this distribution strategy is Sony BMG. Each user can look up the desired music on their homepage. Once the artist and title are found the user can press the purchase button and is directly forwarded to an e-retailer like Amazon. Now the CD-DA can be ordered or the digital music downloaded directly on the computer (Sony BMG).

3.4.2 Record company – customer

Within this model the music is directly distributed to the customer after it is produced. This could lead to substantial cost-savings since not just the manufacturing and distribution is left out, also the retailer is missing (Premkumar, 2003, p. 92). The next figure shows the value chain and the attached profits.

Figure 11. Record Company - Customer



Source: own creation based on Premkumar, 2003, (p. 91)

The cost-saving in this model can be up to 55% but there are several issues that need to be considered. Due to digital downloading used in this model there are some problems involving copyright violations. Since illegal copying is the major concern of the record companies the implementation might be complicated. There are significant bandwidth requirements to ensure reasonable download time. People without Internet are excluded from this kind of distribution. However, there is not just one single record label providing all the music consumed by the customers. Each customer therefore needs to visit different platforms in order to get the desired music. The customer must be willing to invest time in this searching process, which could lead to confusion and dissatisfaction that might be similar to the past model (Premkumar, 2003, p. 92).

Furthermore, record labels need to maintain a retailing environment not just to serve people without Internet but also to promote new artists and records. That leads to additional costs that are not incorporated in this model and might change the outcome. Finally, the teenage market needs to be mentioned. Teenagers might not complete online purchases, because they either

don't have a credit card or access to other online payment solutions. By that this model will miss out on a very big group of potential customers (Premkumar, 2003, p. 92).

Nevertheless, this distribution strategy has the potential to reduce the overall costs for music. Needless to say some changes are necessary, since excluding groups means renouncing profits. Furthermore, customers are not willing to spend plenty of time searching for music on different platforms.

The next table analyzes this business model using the business model framework discussed in chapter 2.3.

Table 8: Analyzing business model 2 using the business model framework

Business model framework	Business model
How will the firm create value?	➔ Selling individually compile able music
For whom will the firm create value?	➔ The customer can download the desired music
What is the firm's internal source of advantage?	➔ Reduction within the value chain, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	➔ Offering cheap music, just in time without any delay other than bandwidth limitations
How will the firm make money	➔ Selling Digital music
What are the entrepreneur's time, scope and size ambitions?	➔ Some growth potential

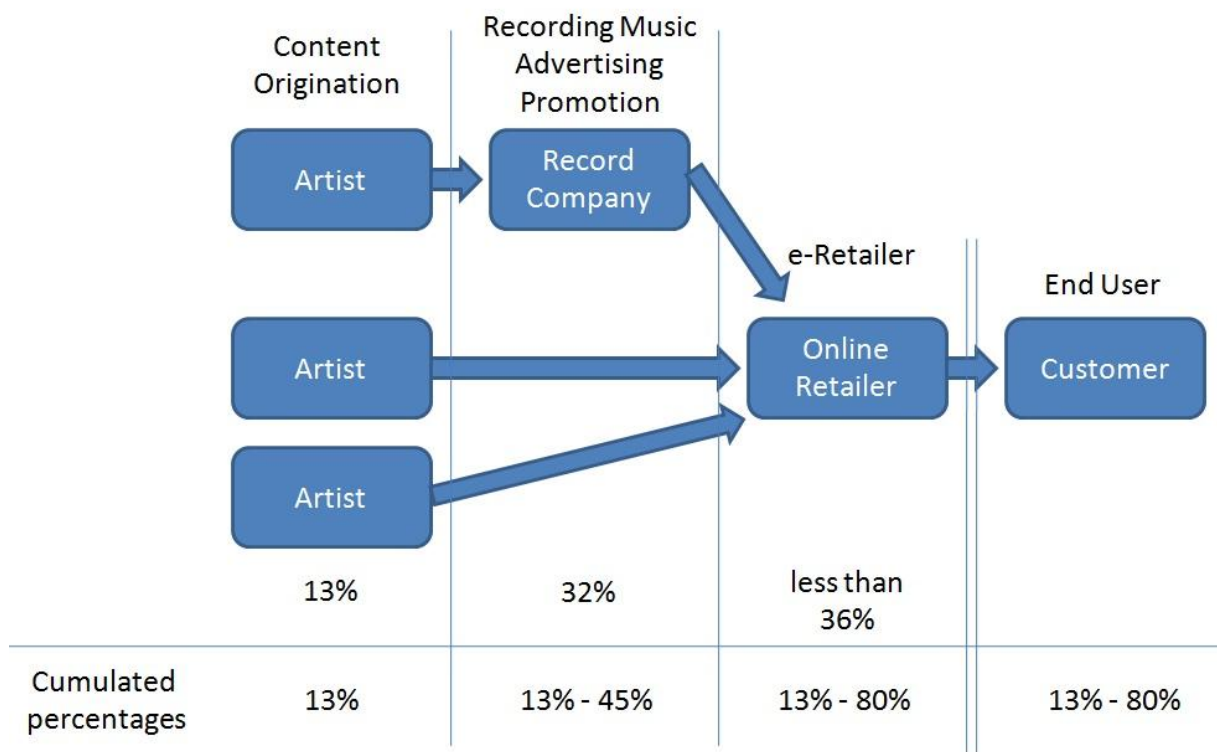
Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

3.4.3 Record company – intermediary – customer

Within this model an intermediary is interconnected in order to eliminate the problem associated with the last model. Now customers just need to visit one platform to get the music they are looking for. The intermediary, which is some sort of online retailer, is collecting the music from record labels or directly from artists, and provides it to the customer in a one-stop shop way. This could be an option for retailers since they can create additional value by providing additional services. These services could reach from suggesting music associated with the one downloaded in the past to unbiased music reviews, community building or email alerts (Premkumar, 2003, p. 92).

The next figure again illustrates the value chain and the profit distribution within this model.

Figure 12. Record Company - Intermediary - Customer



Source: own creation based on Premkumar, 2003, (p. 91)

Since there are many ways for the online retailer to get the music, only assumptions on the money that could be saved within this business model can be made. Again these assumptions

are based on the traditional value chain. Because the artist can opt towards direct or indirect distribution to the retailer, the end user might profit in a broad range from 20 to 87 per cent. Similar to the past models, issues concerning copyright protection may arise. Within this model the music is digitally downloadable via the retailer's online platform. Therefore illegal copying is virtually impossible. Furthermore, because of the download capability there are high bandwidth requirements in order to ensure fast downloading. However, due to constant improvement of the Internet, as well as constant decline in prices of server equipment necessary to run such download platforms, this might be a workable business model (Premkumar, 2003, p. 92).

The next table analyzes this business model using the business model framework discussed in chapter 2.3.

Table 9: Analyzing business model 3 using the business model framework

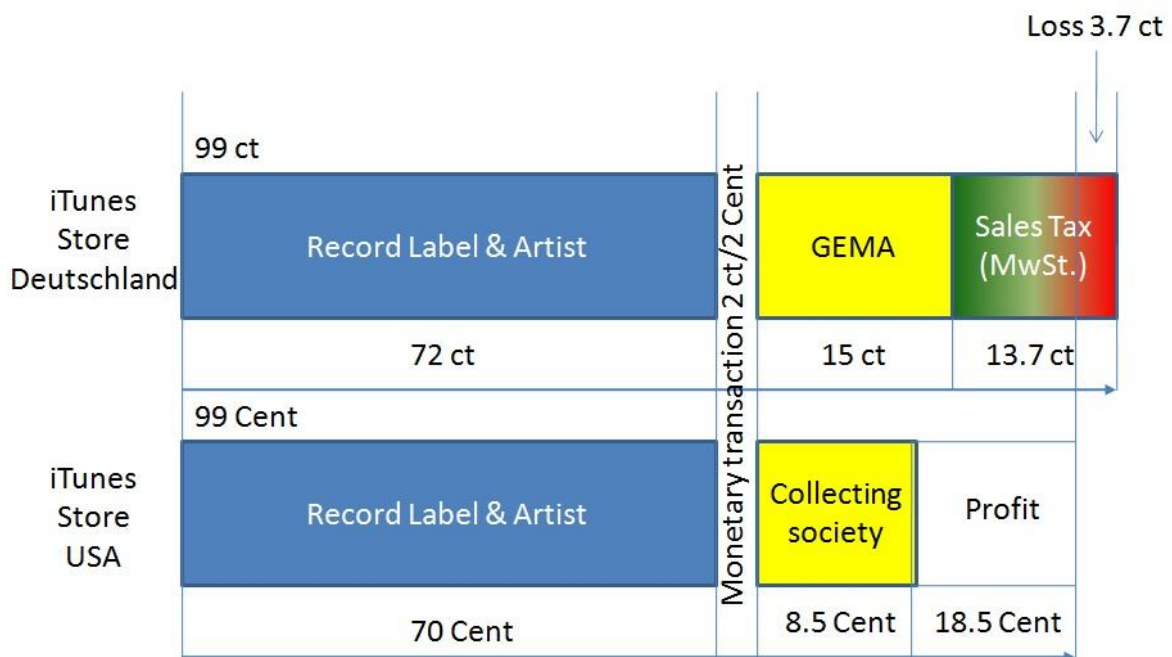
Business model framework	Business model
How will the firm create value?	→ Selling individually compilable music
For whom will the firm create value?	→ The customer can download the desired music
What is the firm's internal source of advantage?	→ Reduction within the value chain, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	→ Offering cheap music, just in time without any delay other than bandwidth limitations
How will the firm make money	→ Selling Digital music
What are the entrepreneur's time, scope and size ambitions?	→ Some growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

An example for this distribution strategy is iTunes. iTunes is representing the intermediary within the value chain. There are several crucial steps necessary to get the music sold on iTunes. Needless to say the iTunes application needs to be installed and an account is necessary to get started. All the music that is uploaded to the iTunes Store is evaluated by a moderator, who decides whether the music is appropriate or not. Then a software called iTunes Producer is necessary to upload the music on the iTunes server (Erdman & Stanek, p. 13ff).

The next figure is illustrating the components of a 99 ct/99 Cent iTunes Song in 2006 with the resulting profit or loss.

Figure 13. The split of a 99 ct/99 Cent Song in iTunes in 2006¹



Source: own creation based on Erdman & Stanek, (p. 18)

As illustrated within Figure 10, there are some country specific differences concerning the taxes and collecting societies leading to profits or losses. Since there are no exact numbers of how much Apple earns with each single sold, there won't be any further information within this thesis.

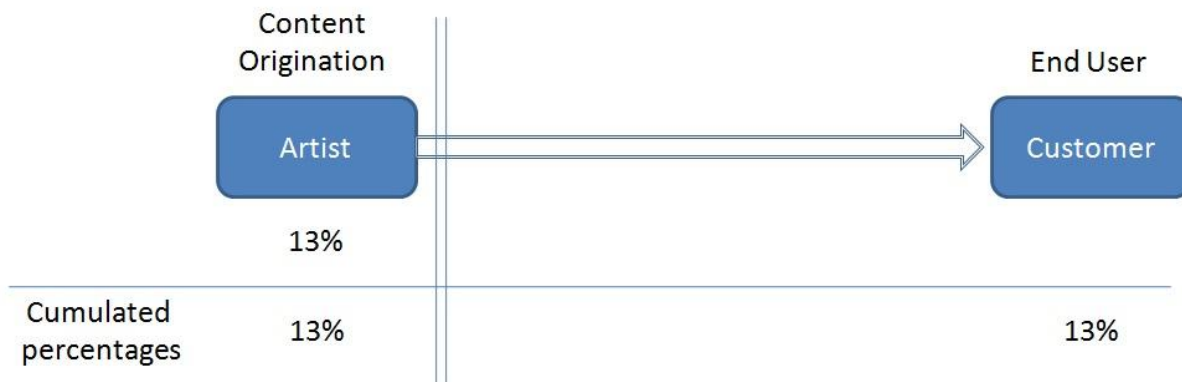
¹ „GEMA represents in Germany the copyrights of more than 64,000 members (composers, lyricists, and music publishers), as well as over two million copyright holders all over the world (GEMA).“

3.4.4 Artist – customer

This might be the most feasible option and most efficient supply chain, since it offers immense cost-savings and productivity gains. There are, however, some draw-backs attached to this model. First, the artist needs to maintain his/her website in order to make music downloads available, which generates costs. Second, direct advertisement and promotion needs to be done by the artist himself, which is not possible most of the time and therefore generates further costs, due to the fact that this job needs to be done by specialists (Premkumar, 2003, p. 92).

The next figure illustrates this model.

Figure 14. Artist - Customer



Source: own creation based on Premkumar, 2003, (p. 91)

Offering directly to the customer is the most efficient way as stated earlier. This would lead to cost-savings of close to 87 per cent and by that making music affordable and attractive to the customer. Nevertheless, there might be some difficulties concerning this model. Established artists might not need to promote themselves in a way new artists do. Since there are lots of new artists entering the music market every month, it takes a lot of effort to promote a newcomer. While established artists might have enough money for self-marketing, newcomers will struggle to raise that kind of money, which is a major draw-back of this direct model (Premkumar, 2003, p. 92f).

Another important flaw is the searching process. There are hundreds of thousands of artists in the whole world implying that it needs a tremendous amount of time to search for music. This will be annoying and inefficient and might lead to dissatisfied customers that are going to miss out on using this distribution model. An online platform including all artists using this kind of distribution strategy might help bypass the searching time issue. Generating a platform like this won't be cost-intensive but will increase efficiency and by that the customer satisfaction.

The next table analyzes this business model using the business model framework discussed in chapter 2.3.

Table 10: Analyzing business model 4 using the business model framework

Business model framework	Business model
How will the firm create value?	→ Selling individually compile able music directly from the artist
For whom will the firm create value?	→ The customer can now download the desired music directly from the artist
What is the firm's internal source of advantage?	→ Reduction within the value chain to a minimum of one, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	→ Offering cheap music, just in time without any delay other than bandwidth limitations
How will the firm make money	→ Selling music plus merchandise
What are the entrepreneur's time, scope and size ambitions?	→ Maximum growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

Music publishing services like TuneCore might help artists getting their music sold. An artist can sign online for free without any obligation. In order to get the music sold the artist needs to create a virtual album, single or ringtone using a preset mask. Once the album, single or ringtone is created the stores in which the digital music is going to be distributed need to be selected (TuneCore). TuneCore currently distributes to a variety of stores including iTunes, Zune, Myspace Music and many more. The release page is generated and the information summarized. Once the artist pays for the release the music will be available for sale in most stores within a few days. How much TuneCore charges, is illustrated within the next table (TuneCore).

Table 11. TuneCore - Running Expenses

	Singles	Album
One song (one time charge)	\$9.99	\$0.99
Per store per album (one time charge)	\$0.00	\$0.99
Maintenance and storage (per year)	\$9.99	\$19.98

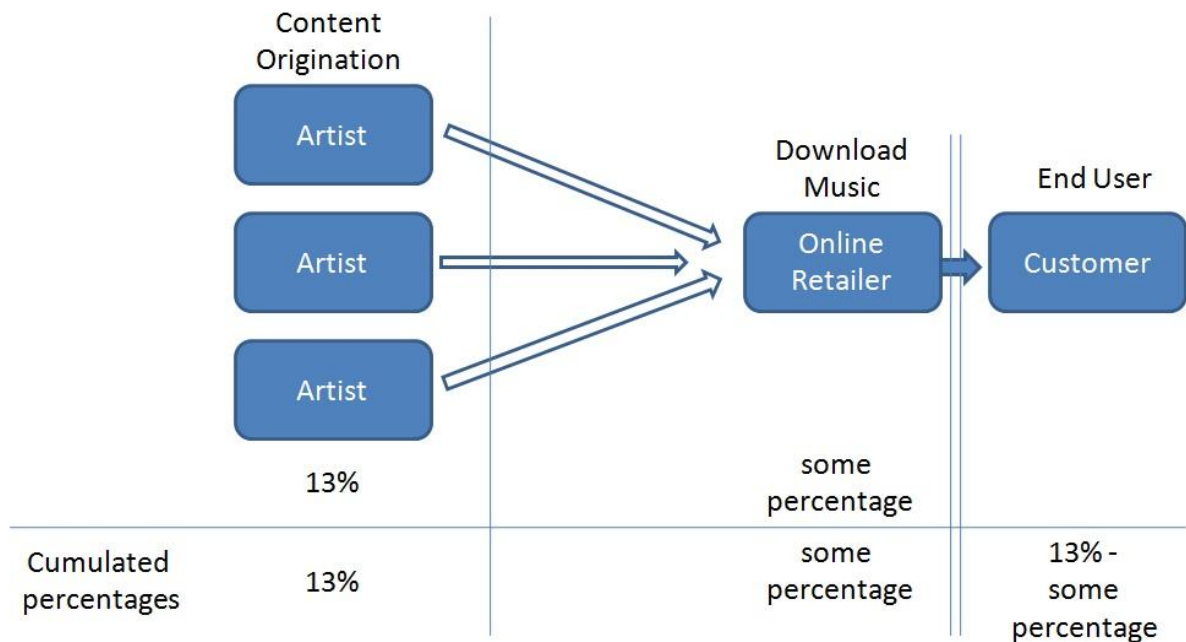
Source: (TuneCore)

3.4.5 Artist – intermediary – customer

Within this model the record labels are cut out again and the intermediary aggregates the music directly from the artists on one platform. This will minimize the time needed to get the desired music and simultaneously satisfy the customer. By using a platform the market reach for artists could be expanded, which would generate additional value (Premkumar, 2003, p. 93).

The next figure illustrates this model.

Figure 15. Artist - Intermediary - Customer



Source: own creation based on Premkumar, 2003, (p. 91)

The cost-savings with this distribution model could still be between 50 and 87 per cent, which might be worth aspiring this model. If the revenue generated through the online retail is too low, promotion is necessary. This will generate costs for both the artist and the retailer, which are going to be passed on directly to the customer. This way of distributing music may have some potential for record labels by evaluating the popularity of new artists through a download count (Premkumar, 2003, p. 93).

There are however some concerns worth mentioning at this point. By renouncing the record labels either the artist or the online retailer need to take over the work of recording and production as well as advertising and promotion. Since the prices of recording and production equipment have been dropping within the last years, only advertising and promotion could be a reason complicating the implementation.

The next table analyzes this business model using the business model framework discussed in chapter 2.3.

Table 12: Analyzing business model 5 using the business model framework

Business model framework	Business model
How will the firm create value?	→ Selling individually compilable music from different artists
For whom will the firm create value?	→ The customer can now download the desired music not just from one artist
What is the firm's internal source of advantage?	→ Reduction within the value chain, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	→ Offering cheap music from different artists just in time without any delay other than bandwidth limitations
How will the firm make money	→ Selling Digital music and maybe merchandise
What are the entrepreneur's time, scope and size ambitions?	→ High growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

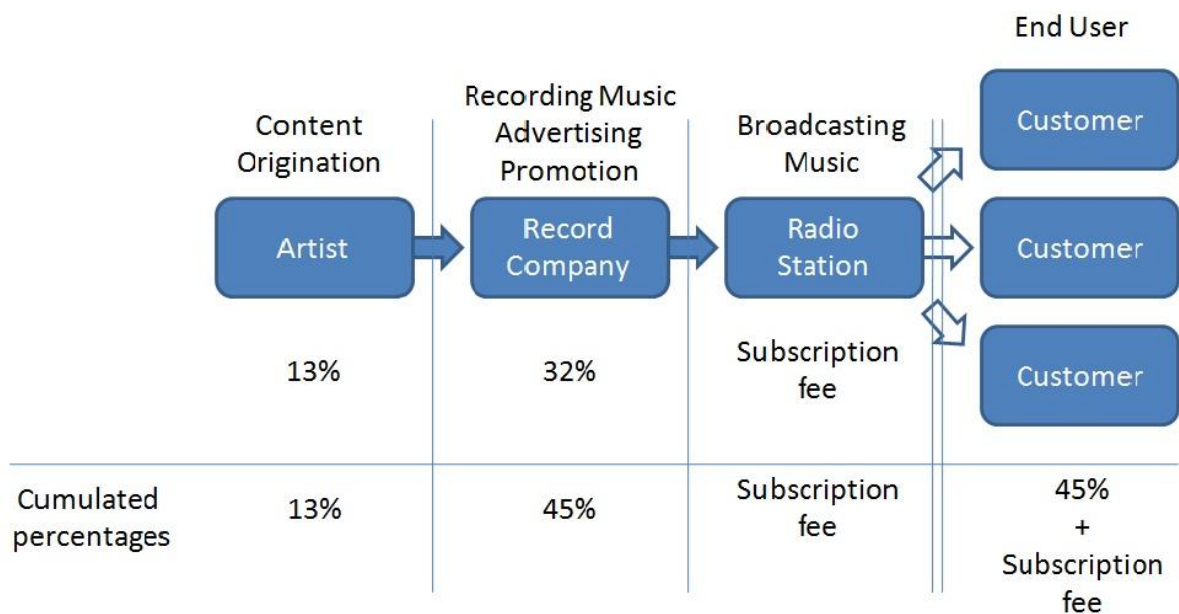
One example for this distribution strategy is New Artist Direct. New Artist Direct is helping independent artists getting their music sold on their own terms without any record label at all. By supplying independent releases to major retailers such as Best Buy, Musicland and many more, the independent artist can sell his/her music and is paid monthly for any CD-DA or digital music he/she has sold (New Artist Direct).

3.4.6 Audio-on-demand

This distribution strategy provides the option of preselecting music to a customized playlist. Now the customer can listen to music whenever he chooses to. This is made possible by Internet music streams. A simple subscription with an attached fee could offer access to the platform for a limited time. The time varies with different subscription types and different fees. Customers are able to change their playlist whenever they want to within the subscription period and by that are not locked in with a few songs like in the ownership model. Similar to conventional radio stations some part of the subscription fees could be subsidized by advertising provided that they are willing to listen to advertising. Said online radio stations could be run by either, record companies, retailers, intermediaries or conventional radio stations. For the record companies this would make sense since they could broaden their target group and by that create additional value (Premkumar, 2003, p. 93).

The next figure illustrates this model.

Figure 16. Audio-on-demand



Source: own creation based on Premkumar, 2003, (p. 91)

Within all the options discussed in this chapter this might not be the cheapest way of distributing music but it appears to be the most useful approach. The record companies could not

complain about copyright violation because the music is not downloaded but streamed without locally storing it. Customers can now listen to music before buying it, which also creates additional value for them. Nevertheless, some points need to be addressed before implementing such a distribution strategy. Conventional radio stations are a useful tool to promote music for the record companies. Another issue is that public radio stations are already playing music for free. One major point might be that customers can consume the desired music whenever and due to mobile devices with Internet capability wherever they want to (Premkumar, 2003, p. 93).

Such subscription business models exist already offering limited access to music for a subscription fee. However there is one big disadvantage compared to P2P networks. Since these sites don't have all the agreements necessary to legally offer all the music available in the market today, one subscription alone will not enable the user to get every music he/she demands. That implies, subscribing on different sites in order to get the music desired which might be cost-intensive and undesirable (Dubosson-Torbay, Pigneur, & Usunier, 2004, p. 173).

There are some parallels to the television industry where customers can choose between free broadcasting and fee based broadcasting. Cable television and pay-per-view television do offer similar approaches to this attempt and are worth mentioning at this point (Premkumar, 2003, p. 93).

The next table analyzes this business model using the business model framework discussed in chapter 2.3.

Table 13: Analyzing business model 6 using the business model framework

Business model framework	Business model
How will the firm create value?	→ Advertisement and maybe subsequent acquisitions
For whom will the firm create value?	→ The customer listens to music broadcasted on demand.
What is the firm's internal source of advantage?	→ Earning money with advertisement and by promoting

	the artists in order to sell music afterwards
How will the firm position itself in the marketplace?	→ ‘free to listen’ Digital music in order to subsequently lift demand
How will the firm make money	→ Offering ‘free to listen’ Digital music
What are the entrepreneur’s time, scope and size ambitions?	→ Moderate growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

One example for this distribution strategy is YouTube, except one does not have to pay for the music that is consumed because of advertisement. With YouTube, every Internet user can search for the desired song and listen to it whenever he/she feels like. Only a broadband internet connection is required in order to gain access to YouTube. Due to Smartphones, the user can stream digital music wherever he/she wants to.

3.5 Comparing the business models

After defining six alternative business models with all their advantages and disadvantages as well as the business model framework, comparing these alternatives shall characterize the differences. Using the same business model framework used with every alternative in particular, each business model is abbreviated with BM and its number. The numbers on the left side represent the following questions with a predefined answer. The next table will list these questions.

Table 14: Business model framework – The Questions

Nr.	Question	Predefined answer
1	How will the firm create value?	By selling digital music
2	For whom will the firm create value?	The customer can download digital music
3	What is the firm's internal source of advantage?	Cost-saving potential which can vary from 1 for hardly any to 5 for great cost-saving potential
4	How will the firm position itself in the marketplace?	Selling cheap, affordable digital music
5	How will the firm make money?	Selling digital music
6	What are the entrepreneur's time, scope and size ambitions?	Growth potential which can vary from 1 for hardly any to 5 for great growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

Based on the predefined structure described in Table 15 the six alternative business models are checked using the business model framework discussed within chapter 2.3 in the upcoming table. The tick within Table 16 indicates whether the predefined answers in Table 15 are applicable with the particular business model. Some business models offer attributes in addition to the predefined answers and will be attached within the table. Two questions are answered using numbers on a scale of one to five. Question three is referring to the cost-saving potential, where one stands for almost no cost-saving potential at all, and five for great cost-saving potential. Question six deals with the growth potential, where one stands for hardly any growth potential, and five for great growth potential.

Table 15: Business model framework using the six alternative business models

BMF	Record company - re-tailer - customer	Record company - customer	Record company - intermediary - customer	Artist - customer	Artist - intermediary - customer	Audio-on-demand
1	✓ + CD-DA	✓	✓	✓	✓	Advertisement + subsequent acquisition
2	✓ or create CD-DA	✓	✓	✓	✓	Listen on demand
3	1	3	3-4	5	4-5	3
4	✓	✓	✓	✓	✓	Free-to-listen
5	✓ + CD-DA	✓	✓	✓	✓	Advertisement in order to subsequently lift demand
6	1	3	3	5	4-5	3

Source: own creation

Similarities between the business models can be observed. Nevertheless, there are some differences concerning the internal capability factors in question three. The reduction of cost and

the associated reduction of the value chain yield to different results. Also question six concerning the potential growth shows differences. Since business model six distinguishes itself from the others in nearly all of the questions within this business model framework, it might not be comparable. As discussed earlier, each alternative has its advantages and disadvantages. Some of the ideas are addressed in chapter five which focuses on business model innovation in the digital music industry and discusses three alternatives using the information gathered within this chapter.

4 Intellectual property rights (IPR)

Changes within the business model for selling digital goods linked to physical media to a model where no physical media is necessary lead to the need to protect the digital intellectual property rights of a copyright holder (Liu, Safavi-Naini, & Sheppard, 2003, p. 1). Digital Rights Management (DRM) is a system to ensure the protection of high-value digital assets. This also includes the extensive control of both the usage and the distribution of those assets. In order to protect commercial digital intellectual property from any illegal usage such as piracy, a system that prevents unauthorized users from getting access to or abusing digital content is needed (Liu, Safavi-Naini, & Sheppard, 2003, p. 1). It is important that the DRM system is capable of managing usage rights for different kinds of digital content such as music files, video streaming and software. In addition to that, DRM systems also need to manage usage rights across different platforms such as personal computers (PCs), personal digital assistants (PDAs) and mobile phones as well as different operating systems such as Windows, Linux, MacOS, etc... (Liu, Safavi-Naini, & Sheppard, 2003, p. 1).

4.1 DRM - A system overview

DRM is based on digital licenses where the consumer buys a license instead of the digital content itself. This license now grants certain rights to the customer but also specifies certain usage rules. These usage rules can be defined individually and may include an expiration date, restriction of transfer to other devices, copy permissions, among others. The combination of usage rules can boost certain business models such as rental or subscription, try-before-buy, pay-per-use and many others discussed in this master thesis (Liu, Safavi-Naini, & Sheppard, 2003, p. 1).

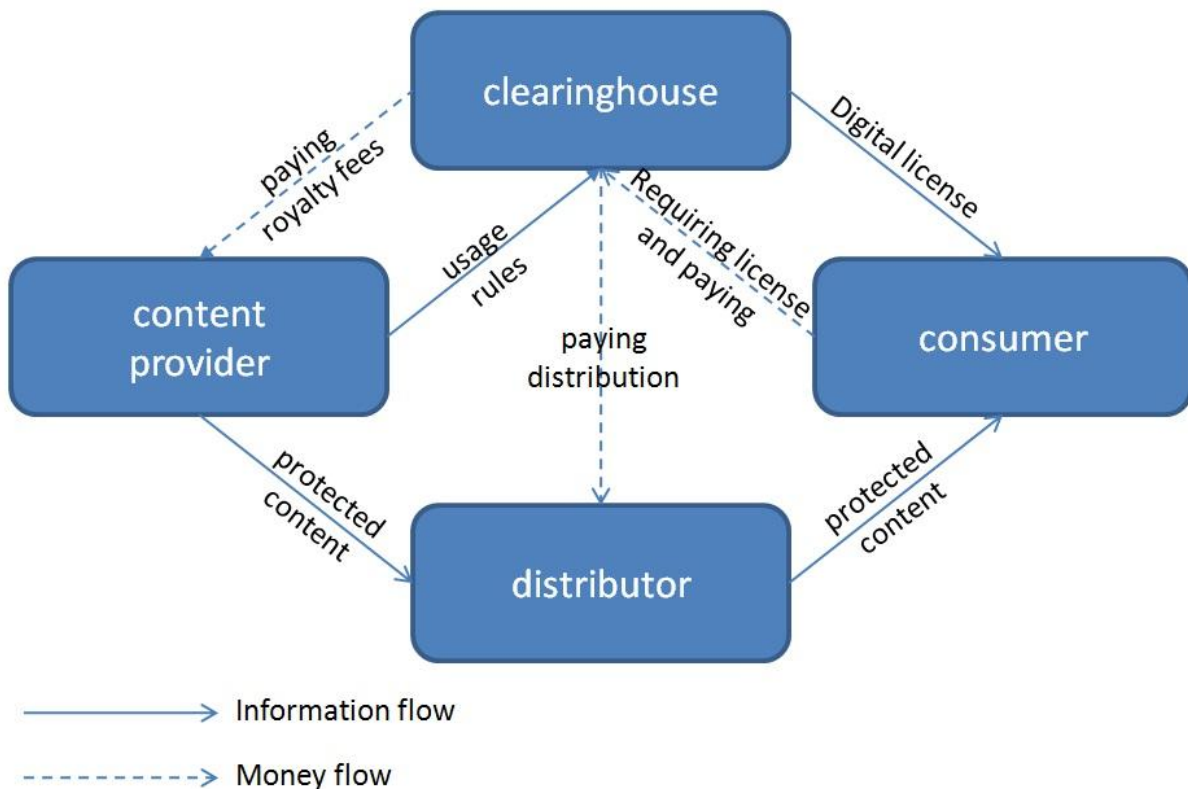
By using a DRM based licensing system the form of distribution is circumstantial and can reach from a client/server system and digital audio/video broadcasting to the conventional CD-DA (Liu, Safavi-Naini, & Sheppard, 2003, p. 1). The digital content can now be distributed among the users. Without a license the content is useless. By using such digital licensing, content providers are increasing their control and specify the extent of use (Liu, Safavi-Naini, & Sheppard, 2003, p. 1).

The next chapter describes the common components of a DRM system and how it works.

4.2 A typical DRM model

Although there are differences with each DRM process, the essential basis of each DRM system stays the same and is summarized in the next figure (Liu, Safavi-Naini, & Sheppard, 2003, p. 2).

Figure 17. The common components in DRM system



Source: own creation based on Liu, Safavi-Naini, & Sheppard, 2003,(p. 2)

The content provider, which is the content originator or a record label in our case holds the digital rights of the content and has an interest in protecting it from illegal usage (Liu, Safavi-Naini, & Sheppard, 2003, p. 2). Since the digital content needs to get to the customers, certain distribution channels such as an online shop, web retailer or just a normal retailer are incorporated into the distributor. The distributor receives the digital content from the content provider and transfers it to the customer when demanded. Once the customer has downloaded the digital content, the clearinghouse comes in place. Since the digital content is useless without any license the clearinghouse transfers the license to the customers. Furthermore, all financial

transactions from the customer to the distributor and the content provider are handled by the clearinghouse (Liu, Safavi-Naini, & Sheppard, 2003, p. 2).

4.3 Potential application in the digital music industry

The music industry is facing a battle against piracy and online file sharing. DRM has been a useful tool in the past to prevent illegal use of digital content. Now it is necessary to focus on the music industry by implementing useful DRM systems (Petrick, 2004, p. 4).

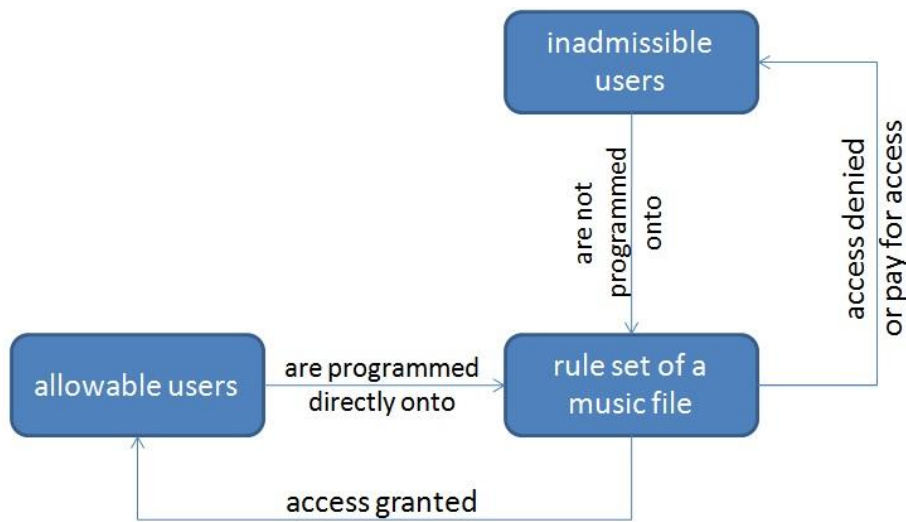
There are three potential methods how DRM can be implemented into the digital music industry (Petrick, 2004, p. 8). All of them are going to be discussed in the upcoming three paragraphs.

4.3.1 The “code-only” method

The first method is characterized by computer codes and certain authorized users would be directly programmed into the rule set. The rule set is controlling who has or has not got the permission to access a digital content. Whether a user is charged when accessing a digital file, depends on the code underlying the user. If a consumer is paying a monthly fee for free access to the whole digital content available on a certain homepage, then the code underlying this customer is programmed in a way that he is not charged in addition to the subscription fee (Petrick, 2004, p. 8). A software example for this kind of implementation was Apple’s iTunes. After charging the customer for downloading a song or an album, the software allows the user to make a certain number of copies to download it on some devices. Every potential action can be limited as Apple sees fit. Nevertheless, the degree of control is just a fraction of the potential of computer code facilitated control (Petrick, 2004, p. 8).

The next figure illustrates this method graphically.

Figure 18. The "code-only" method



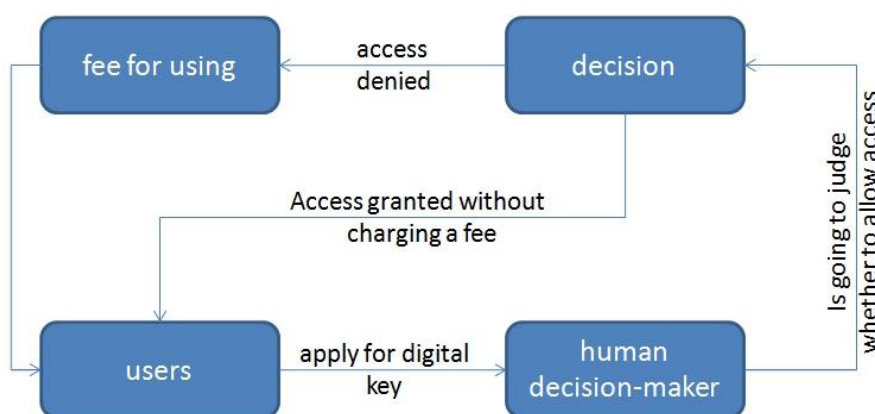
Source: own creation based on Petrick, 2004, (p. 8)

4.3.2 The "key access" method

The second method of using DRM in the digital music industry is through the use of key access. With this method an external, human decision-maker is necessary that more or less acts like a gatekeeper. Users must apply for digital keys in order to get access to certain digital data. The person in charge would then decide whether to grant the access or to charge for the particular use requested (Petrick, 2004, p. 8).

The next figure illustrates this method graphically.

Figure 19. The "key-access" method



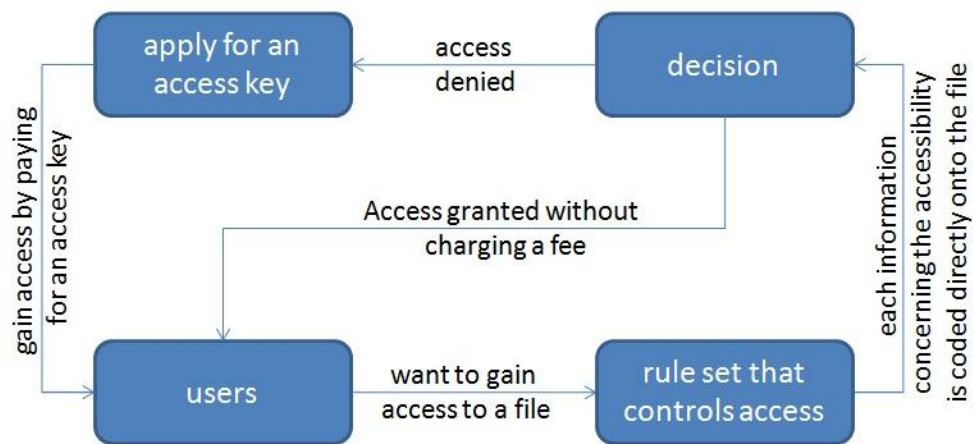
Source: own creation based on Petrick, 2004, (p. 8)

4.3.3 The combined method – “code-plus”

The third method is combining the first two methods, where basic information is directly coded into the file itself. The system automatically decides whether to charge the user for accessing a certain file. When the user is blocked he/she can apply for an access key (Petrick, 2004, p. 8).

Again this is illustrated by the next figure.

Figure 20. Combined method - "code-plus"



Source: own creation based on Petrick, 2004, (p. 8)

When it comes to practicability only the code-only and code-plus options seem worth striving for in the digital music industry. Nevertheless, the idea of implementing DRM into the music industry seems ambitious but definitely feasible (Petrick, 2004, p. 9).

4.4 The legal setting

This sub chapter discusses the legal setting concerning the implementation of DRM in the digital music industry.

4.4.1 Exclusive rights under copyright

The Copyright law with all its country-specific variations provides the legal mechanism for distributing music. This includes certain rights to the author or assigned people. The rights include reproduction, production, distribution and public performances of any kind and are granted as long as 70 years after the demise of the artist. Till then only the artist itself or his inheritors can determine the usage of the music (Petrick, 2004, p. 9).

There are certain definitions concerning reproduction that need to be defined before continuing with the topic. What is commonly known as reproduction is the duplication of a recording through direct or indirect methods (Petrick, 2004, p. 9). However, the definition needs to be advanced with derivative works. Derivative works represent combinations of different existing works. When applying this derivative works to the music industry this might be expanded again. Since derivative works in the music industry are works “...in which the actual sound fixed in the sound recording are rearranged, remixed or otherwise altered in sequence or quality (Petrick, 2004, p. 9).” Hence distribution is the “...sale or other transfer of ownership, or...rental, lease, or lending (Petrick, 2004, p. 9)” of the work itself. Public performances are the last way of distributing music and are defined as an audio transmission commonly known as a webcast (Petrick, 2004, p. 9f).

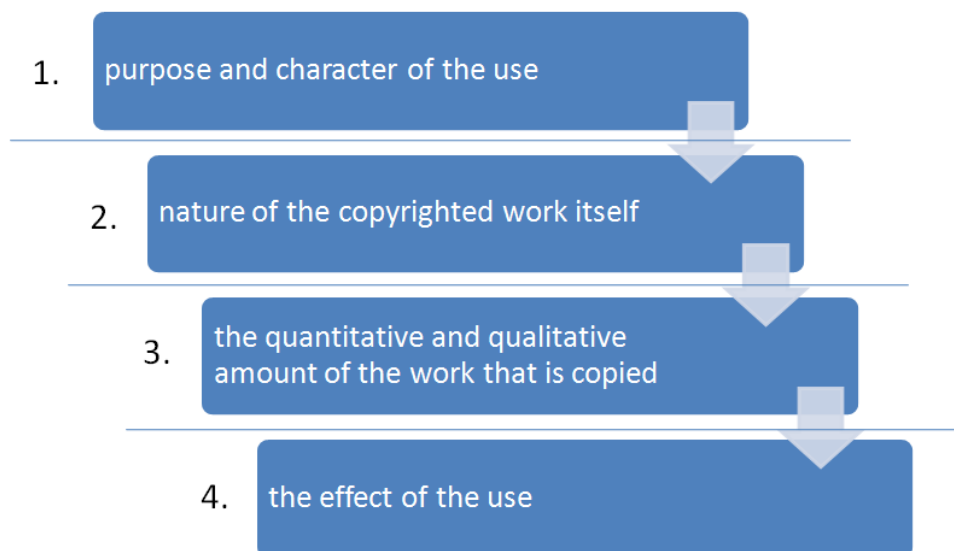
Different copyright infringements exist which are discussed within this paragraph. When speaking about infringement of the right to copy, unauthorized copying of parts or the whole work is meant. This might even be expanded when the new work is considerably similar to the protected work. Infringement of the right to distribute passes when unauthorized and by that illegal distribution of a work is happening. Lastly the infringement of the right to publicly perform a recording occurs when music is broadcasted without paying the indispensable legitimate licensing fees (Petrick, 2004, p. 10).

4.4.2 Exceptions to the exclusive rights under copyright

After having defined the legal setting exceptions to the exclusive rights under copyright need to be examined. There are several exceptions concerning copyright in general but only two that are of interest for musical recordings in this thesis. The first exception is fair use. It is necessary to define what fair use is in order to understand the difficulty with it. “Fair use is decided on a case-by-case basis (Petrick, 2004, p. 11).” In order to define the fairness of use it is indispensable to run a four factor test (Petrick, 2004, p. 10f.).

Each of these four factors is illustrated in the next figure and described afterwards.

Figure 21. The four-factor test



Source: own creation based on Petrick, 2004, (p. 11)

1. The first factor analyzes the purpose and character of the use of a copy. The interest of this work lies in finding out whether the copy is used commercially or for non-profit educational purposes (Petrick, 2004, p. 11).
2. The second factor analyzes the nature of the copyrighted work. That includes defining whether the work is factual, scientific or artistic in nature. This is of great importance when it comes to regimenting fair use (Petrick, 2004, p. 11).

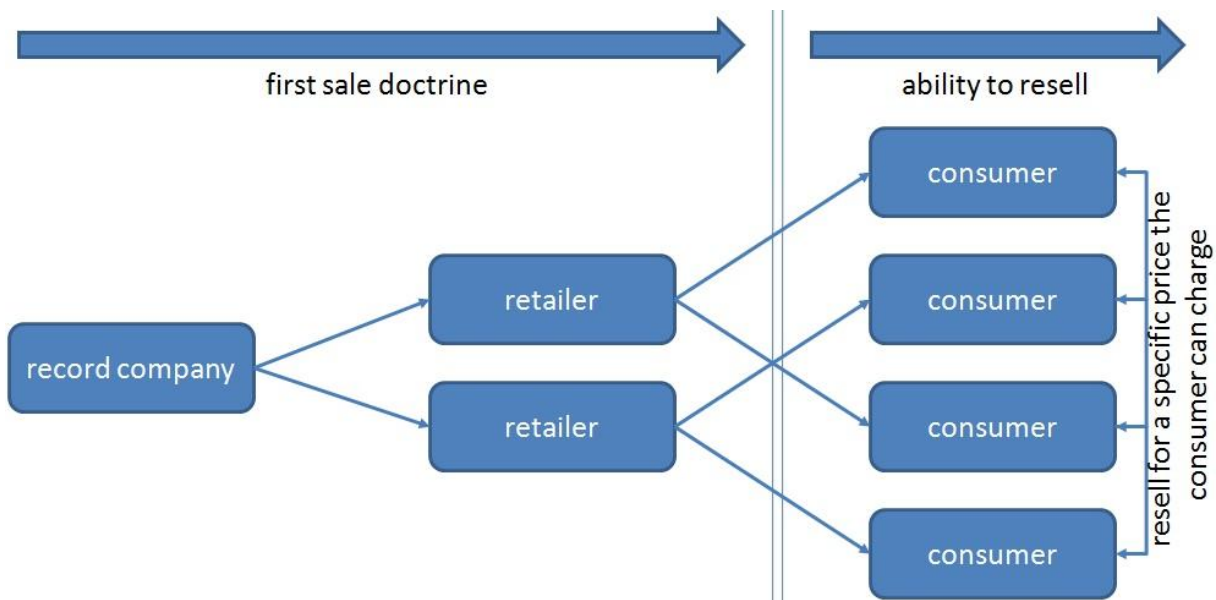
3. The third factor deals with the amount and substance of the portion taken out of a work that is going to be copied. An estimate might be that the less is copied the more likely the copy will be handled as a fair use (Petrick, 2004, p. 11) & (Stanford University Libraries).
4. The fourth factor analyzes the effect triggered by the copy. That might include analyzing if the copyright holder is somehow deprived or if the copy itself is generating new profits (Petrick, 2004, p. 11) & (Stanford University Libraries).

There are many factors influencing fair use and the one with the delicate task to decide whether fair use is applicable has a great deal of freedom determining it (Stanford University Libraries).

The second and last exception that inevitably needs to be mentioned is the first sale doctrine. “Under the copyright statute, copyright holders are entitled to the right of control only over the first public distribution of a particular copy of the work (Petrick, 2004, p. 12).”

The next figure illustrates the copyright statute.

Figure 22. The first sale doctrine



Source: own creation based on Petrick, 2004, (p. 12)

Once the customer has bought the music, the first sale doctrine is overcome, allowing the consumer to charge a certain price and resell the music without copyright infringement (Petrick, 2004, p. 12). What needs to be mentioned is that this just includes music that is stored in physical form (Tape, CD, etc.) also referred to as analogue music. Once music is digitally available or stored on the computer reselling the music is going to get difficult. The music even deleted will be somehow stored on the computer on a temporary storage space called Random Access Memory (RAM) and therefore made available to the person who sold it again. That makes the first sale doctrine somehow not applicable to digital music. One important exception of the exception is that sound recordings may not be rented, leased or lent for commercial purpose without authorization (Petrick, 2004, p. 12).

4.4.3 Structural limitations to the control over copyrighted works

The phenomenon of illegal copying is nothing totally new to the music industry, even though there might be a difference in the scale. Before the CD-DA was developed people made unauthorized tape copies of music and distributed these copies among their friends. Besides that many consumers recorded music from the radio, concerts or any sort of public broadcasting without any authorization. What is new is the scale in which music is being distributed on an illegal basis (Petrick, 2004, p. 13).

5 Business model innovation applied in the digital music industry

After having discussed the crucial elements of business models as well as the digital music industry and the legal foundation of DRM within the last chapters, the focus now lies on creating a business model for the digital music industry to cope with current conditions. This chapter picks up some of the ideas discussed earlier, combines and expands them to a whole new construct. The model is also checked in terms of feasibility, potential advantages as well as disadvantages.

5.1 Business model innovation in the digital music industry

Antecedent chapters formed a theoretical base in order to formulate options to improve the existing business model within the digital music industry. The basis is again the value chain underlying each business. Therefore improving the traditional value chain requires cutting out the non-essential but definitely cost-increasing parameters. Accordingly the component parts of the traditional value chain are summarized in Table 17.

Table 16. Functions and improvement within the traditional value chain

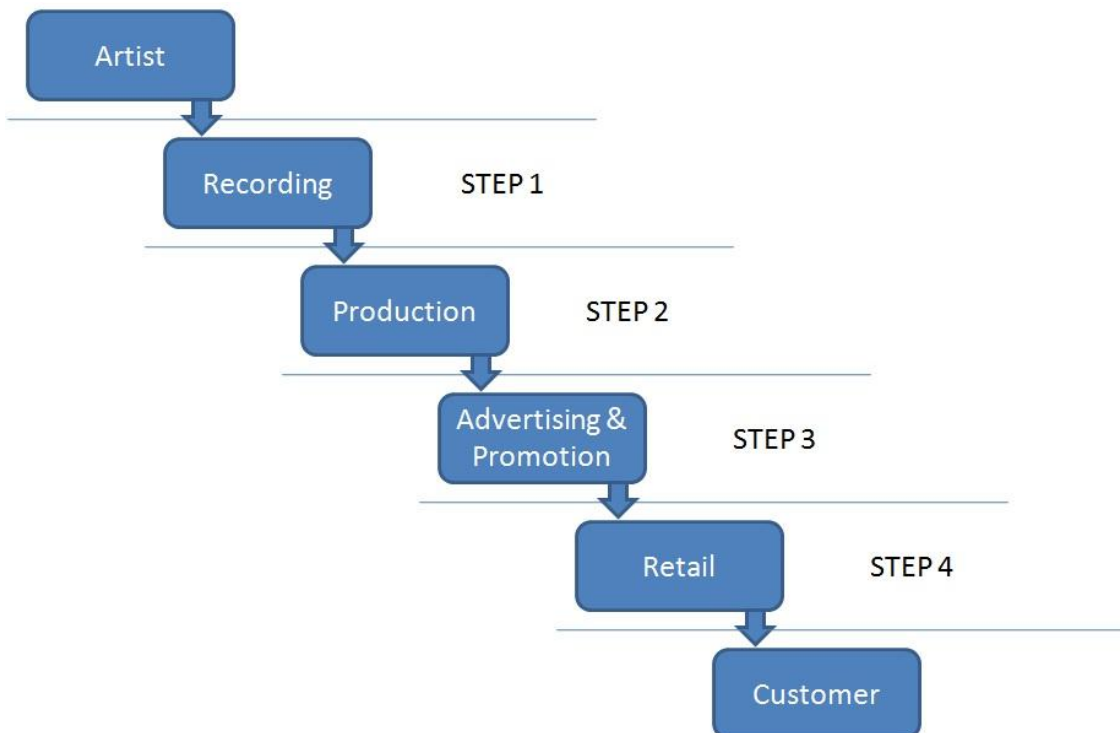
Value chain	Functions	Improvement of the traditional value chain
Artist	Songwriter - content originator ² Compose or arrange music Music performer	Since there won't be music without the artist – unavoidable part of the value chain
Record Label	Recording the music Producing the music Promotion (concert, tour, etc.) Advertising (radio station, TV or meet and greet with the artist)	The necessity of a record label mostly depends on the prominence of one artist – well known artists might have both the money to produce and promote their music without a record label.
Manufacturing	CD-DA manufacturing Packaging	Since CD-DA sales are declining and the demand for CD-DAs is dropping because of Digital music being downloaded, manufacturing as well as distribution might be a negligible part of the value chain.
Distribution	Distributing the CD-DA to Retail	
Retail	Selling the CD-DA or Digital music	A more demand-oriented way of retail is necessary in order to cope with the declining CD-DA sales. Nonetheless artist can option direct distribution through their homepage.
Customer	End user	With a declining willingness to pay – looking for the cheapest and most comfortable way to consume his music.

Source: own creation

² Nevertheless, the artist does not necessarily have to be the songwriter. Often special songwriters sell their songs to an artist who then performs the music.

As illustrated in the last table the artist is the key role within the whole value chain. Without the artist no music will be produced. The question emerging is which other parts of the value chain are necessary. Since music recording and production equipment is becoming less expensive and therefore affordable, the role of the record labels is losing importance. Clearly recording and producing music is not selling music in the first place. Promotion and advertising is unavoidable and necessary not just for unknown artists to get their music sold. It seems that this circumstance makes the record label a more or less undisputable part of the value chain. Manufacturing is negligible since the trend towards Digital music away from the conventional CD-DA seems unstoppable. As mentioned several times, the customer desires music on-demand, whenever and wherever he feels like making CD-DA an outdated medium. Since manufacturing is losing importance the interrelation with distribution will be responsible for making this part of the value chain obsolete too. The trend towards Digital music where music is directly transferred to retail after being produced somehow obviates manufacturing and distribution. Last but not least, the retail still plays an important role within the value chain. Nevertheless, some adoption focusing e-retail is necessary to handle the changing demands. Figure 22 depicts the four essential steps necessary to get from the artist to the customer.

Figure 23: Four steps necessary to get from the artist to the customer



Source: own creation

The four classical steps to get music from the artist to the customer, in particular recording, production, advertising & promotion and retail are indispensable to get the music from the artist to the customer. The role of the artist and the customer is undisputable and therefore beyond discussion. The artist will always create music and the potential customer will always have a demand for it. What is changeable however, are the four steps in between and who performs them.

The next table lists the traditional value chain excluding manufacturing and associate them with the four inevitable steps described by Figure 22. Each table window marked with two plusses (++) indicate a good chance of carrying out this step. Table windows marked with one plus (+) indicate a minor chance of carrying out this step and table windows marked with a minus (-) indicate no chance of doing this step. This attempt is necessary to depict which of the four steps can be performed in the different parts of the value chain. Manufacturing is purposely neglected since it is left out totally within this last chapter.

Table 17: Inevitable steps; Artist - Customer

Inevitable steps	Artist	Record Label	Distribution	Retail	Customer
STEP 1 Recording	++	++	-	-	-
STEP 2 Production	++	++	-	-	-
STEP 3 Advertising & Promotion	+	++	+	++	++
STEP 4 Retail	+	++	++	++	+

Source: own creation

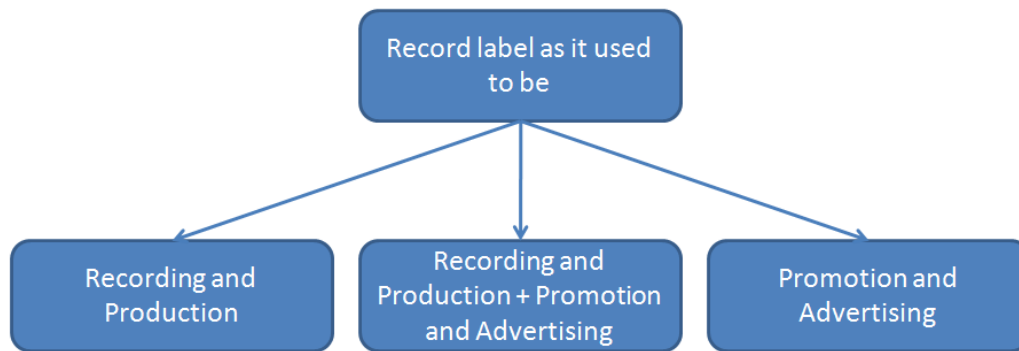
As illustrated by Table 18, the artist is more or less capable to handle all the four steps to get the music to the customer. Nevertheless, this cannot be broken down to every artist. As mentioned earlier professional recording and production equipment is getting cheaper and cheaper but still not every artist can afford to buy a fully equipped recording studio. Furthermore the costs for advertising and promotion are immense and require professional working as well as know-how. Distributing music via an own retail might be possible but still very cost intensive. A solution where all four steps are transcribed by the artist himself might be possible but not worth striving for for every artist. Only well-established artists could afford such a solution and therefore it does not represent a broadly applicable solution for the digital music industry.

Since three out of the four, namely recording, production and advertising & promotion, as described within the last table represent the core businesses of the record companies, changes might be difficult. One possible improvement would be distributing the music via own retail channels. Record companies both have the money as well as the artists to do so. This would throw distribution and retail out of the traditional value chain but could help counteract declining CD-DA sales by providing digital music via e-retail with attractive prices. It might also be useful to adapt the way record labels offer their services. Changing to just offering an all-inclusive contract where the music is being recorded, produced and marketed would make good sense.

Distribution is mentioned for the sake of completeness since their role within the three alternatives is negligible. Retail needs to change towards a more demand oriented online platform where the desired needs of the customers are fulfilled. Last but definitely not least is the customer. His role might not just lie in buying the music. Once the music is bought the customer can also act as a virtual retailer when it comes to peer-to-peer file sharing. Depending on a country's legal situation this may be illegal but still worth to mention. Another important role of the customer is definitely advertising and promotion. By posting songs, videos or links on social networks like Facebook, Twitter, etc. the customer is more or less indirectly promoting music. Word of mouth is still one big driving factor of several industry sectors such as the digital music industry.

As mentioned within this chapter the recording industry needs to focus on new ways to gain back its importance. The next figure illustrates the split of services mentioned before and divides the core business into three independent sub businesses.

Figure 24: Record label - potential services



Source: own creation

Splitting the conventional service into three parts might be a feasible solution to cope with different requirements. Now the artist can decide whether to record and produce, promote and advertise or use the traditional service including both. With this tailored service record companies might meet the different demands of artists and by that become attractive again. Since different services are more or less cost and time intensive a service that just includes a fraction of the traditional service will be cheaper and therefore could reduce the costs for the end-user.

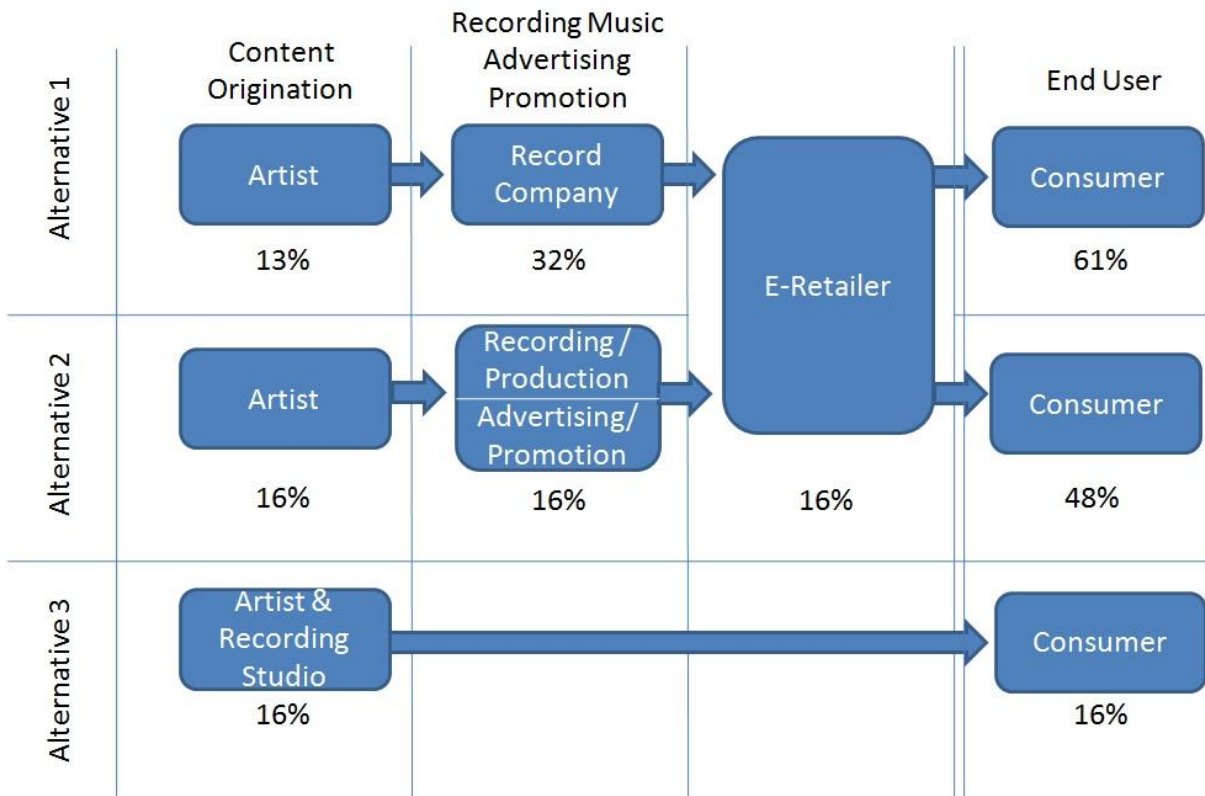
The core business of the distribution part of the value chain is distributing the music recorded and produced by either the artist or the record label. The fact that digital music is consumed online and the music could be digitally transferred from production to online platforms renders the distribution part obsolete. The consumer is just one mouse click away from listening to the desired music, without leaving home, paying for it by using a virtual money transaction. Marginalized groups that need to browse music within wholesale can be more or less neglected.

5.2 Possible improvement of existing business models

The afore-mentioned pre-assumptions furthermore support the formulation of three alternatives. Some similarities to Premkumar's alternative distribution strategies discussed in earlier chapters can be noticed. Nevertheless, the traditional value chain is reduced to a maximum of three parts namely artist, record label and e-retailing. This is necessary to cut out cost drivers

in order to make the value chain more efficient again. The next figure shows those three alternatives.

Figure 25: The alternative distribution strategies



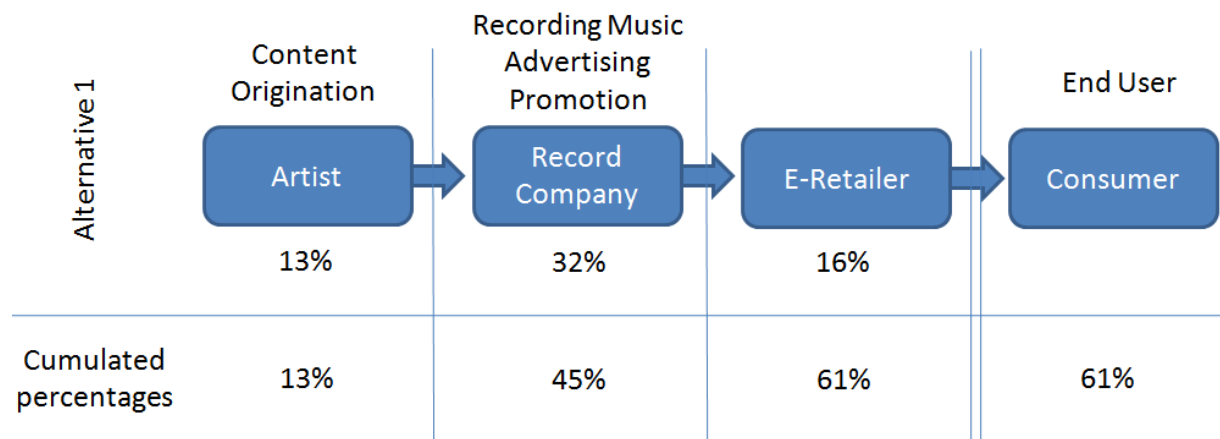
Source: own creation

As constituted in Figure 24 different approaches exist when it comes to reducing the components of the traditional value chain. Each of the alternatives are discussed in detail within the next three sub-chapters.

5.2.1 Alternative 1: Artist –record label - consumer

Alternative 1 is essentially a minor modification of the traditional value chain. Within this reduced form, distribution is left out and retail is converted into more forward-looking e-retail channels. Artists as in the past need a record company to get their music recorded, produced, advertised and promoted.

Figure 26: Alternative 1



Source: own creation

Nevertheless, this model with just minor changes has some advantages but still several disadvantages. While the value chain is shorter the impact on the price of music is still quite small. There have been some changes concerning the retail, which has been transformed into an e-retail, not just in terms of cost-saving but also because of a change in demand. As mentioned leisure oriented consumers prefer to get music on-demand without delay. The demand for online platforms that are easy to use is rising more and more. Due to the development of mobile Internet and high-end devices like Smartphone's the consumer is no longer place bound. Downloading the desired music wherever and whenever is the future of the digital music industry. The conventional CD-DA in the long run, if not in the short run, might disappear from the market since the use of it has changed. CD-DAs are no longer used to listen to music rather than as storage in order to transfer the music onto a computer and synchronize the digital files on several mobile devices.

The next table analyzes and illustrates the business model based on the business model framework discussed in earlier chapters.

Table 18: Analyzing Alternative 1 using the business model framework

Business model framework	Business model
How will the firm create value?	➔ Selling individually compile able music via e-retail

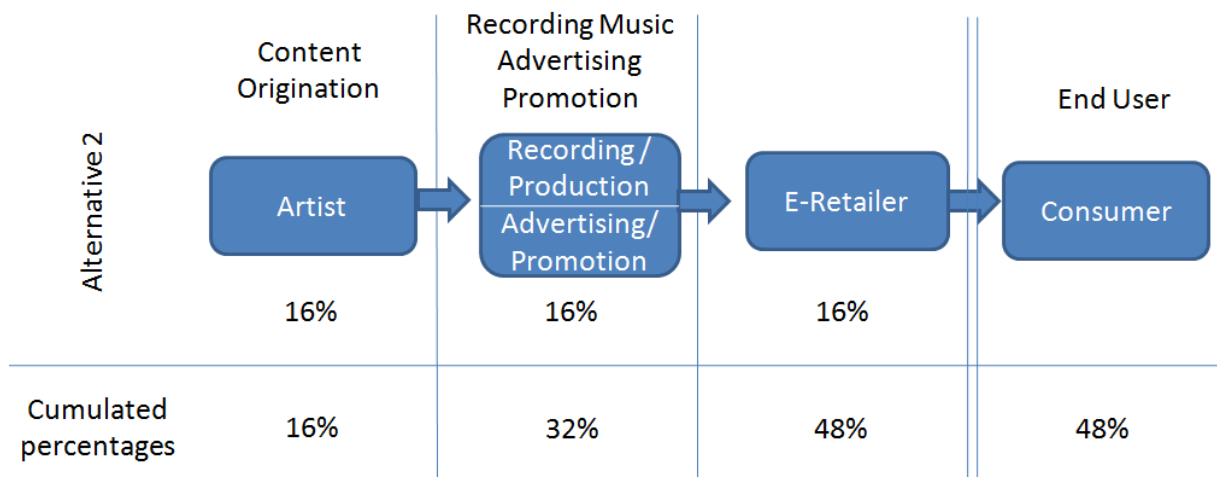
For whom will the firm create value?	→ Value is created for each part of the value chain. The artists benefit from getting their music sold, record labels benefit from royalties, e-retail benefits from a surcharge and the customer by paying less.
What is the firm's internal source of advantage?	→ Reduction within the value chain, hence an improved cost/earnings ratio
How will the firm position itself in the marketplace?	→ Offering cheap music, on-demand without any delay
How will the firm make money	→ Selling music
What are the entrepreneur's time, scope and size ambitions?	→ Moderate growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

5.2.2 Alternative 2: Artist – modified record label - consumer

Alternative 2 is more in line with demand. It might look similar to Alternative 1 but still has a major advantage. Since the prices of recording and production equipment have reached an affordable level and many artists have decided to invest some money into an own recording studio, recording and production is no longer an essential advantage of the record companies. Within this alternative the record companies do offer three different options. The options include not just recording and production or advertising and promotion but also a well-known combination of them both. Besides that, e-retail will also be implemented to satisfy the consumer's need as elaborated within the last sub-chapter.

Figure 27: Alternative 2



Source: own creation

Since the content originator, namely the artist, might invest some money in either the recording and production equipment or the advertising and promotion it inevitably results in higher share within the value chain. Nevertheless, due to reduced time and effort within the record companies this can have a positive impact on the prices for the consumer. Advertising and promotion require experience, good contacts and worldwide presence. All these factors indicate that both are driving factors of the record companies. Splitting services into three independent sectors might be a feasible solution for the moment. An alternative to the traditional ‘all-inclusive’ service might be a separate service concentrating on advertising and promotion. With this alternative both, not just the artists but also the record companies, would benefit.

In order to see who would benefit by using this alternative, three different types of artists are categorized. This includes newcomers, well-established artists, as well as international stars, taking into account the four crucial steps defined within the last sub-chapter.

The next table examines these three types.

Table 19: Three types of artists and the four steps of making music

Inevitable steps	Newcomer	Well established artist	International star
STEP 1 Recording	Since newcomers won't have the money or potential to record or produce their own music the help of record companies is unavoidable and necessary.	Most likely have the money to invest into an own recording studio. The production of the CD-DA must be ignored. The finished Digital music is of interest.	Might continue to clutch on old structures. Since they already got both the money and the popularity there might be no need to change 'the winning team'.
STEP 2 Production			
STEP 3 Advertising & Promotion	There might be no public awareness for a newcomer. He needs to catch people's attention in order to get the music sold. Again the help of the record companies is necessary for success.	Since advertising and promotion are one of the key activities of the record companies, artists will rather believe in these abilities then try something by themselves without knowing the potential outcome.	Probably not in need of extensive advertising and promotion because of their popularity. Since there is enough money, most likely leave this step in the hands of the record companies.
STEP 4 Retail	Since there is no money and no popularity, unaided distribution won't be an option.	The advantage of recording and producing the music in an own studio might also include a linked e-retail of any kind.	Could be an option but since retail is directly connected to the record companies, international artists can just distribute their music

			when there are no contracts with record labels.
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Source: own creation

Due to contracting newcomers are more likely to be tied to record companies and lack the alternative of making independent decisions. Since the record companies want the highest profit possible from their investment, the artist will be offered a long-term contract. Lack of money and popularity binds this type of artist to record companies. Hence, the alternative of just using advertising and promotion is not applicable to newcomers. Using the traditional service appears to be the only meaningful option.

For more established artists self-recording and production is about to be the future and record labels might lose importance in this area. What's left is advertising and promotion which plays in the hands of Alternative 2. Since record companies have the knowledge a separation of the two core activities, recording and production as well as advertising and promotion, could help both. The artist could get the marketing necessary for further success for a lower price and the record company would benefit by having a new source of income.

International stars have both the money and the popularity to break out of the traditional model. Precisely this group of artists could advance the way music is being distributed. Later on, Alternative 3 picks up this idea and examines its potential.

Table 21 analyzes Alternative 2 using the business model framework.

Table 20: Analyzing Alternative 2 using the business model framework

Business model framework	Business model
How will the firm create value?	➔ Selling individually compile able music
For whom will the firm create value?	➔ Value is created for each part of the value chain. The artists benefit from getting their music sold, record labels benefit from royalties and the cus-

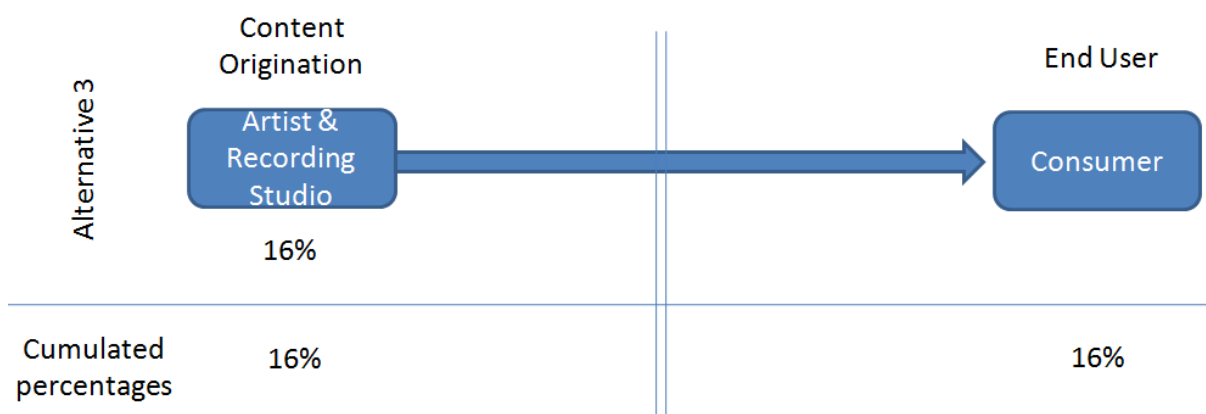
	tomers by paying less.
What is the firm's internal source of advantage?	→ Reduction within the value chain, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	→ Offering cheap music, on-demand without any delay
How will the firm make money	→ Selling music
What are the entrepreneur's time, scope and size ambitions?	→ Medium growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

5.2.3 Alternative 3: Artist- consumer

Alternative 3 breaks up the classic value chain entirely and narrows it down to the relation artist – consumer. As introduced in the last alternative, the artist is an autonomous actor within a value chain consisting of just one part, the artist himself. Therefore, recording and production, advertising and promotion as well as retail are determined by the artist.

Figure 28: Alternative 3



Source: own creation

The idea behind that alternative is to cut down the value chain to a minimum in order to reduce cost and to retain full freedom with decisions. The artist can now decide which price is appropriate, which distribution strategy is reasonable and how much money is necessary to advertise and promote the music. Advertising and promotion is associated with either the knowledge or the money to acquire the knowledge externally. One disadvantage of this alternative is that external knowledge is going to be quite expensive. This could split the group that can be considered. Newcomers hardly can afford to promote and advertise themselves. Competition within the advertising and promotion business could help reduce costs in order to make this alternative worth striving for. Similar to the variety of independent record labels, a variety of marketing agencies specialize precisely in advertising and promoting. This would lead to artists being almost entirely independent from any record company.

Table 22 analyzes Alternative 3 using the business model framework.

Table 21: Analyzing Alternative 3 using the business model framework

Business model framework	Business model
How will the firm create value?	➔ Selling individually compile able music directly from the artist
For whom will the firm create value?	➔ Value is created for each part of the value chain. The artists benefit from getting their music sold and the customer by paying less.
What is the firm's internal source of advantage?	➔ Reduction within the value chain to a minimum of one, hence a greater cost-saving potential
How will the firm position itself in the marketplace?	➔ Offering cheap music, on-demand without any delay
How will the firm make money	➔ Selling music plus merchandise

What are the entrepreneur’s time, scope and size ambi- → Maximum growth potential
 tions?

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

5.2.4 Summarizing these three alternatives

This subchapter focuses on summarizing the ideas concluded from the three alternative solutions to improve the traditional value chain within the digital music industry. The next table compares each of the alternatives in combination with the four crucial steps of making music in terms of feasibility and cost-saving potential.

Table 22: Summarizing the three alternatives

Inevitable steps	Alternative 1	Alternative 2	Alternative 3
STEP 1 Recording	There won't be any cost-saving potential since recording and production as well as advertising and promotion are still performed by the record companies.	Due to self-recording and production the artist is saving money not just in the long run. There is definitely some cost-saving potential in doing so.	Within this alternative the artist is recording, producing, advertising, promoting and distributing the music autonomously. This might be the most cost-saving alternative of them all.
STEP 2 Production		While recording and production equipment is affordable, advertising and promotion are one of the key roles record companies seem to be best in.	
STEP 3 Advertising & Promotion		Since the music might be produced	
STEP 4 Retail	Some improvement can be achieved		

	through changing the way music is distributed without using brick and mortar stores.	by the artist it could also be distributed by him. This could lead to potential cost-savings.	
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Source: own creation

All of these three alternatives concentrate on one important factor, reducing the value chain. It is indisputable that each alternative is not applicable to every artist. As discussed within the last table there are some difficulties concerning newcomers. Since newcomers mostly lack money and public awareness it essentially is difficult to exist without the initial support of a record company.

Alternative 2 and 3 are conceivable for more established artists. Since these alternatives again reduce the value chain to as far as one element, there can be a cost-saving potential. The progressing independency towards the record companies facilitates the autonomy of the artist. Decisions can be made without the blessing of solely profit-oriented record companies. This leads to innovative ideas concerning distribution and pricing policy and by that increases demand for legally-owned music. Record companies need to re-evaluate their value creation process or their ways of conducting business or this could sooner or later mean their final note.

After comparing the three alternatives regarding the four crucial steps of making music, they can be now interwoven with the business model framework as illustrated in Table 25. Table 24 again describes the predefined answers applied in Table 25.

Table 23: Business model framework – The Questions

Nr.	Question	Predefined answer
1	How will the firm create value?	By offering digital music
2	For whom will the firm create value?	The customer can download digital music

3	What is the firm's internal source of advantage?	Cost-saving potential which can vary from 1 for hardly any cost-saving potential to 5 for great cost-saving potential
4	How will the firm position itself in the marketplace?	Selling cheap affordable digital music
5	How will the firm make money?	Selling digital music
6	What are the entrepreneur's time, scope and size ambitions?	Growth potential which can vary from 1 for hardly great growth potential any to 5 for great growth potential

Source: own creation based on Morris, Schindehutte, & Allen, 2005, (p. 730)

The column within the next table is referring to the six questions described within Table 24. The ticks within Table 25 indicate that the predefined answer within Table 24 is applicable.

Table 24: Business model framework using the three alternative business models

BMF	Alternative 1	Alternative 2	Alternative 3
1	✓	✓	✓
2	✓	✓	✓
3	2	3-4	5
4	✓	✓	✓
5	✓	✓	✓
6	2	3-4	5

Source: own creation

By looking into the first row, one can see that each alternative is using digital music to create value. The second row describes for whom the value is generated and again there is no variation within the alternatives. Each alternative is generating value for the customer, who can

download the desired music. Row number three refers to the firm's internal source of advantage. Since the cost-saving potential stands in the forefront, there are differences with regard to the amount of cost-saving represented by the numbers within this row. Number one means no cost-saving at all, whereas number five reflects great cost-saving potential. Again there are no differences among the alternatives when it comes to question four, how the alternative will position itself, and question five, how the alternative will make money. Nevertheless, question six is illustrating some differences concerning the growth potential. Number one means no growth potential at all, whereas number five stands for great growth potential.

The comparison of the three alternatives using the business model framework show some similarities, advantages and disadvantages. Since the differences between the three alternatives are minor, what remains is efficiency. The direct distribution Alternative 3 has the highest cost-saving potential as well as the biggest growth potential. It tends to be the alternative worth striving for for the artist and needless to say the consumer.

6 Conclusion

The early Internet from the late 1980s and the associated improvements in terms of technology and efficiency have been accompanied by a lot of advantages but also disadvantages. While in most industries the advantages are predominant, in some industries it might be quite the opposite. The World Wide Web facilitates many opportunities for illegal usage. Since the illegal downloading of files, applications, etc. is nothing new within the Internet and a more or less unwanted but integral part well from the outset, it did not surprisingly slop over to the digital music industry. This did not happen overnight but still has a dramatic impact on the ongoing CD-DA sales. The development of big and heavy music devices into smaller, portable devices in the late 1990s changed the way of the public dealing with music. Music is saved on the internal storage of a device with a capacity well beyond any conventional CD-DA. Furthermore, the compression algorithms for music evolved as well resulting in a much smaller memory footprint compared to music stored on the CD-DA while retaining almost equal quality. Music could be added or removed in practically no time with nothing but a computer linked to those devices making the CD-DA not obsolete but no longer indispensable. This development lasted until now with technological advancement on both sides. Not just the players itself evolved to a complex entertainment devices with enough storage space for tens of thousands of songs, movies, games etc., but also Internet access doubled its speed nearly every year within the last decade. Broadband Internet access creates and forms new business models. Business model innovation gained importance because of new ways money could be made in shorter amounts of time. Due to fast growing markets and the lack of big venture capital investments, business model innovation is nothing totally new, but an attractive yet not simple way of starting an all new business nevertheless.

CD-DAs or most of the past forms of conventional music memory are by now out-of-date and about to disappear from the market. The way music is distributed is changing and people are less willing to purchase the music at a local retailer. This is not just the result of inscrutable and unattractive pricing policies with extensive value chains. It is also due to the Internet the consumer is just one mouse click away from purchasing the music desired, on-demand with nothing but a credit card or any other form of virtual money transaction. The consumer can easily transfer the music onto any sort of mobile device and listen to it whenever and wherever he/she chooses to. This of course promoted new ways of distributing music via certain

online platforms giving birth to the peer-to-peer era. Due to this development music could be easily diffused throughout the world on a more or less illegal basis. Since the majority of people having access to Internet were now able to get their music for free the CD-DA sales declined dramatically. For years the music industry is struggling to find an effective way to eliminate illegal music distribution. It might be the right time to adopt and incorporate a big slice of the cake called digital music in order to win back its relevance.

The music industry by all means needs to adapt faster to the consumer wishes. This means not just changing the way of distributing music but also reducing prices in order to make legal music more attractive again. This could happen through shorter and lucid value chains. The traditional value chain with all its components is obsolete. With dropping prices for music equipment a variety of artists are recording and producing their music without involving a record company. This leaves out the existing value chain and can still be more profitable for the artist in the end. One factor that can weaken the trend away from record companies are the advertising and promotion activities necessary to get the music sold. It seems that this role of record companies is undisputed. Since advertising and promotion are key elements of prominence, record companies might always play an important role in the music industry. Nevertheless, the record industry needs to rethink the way they conduct business. By splitting their services in order to meet the demands, record companies should offer a service that is concentrating just on advertising and promotion. This can help contracting new artists and lead to potential cost-savings as well a reduction within the value chain. However, the change needs to be transcribed now. Since advertising and promotion is nothing new to certain other businesses this offers immense potential to administer to the artist's needs. Once there is competition within this business not just the prices for the service will decrease but also its benefits. The trend towards independent artists is on the rise. It seems to be the result of dissatisfaction with regard to the record companies ways. More autonomy can improve the way music is recorded, produced, advertised, promoted and distributed. Due to a more flexible way of doing business this can lead to innovative and completely new business models. By that, legally owned music should get more attractive again. With adapting the needs of the customer and aspiring both the satisfaction of the artist and the customer new ways of distributing music can be found.

Due to the comfort of downloading music without even leaving home and the advantage of listening to the music on-demand the record industry should focus on distributing music

online. This would in any case reduce the costs of production and can reduce the price of music to a minimum in order to make legally-owned music attractive again. That would imply cutting out parts of the traditional value chain such as manufacturing, distribution and retail. Even though this could mean the destruction of certain industrial sectors this might be the only path worth striving for.

Feasible solutions for this matter were examined and discussed within this master thesis. Some might be difficult to implement others don't have the potential to save costs. Nevertheless, the key to selling music lies in fulfilling the needs of the customers. Getting the music to customers with a low price tag seems to be the desirable way. Each business model adopting these needs might be successful. As mentioned earlier, the key in reducing cost lies in reducing the value chain and by that eliminating cost drivers. The most efficient business model when it comes to reducing the value chain to a minimum is the one where the artist records, produces, promotes, advertises and distributes the music. Within this business model every aspect of the value chain is executed by the artist himself. This would not just accelerate business model innovation in terms of creating new ways making legally-owned music attractive again but also make the artist more agile again. With the gained autonomy, artists could decide upon how to profit from their music. Maybe the lifestyle radiated by an artist is more profitable than selling its music.

Without major changes within the business models currently in use the digital music industry and by that the record industry, will sooner or later be displaced, destroying a branch of industry that used to be the most profitable. What remains an open question is who benefits from all these changes discussed within this thesis. By reducing the value chain to a minimum, the customer would benefit by paying less for music. This implies that the amount of music being sold on a legal basis might increase but due to reduced prices the recording industry share in profits will be reduced to a minimum. Neglecting the rather expensive CD-DA and keeping with the times by concentrating on digital music and online distribution might be an adequate perspective for the recording industry. Nevertheless, the recording industry needs to adapt their prices for music in a way that it is getting an attractive option again. In any case, lowering prices is affiliated with lower profits. It is also necessary to cut down costs in every aspect of the recording industry in order to cope with the reduced revenue. Another attempt could be comprehensive new laws. Since the legal principle varies in each country, unified laws ap-

plied to undermine illegal distribution of digital content could also lead to eliminate online piracy. The music industry is no longer in a position to watch and wait, it needs to act.

7 Further research

Another consideration worth mentioning are new laws in order to undermine illegal music distribution worldwide. The amount of music being illegally distributed varies from country to country. Music piracy is a phenomenon more common in the developing world rather than the developed world. Countries like China, Nigeria and Russia can be contemplated. In these countries virtually all music that is not downloaded illegally is sold in the form of illegal copied CD-DA's. Law differences might be the reason for this phenomenon. While in some countries it is rather easy to fine somebody for illegally downloading music in others it is almost impossible. Unifying the legal basis concerning piracy might be inevitable. However, as experience has shown, creating new laws on a worldwide basis might prove difficult. (Illegal downloading and media investment, 2011) Further research is needed to discuss options that are going to support a unified legal basis in order to cope with the country specific legal differences.

Chapter five concluded that different types of artists require different types of business models. A reduction within the traditional value chain to a minimum of one element namely the artist, seems to be a feasible option. Artist management seems to be the future for artists that are no longer willing to depend on record labels. Since artist management was just mentioned but not analyzed or incorporated in any of the considerations but could be the future, it should be picked up for further research.

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Apendix: CV



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Sprache: Deutsch

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Eidesstattliche Erklärung

Ich erkläre hiermit an Eides Statt, dass ich die vorliegende Arbeit selbständig und ohne Benutzung anderer als der angegebenen Hilfsmittel angefertigt zu haben.

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Die Arbeit wurde bisher in gleicher oder ähnlicher Form keiner anderen Prüfungsbehörde vorgelegt und auch noch nicht veröffentlicht.

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Unterschrift

(Philipp Schinko)