The Future of Digital Music Services in Three Stereotypes

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ABSTRACT
The digital music industry is struggling to provide all involved parties with a proper income. This paper investigates new initiatives to create and capture value from digital music. Literature sources were used to define the concept of digital music and to investigate how value creation and value capture are interweaved in business models. Focus group interviews with 90 people between the ages of 15 and 25 were successfully employed to provide 20 new business models. These models were subjected to grounded theory analysis. This analysis revealed three stereotypes for future music services to create and capture value from digital music. The first are socially focused business models that emphasise social interaction to stimulate discovery and sharing of music. Secondly, artist focused business models that create a closer artist – fan relationship. And finally extra value focused business models that bundle the sale of digital music with other products or services. The success of any of these stereotypes is concluded to be strongly dependent on the proper alignment of the value chain design.

Keywords
Digital music, digital music service, value capture, value creation, business model, music industry, digital music distribution

1. INTRODUCTION
As Shafer et al. [35] put it: “for-profit companies must make money to survive; thus, their viability is tied both to the value they create and to the way they capture value and resultantively generate profit”. When this fact is kept in mind and one considers the developments of the music industry since the introduction of digital music, one thing becomes clear: the way value is created and captured is inadequate. Consequently, new initiatives are welcome, but which?

Before the effects of digital music on the music industry will be considered, the concepts of value creation and value capture will be introduced.

Value creation refers to how an organisation offers value to its customers with its products or services [4]. Strongly related to what Bouwman et al. [4] Osterwalder & Pigneur [25] and Al-Debei & Avison [1] refer to as ‘value proposition’, it concerns which customers are attracted to the product or service and why these people are attracted.

The value capture concept as Shafer et al. [35] labelled it corresponds to what Bouwman et al. [4] refer to as financial domain. It involves the monetary side of the value proposition. Simply put: how to generate profit from a product or service?

With the above mentioned concepts in mind, the developments in the music industry after the introduction of digital music will be considered.

The first piece of music that was commercially recorded with digital equipment dates back to 1977 [9]. Since then, digital music has revolutionised the music industry. Digital music or digital content in general, can be easily detached from its physical container. With the evolvement of the internet and its related technologies, excellent means of sharing and distribution of that content became available [28]. And as Vanderdonckt & Rodman [34] describe, the value of music is independent of the ease by which it can be discovered, shared or gathered. These aspects created a significant financial problem for the music industry; suddenly an increasing amount of people were no longer paying for music, but were downloading or streaming it for free instead [7, 28, 37].

According to the industry itself, these missed sales lead to the loss of up to $4.2 billion a year worldwide [7]. Parts of these losses might be explained by a shift in revenue streams towards unregistered parties, but nonetheless it was evident that new means to capture value from digital music were required.

Choi & Perez [7] indicate that initially the music industry attempted to compensate for these losses by means of litigation, however this was considered not to be the appropriate course of action for the future. Jurišić & Kermek [15] determined that by now the industry is investigating different business models which embrace formerly illicitly employed technologies to create interesting value propositions with digital music. Most of these new initiatives can be described as digital music services.

According to Katsma & Spil [16] a digital music service is “an Internet enabled service that principally offers music in an audible format to its consumers”.

This paper will investigate the next step for these digital music services: how should they create and capture value in the future?
As Magretta [24] states, a formal technique to describe a value proposition and the means of value capture is a business model. Such a model describes every aspect of an organisation that is employed to create and capture value and to achieve its goals [2]. Therefore this paper will study business models of digital music services which incorporate relevant value aspects for the future of digital music.

1.1 Problem Statement
Over the last few years the revenues achieved from the sale of digital music content have increased dramatically. The value of the digital music industry has in fact increased with a staggering 1000% between 2004 and 2010 [13]. Despite this growth, the proportion of digital music revenue is still only 32% of the total revenue in the music industry [14]. At the same time the value of the total music industry has declined by 31% in the same period. What this means is that digital revenue is increasing at the cost of other revenue sources (such as CDs), but the total industry revenue is still declining. This constitutes the music industry’s biggest problem at this moment: there is a big market for people who want to listen to music digitally; however too often those people acquire their music through channels which generate no or too little income for the music industry. In other words people consider the price to be too high for the value they get in return, or the value they require is not offered.

To overcome these problems, the music industry needs new business models that enable them to create value in a different manner and capture that value in a way that is sustainable. This paper will define what these new business models will look like by introducing three stereotypes for digital music services of the future.

Section 2 will introduce the research questions and the methodology which was applied to answer them. After which in section 3 literature concerning business models and digital music will be discussed. The results of this research are discussed in section 4 and analysed in section 5. This analysis will be reflected upon in section 6 “Discussion”. Finally section 7 presents the conclusion and suggestions for further research.

2. RESEARCH QUESTIONS & METHODOLOGY

2.1 Research Questions
To find the means of value capture and value creation of the future, a source of inspiration and creativity is required. A logical approach is to take an important industry stakeholder as a source of resourcefulness. The most important stakeholder of any commercial industry is the customer base; without sufficient customer purchases, an industry will not survive. However, as not everyone purchases their music legally, this paper should not look merely at digital music customers, but should focus on digital music consumers. This includes both people who procure their music legally and people who obtain their music otherwise.

The main research question of this paper is as follows:

How to create and capture value in the future from digital music according to digital music consumers?

To answer the main question properly, the following sub questions were answered:

1. What is digital music?
   - What is a digital music service?
2. What is a business model?
   - What components constitute a business model?
   - What is value creation and what is its relationship to a business model?
   - What is value capture and what is its relationship to a business model?
3. What do consumers think a business model which captures value from digital music should look like?
   - How is value created?
   - How is value captured?

2.2 Method of Research
To answer the research sub questions and ultimately the main question, two research methods were employed: for questions one and two a literature study was conducted and for the last question a focus group approach was taken. This section will elaborate these methods.

2.2.1 Question One – Digital Music
Digital music is such a broad, and possibly vague term that a definition was required to clarify what aspects of digital music this paper comprehends and what it does not.

The longer digital music has been in our lives, the more research has been done into related subjects [5]. More recently, the broad spectrum of digital music related services has been analysed and categorized [15, 16]. These, and similar sources provided input which lead to the formation of a meaningful definition for this paper.

2.2.2 Question Two – Business Models
In order to facilitate the definition of a new value creation and value capture concept, a formal tool was required. Such a tool is a business model [24].

Quite some research has gone into this subject but as of yet, there is a wide range of theories and models all of which present the concept in a different manner [1]. It is therefore of importance to clarify what a business model is and how it is used in this paper.

Since a business model is said to describe the core business logic behind a certain value creation and value capture proposition [24], it is also interesting to clarify how these concepts are interweaved in a business model.

2.3 Focus Groups
A method was required to gather and analyse consumer ideas about the subject at hand. To accomplish this, a focus group research methodology was applied, followed by grounded theory analysis.

Focus groups are a suitable method because they allow for the development of ideas, and thus data for this research, through group interaction. This is convenient for this research first of all as it allows for an economical way of gathering data from multiple people. Simply because there is no need to interview them one by one [19]. Secondly, considering the topic at hand can be considered quite complex and involves creative thinking, the involvement of multiple people at once can stimulate the discovery of new ideas [22].
2.3.1 Data Collection Theory
According to Krueger & Casey [19] a focus group is “a carefully planned discussion designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment”. They state that a focus group usually involves between four to ten people who share a common characteristic and generate data through interaction.

The participants take part in a structured discussion with each other. This discussion is guided by a moderator, who is one of the researchers [30]. Data is then collected by taking notes and/or recording the statements and responses the group provides [19].

Kitzinger [17] advocates a method in which the interaction between the participants itself becomes the central point of analysis instead of the actual answers the group provides. This method is mainly used in health related research projects. However for this research the interaction between participants as a point of analysis is not relevant. The interaction will simply stimulate the development of new ideas [22].

2.3.2 Target Group
Participants for a focus group session needed to be chosen carefully as they are the primary source of research data in this paper. To allow the groups to generate rich data, Krueger & Casey [19] advocate the use of homogeneous groups. The participants should share similar characteristics such as age-range and social-class background [19].

To be of value for this research, participants should furthermore have at least once listened to and/or downloaded digital music to ensure they grasp the consequences of the business model they design.

In order to create homogeneous focus groups, people from a preselected age-range were chosen. The age-range which was selected was the range of the most significant digital music consumers as described below.

In 2008 the UK’s digital music rights body “British Music Rights” (nowadays part of the collective body “UK Music”) conducted a research project into the state of digital music in the UK. The age-group that spends the most amount of time listening to digital music, according to their research, is that of people between the age of 14 up to and including 24. [41]

This fact is backed up by the consumer profile data collected by “The Recording Industry Association of America” (RIAA in short); the largest music trade organization in the USA. According to their research 20.0% of music buyers in 2008 were between the age of 14 and 25; which is the largest percentage of all ten year age-ranges they investigated. [33]

Since participants will need to discuss the business model concept in the context of digital music, which can be considered moderately complex, people under the age of 16 are deemed to be unsuitable for this research.

The participants for the focus groups in this research were therefore between the ages of 15 and 25. To ensure a similar social-class background between group participants, all participants in a single focus group were a member of the same educational institute. In the case of people between 15 and 19 years old this educational institute was a secondary school. Others (between 18 and 25 years old) attended the same university.

In total around 200 people were considered for inclusion in this research. After a selection procedure to ensure participants complied with the above mentioned criteria, a group consisting of approximately 90 pupils and students were elected to take part in the focus group interviews.

2.3.3 Applied Data Collection Method
Since the focus group participants are roughly in two age categories (15 – 19 and 19 – 25) two slightly different approaches were applied to compensate for the different levels of education.

The focus groups were held at two different occasions, one occasion for each of the aforementioned age ranges. Both events started with a briefing to inform the participants of the state of the music industry and to educate them about business model theory. The younger group received a more elaborate briefing as being secondary school pupils they have not been educated in business related issues.

At the end of the briefing both groups were split into smaller groups sized from 4 to 6 members. They were requested to design a viable business model for a music service of the (near) future. Each group was assigned a different location and at this point the actual focus group discussions started. This simultaneous approach limits inter-group communication which could influence the various focus groups’ ideas and would thus generate ‘cluttered’ data.

Since this research required the groups to create a new business model, the structure of the focus group questions resembled the structure of a business model. In other words, each question informed about a specific component of a business model. Together, all the answers of one focus group session formed a business model. At the same time however, since each business model component was in the first place considered separately, structured means of analysis, such as the long table approach as described in section 2.3.4, remained possible.

For the younger participants, more moderators were present to resolve issues and to assure the pupils focused on the task. Furthermore, a different means of data recording was chosen for these younger groups. Instead of presenting their ideas in front of a large group as the university students were requested to do, they were given a laptop with a webcam to record their ideas. This removes the stress which presenting in front of a live audience can bring, and allows them to repeat the recording until a perfect video clip was composed about their ideas.

The university students were invited to present their ideas at the end of the discussions in addition to handing in a short written report elaborating their ideas.

These focus group interviews have thus yielded the following data to be analysed: video recordings from the pupils, written reports from the students and notes on both the pupils and students taken by moderators.

2.3.4 Data Analysis
Once gathering data was completed by performing multiple focus group sessions, the need arose for a means to structure the data. In this paper the ‘long table approach’ as advocated in Krueger and Casey [19] and discussed in Rabiee [32] was used. This was followed by performing a grounded theory analysis to discover similarities and trends in the data.

The long table approach involves creating a table in which all answers from all groups to a specific question are put together under that question. This creates a (long) table in which all answers are structured according to their corresponding questions.
All video data was transcribed into business models according to the structure as proposed in section 3.3.2. The textual notes and reports were incorporated and added to this collection of business models. This resulted in a pile of similarly structured models from which the long table was constructed. These results will be presented in section 4.

To form a well-founded theory from the long table and the numerous individual business models, a qualitative data analysis method called “grounded theory” was used. LaRossa R.[20] describes a pragmatic method based on the leading theories of Glaser and Strauss. That paper proposes a three stage approach to grounded theory [20]:

1. Open coding
   The first stage aims to distil so-called ‘categories’ and their ‘indicators’ from the data. Every individual element of each business model was compared to all other elements of all business models. This one-by-one comparison resulted in a number of (more general) categories each of which is backed up by a number of indicators.

2. Axial coding
   The second stage aims to clarify the relation of the categories with its subcategories. By looking at each category individually and asking questions such as why, who, where, when etc. the relation of a category with other categories can be discovered.

3. Selective coding
   In the final stage the core category is identified. This category is central to all other categories and allows the researcher to create an explanatory whole.

This three stage approach resulted in the formation of a key category with corresponding indicators which allowed identification of the proposed means of value creation and capture embedded in the business models. These will be presented in section 5.

3. LITERATURE AND DEFINITIONS
   This section will introduce the necessary knowledge and definitions to be able to understand and follow the logic of the rest of this paper. Furthermore, it will clarify, demarcate and define some possibly ambiguous terms to prevent confusion and establish which parts of some major themes are discussed in this paper and which are not.

3.1 Digital Music
   At the very core of this research lies the product of ‘digital music’. However, this term is too ambiguous to be used without a proper definition. This section will define said term as it is intended in the rest of this paper.

   Jurisić & Kermek [15] define digital products in general as “... a bundle of properties comprised of information that is either digitized or produced electronically”. When we apply this definition to music, it would include digital carriers of music such as CD’s, which is not the intention of this paper.

   Focussing the aforementioned definition of digital products in general towards digital music specifically and eliminating physical containers of digital music from the definition yields the following:

   Digital music is a digitized or digitally produced audible format which is stored in a digital, intangible fashion.

   However, as Katsma and Spil denote in [16], music can also be consumend by enjoying it through a service (such as a radio station) as opposed to owning the specific product (like a CD or MP3-file). When we add that fact to our definition it yields the definition as it shall be used in the rest of this paper:

   Digital music is a digitized or digitally produced audible format which is stored or transferred in a digital, intangible fashion.

   This includes digital music products in which the consumer owns the music they listen to such as MP3 (or otherwise formatted) music files, but also scenarios in which the consumer employs a service to enjoy music such as a digital radio station or on-demand music services. This definition on the other hand excludes physical containers of music such as CD’s or DVD’s as well as traditional analogue radio stations.

   To further specify the role of digital music services, a deeper look into the matter is required and is given in the next section.

3.2 Digital Music Services
   As mentioned before, digital music can be enjoyed by either owning the music source (such as is the case with music files on a hard drive) or utilizing a digital music service [31]. This section aims to clarify the latter concept.

   In the introduction a definition of digital music services was already introduced. Defined by Katsma & Spil in [16], it was as follows: “an Internet enabled service that principally offers music in an audible format to its consumers”

   This definition aptly covers what this paper believes are digital music services.

   According to Komulainen et al. [18] digital music services nowadays are used in more ways than just to provide music. Users also use these services to:
   - keep up to date with latest music news,
   - get access to a large music collection from various locations and devices (also confirmed by Haaker et al. [12]),
   - provide recommendations based on the user’s music taste,
   - share music with others.

   Sections 3.1 and 3.2 have introduced and clarified digital music and digital music services in the light of this paper’s intended domain. Moreover they have implicitly discussed the most common ways by which digital music consumers enjoy music. However, we have so far ignored the business aspect of the digital music industry. In the next section we will therefore focus on that business facet.

3.3 Business Models
   The term business model has been widely discussed in academic literature. This, however, is not necessarily advantageous for the understanding of the concept. This confusion is caused by the differing definitions, uses and theories that are present. This section will therefore aim to introduce and clarify the business model concept in the sense as it is used throughout this paper.

3.3.1 The Business Model Concept
   Al-Debei & Avison [2] have attempted to find a comprehensive definition which suits the current state of technology and would create more consensus about the subject. This definition is as follows:

   “The business model is an abstract representation of an organization, be it conceptual, textual, and/or graphical, of
all core interrelated architectural, co-operational, and financial arrangements designed and developed by an organization presently in the future, as well as all core products and/or services the organization offers, or will offer, based on these arrangements that are needed to achieve its strategic goals and objectives.” – Al-Debei & Avison [2]

This definition states that a business model can be any form of abstract representation of an organisation (textual and/or graphical). Furthermore the model should somehow incorporate all components of the business which it employs to reach its goal (which in for-profit organisations will be, to put it bluntly: making money). It also declares that these components can be of financial, co-operative or architectural nature and that they include the products or services the organisation offers. All this together constitutes the means which the organisation utilizes to ‘get the job done’.

This definition explicates what a business model is. However, it does not mention possible uses of such a model. Nor is it clear about the structure or components of a business model. The latter will be discussed in section 3.3.2, for now the former will be elaborated.

An important aspect of the business model concept is the fact that it is considered to be fundamental to any organisation, as it describes the business logic behind the way an organisation creates value for its customers [24]. This means it allows one to communicate, analyse and understand new or current business ideas [25, 26]. Additionally, it allows organisations to communicate and clarify strategic-oriented choices as well as inform the information system design which supports the business [1].

Among the various business model concept definitions and uses there are however two themes central to all of them: value creation and value capture [36]. Chesborough and Rosenbloom [6] have therefore defined a business model as “a blueprint for how a network of organizations co-operates in creating and capturing value from technological innovation”. Value creation and value capture are thus considered to be the core of a business model [4, 24, 26]. This paper will therefore focus on those two elements. Other elements that are present in a business model will be considered as the context for what is being investigated.

3.3.2 Business Model Components

Not just the definition is subject to discussion when it comes to business models; the individual components which together constitute the entire model are neither agreed upon in literature.

However, Al-Debei & Avison [1] have attempted to unify the wide range of theories and concepts surrounding this subject. They have identified four dimensions of a business model. These dimensions cover what various leading theories suggest should occur in a business model. This paper introduces these theories and dimensions. Additionally the position of value creation and value capture in this context will be clarified.

**Value proposition**: According to Magretta [24], Osterwalder & Pigneur [25] and Amit & Zott [3] this dimension describes the products and/or services the organisation has to offer along with the value elements incorporated in these products/services. Furthermore the targeted market segments would be depicted in this dimension. This largely describes value creation. Value represents what an organisation has to offer for its customers that other organisations do not offer or offer to a lesser extent. It results from one or more unique aspects of an organisation. In any business model it should be clear what product/service is offered to whom and what value that product/service holds for those customers.

**Value architecture**: Described by Timmers [39] and Venkatraman & Henderson [40] this dimension portrays the structural elements of the organisation. This includes factors such as technological architecture and organisational infrastructure. These aspects constitute the various tangible and intangible resources and organisational assets of the organisation.

**Value network**: Amit & Zott [3] Bouwman et al. [4], Gordijn & Akkermans [11] and Tapscott et al. [38] defined the third class by all inter-organisational relationships and their nature. Any organisation is bound to have relationships with suppliers, competitors, customers etc. Together these stakeholders encompass the value network. The positions of these organisations in said network should become clear in this third construct.

**Value finance**: Shafer [35], Timmers [39] and Linder & Cantrell [21] identified the information related to costing, pricing methods and the revenue structure. These items form the final category: value finance. This dimension describes value capture: it portrays the monetary side of the value proposition: how will the organisation profit financially from that value proposition? What do the revenue streams look like? A business model should describe the revenue streams which keep the organisation viable and how they relate to the value proposition. In other words both the costs and the revenue sources should be identified.

As mentioned before, other authors may suggest different elements to be discussed in a business model, but these are highly likely to be covered by one (or more) of the above stated business model dimensions and theories.

This paper will focus on value creation and value capture, as was explicated earlier. Other aspects which occur in a business model (the value network and value architecture dimensions) will be considered as the context for this focus. Furthermore this paper will consider the effectiveness of business models in a focus group interview research approach. A verdict will be given on how effective business modelling is for the generation of new value ideas in a focus group setting.

4. RESULTS

This section will present the results of the focus group interviews. In total, 22 focus group interviews were held resulting in 22 different business models. After initial analysis two business models were concluded to be unsuitable for further analysis as they did not propose a business model for a digital music service. The remaining twenty business models were analysed as described in section 2.3.4.

Since there is no space to present all twenty business models or the resulting ‘long table’, a quantitative presentation of the different characteristics found in the value proposition and value finance business model dimensions will be given.

These characteristics were identified by sorting the long table. Every aspect of an answer that shared strong similarities with another (group of) answer(s) was placed together. After all answers were sorted, a process of labelling and counting them resulted in the characteristics and percentages presented below.

All numbers represent percentages which correspond to the amount of business models that incorporated that
characteristic. The percentages do not add up to 100 as business models incorporated multiple characteristics at the same time.

### 4.1 Value Creation

As was described in section 3.3.2 value creation mainly concerns the customer value elements of the service and the target customer segments. To present a clear view, these two elements will be presented in separate figures (figures one and two).

#### Figure 1. Music service value characteristics

The following value characteristics were identified:

- **Social aspect**: The music service incorporates the possibility to interact with other users.
- **Strong artist focus**: Artists play a central role in the user experience of the music service.
- **Partially free content**: All or some of the offered content can be acquired for free by the users.
- **Website to play/download**: The music service distributes music content with a website where users can play and/or download music.
- **Extra value activities**: The music service performs activities that represent substantially different value for the user than what can be expected from a music service such as is defined in section 3.2.
- **24/7 available on multiple platforms**: The music service is supposed to be available at all times and on various platforms (such as computers, phones, televisions etc.).
- **Ease of payment**: The music service intentionally makes the payment process easy for the users.
- **Technically high quality content**: The format in which the content is delivered to the user is of high quality.
- **(Phone) application to play/download**: The music service distributes music with an application (for computers and/or phones) with which users can play and/or download music.
- **Music profile**: A selection of tracks selected by the user, which the user wants to store or present to other users and are therefore linked to the user’s account.
- **Personalisation**: Allowing the user to express preference for certain tracks.

Only customer groups that are deemed not self-explanatory are described below.

- **Any digital music consumer**: Some business models did not focus on a more specific target group.

**Extra value activity customers**: Users who are not solely interested in music but also in the extra value activities the service provides.

- **Dedicated fans**: Users with a strong preference for one (or more) particular artist(s).
- **Customers with existing subscription**: Users who are already paying a subscription fee for another service (such as phone, TV or internet subscriptions).

#### Figure 2. Target customer groups

### 4.2 Value Capture

In order to present a clear view of the proposed value capture elements, revenue and cost characteristics are presented separately (figures three and four respectively).

#### Figure 3. Revenue characteristics

Only revenue characteristics which are deemed not self-explanatory are described below.

- **Pay per use/track**: Users are required to pay the music service each time they download a track or each time they listen to the track.
- **Pay fixed price per month/year**: Users pay a fixed amount to make use of the music service.
- **Pay with existing subscription**: The amount to be paid to the music service is added to an already existing subscription fee of another service (such as telephone, TV or internet subscriptions).

**Extra value activity revenues**: Revenues from activities which are not directly related to the provision of digital music.
The following cost characteristics were identified:

**Hosting:** Costs related to the digital storage of content.

**Content providers:** Providers of music content such as artists and record labels.

**IT development:** Costs related to the development of IT solutions to enable the music service to function (such as website or application development).

**Marketing/promotion:** Costs related to any marketing and promotional activities of the music service.

**Extra value activities:** Costs related to any activities which are not directly related to the provision of digital music.

**Payment service:** Costs to enable the payment service provider to handle payment requests.

5. **ANALYSIS**

This chapter will introduce the results of the grounded theory method (or GTM) analysis as described in section 2.3.4.

In the first stage of GTM, each individual characteristic as found in the sorted long table (see section 4) was compared one by one with all other characteristics. Every time a category seemed to be found, it was verified by comparing it again to all other characteristics and adjusted or discarded accordingly. This resulted in the identification of the categories presented in table 1. Stage two of GTM incorporated business model theory to identify the relationships among the categories. The final stage involved repetitively comparing and structuring the various categories. This process was continued until all categories were correctly represented as subcategories of a main category. Identification of that main category lead to the formation of three stereotypes as presented in the following sections.

The main category is named the ‘differentiating value element’. All of the analysed business models could be classified as containing one of the three differentiating value elements that arose from the analysis. These three elements are: ‘social focus’, ‘artist focus’ and ‘extra value focus’.

In table 1 all categories and their indicators that resulted from the grounded theory approach are presented.

The grounded theory analysis provides each of these three groups with corresponding indicators for various categories. Together this yields three stereotype images, one for each group, which give a rough indication as to what the business models in those groups look like. These stereotypes are discussed further in the following sections.

### 5.1 Social Focus

**Value creation**

In the socially focused business models, a strong focus is placed on social interaction to stimulate sharing and discovery of music. Users are able to share their music preferences, which encourages discovery by others [18]. Furthermore, tracks the user likes can be added to a personal music selection.

Several studies [18, 23] indicate that social interaction has a large influence in a user’s decision to download a track. Komulainen et al. [18] even identify social interaction as a ‘must have’ component of future digital music services.

The content is delivered either through a website, an application or both. The ‘high availability’ indicator refers to the fact that these business models stress 24/7 availability of the music content on any internet enabled device, anywhere in the world. Haaker et al. [12] identified that this aspect is crucial to raise the willingness to pay for digital music services.

**Value capture**

The social aspect is not only prominent as a means of user interaction and music discovery, but also as a means of financial discount. An example of such a construction is a discount on the purchase price of a track if another user purchases the same track after you recommended the track to him/her.

Pricing methods of these socially focused business models include a subscription fee and payment on a usage basis (pay per use, pay per track). Furthermore, parts of the offered content are available for free. As Gopal et al. [10] and Papies et al. [27] indicated, this freely available content is necessary to attract customers, since a lot of customers are accustomed to free music originating from piracy. In order to compensate...
for this partially free content, advertisement is appointed as a revenue source in these business models [27]. Additionally Peitz & Waelbroeck [29] concluded that free content may help customers to select tracks they will purchase eventually, thus still creating revenue for the music service in the end.

The most important cost factors include the hosting of the content, the acquisition of the content and the development of the required IT infrastructure.

5.2 Artist Focus

Value creation

Business models that could be classified as ‘artist focused’ emphasise the role of the artist in the user experience. These services may appeal to fans of a particular artist, because they create a closer relationship between the artist and his/her fan base.

Delivery of the content is done in a way to ensure technically high quality content, for example by employing audio technologies with superior sound quality or high resolution videos.

Apart from utilizing both a website and an application to distribute the content, cooperation with radio stations may ensure a larger audience for the artist and at the same time attract new customers to the music service [18].

Value capture

As is true for the ‘social focus’ based business models, artist focused business models employ both subscription fees as well as payment on a usage basis as pricing methods. Furthermore, parts of the content are offered for free, for the reasons explained earlier.

The sale of digital music and the sale of advertisement space are considered to be the primary sources of revenue.

The main cost sources that were identified in artist focused business models are the acquisition and the hosting of music content.

5.3 Extra Value Focus

Value creation

Business models in the final group incorporate a value element that is substantially different than digital music related value. These models try to gain customers with that differentiating value element.

An example of such an extra value element is the donation of part of the revenues of digital music sales to charity. Another example is setting up concerts. These elements represent value for the customer and differ strongly from traditional digital music value elements. The IFPI [14] reports that various services are already experimenting with bundling digital music sales with other value elements.

Just as the artist focused models, these business models focus on providing technically high quality content. However as opposed to the previous types, content distribution in ‘extra value’ focused business models occurs exclusively through a website.

Value capture

The only pricing method that was identified for these business models is that of usage based pricing.

The revenue sources for ‘extra value focus’ business models include the sale of digital music content, the sale of advertisement space (just as the previous stereotypes) and in some instances the extra value activities themselves (for example concert ticket sales).

Apart from being a revenue source, these extra value activities also incur costs and are thus identified as a cost source. Other cost sources include hosting and content acquisition.

5.4 Overview

A number of elements are present in all three stereotypes and can thus be considered as essential to any digital music service. These elements are as follows:

Advertisements as a source of revenue: since the availability of free content is of importance to attract customers [10, 27, 29], advertisement is considered a requirement as a source of revenue to compensate for this free content [27].

Payment on a usage basis as a pricing method: this is considered a traditional pricing structure that has been widely used in the digital music sector [8]. From the business models considered in this research, it can be concluded that it is still regarded as a relevant pricing method.

Content acquisition and IT investments (hosting and development) as cost sources: just as Premkumar [31] indicated, retail of digital music without a physical store will have content acquisition and IT related investments (IT development and hosting) as the main sources of costs apart from marketing (which is a major cost source for any commercial organisation).

Website as means of content distribution: since an increasing amount of devices incorporate a web browser, websites become instruments to target a wide range of devices. As mentioned earlier, this cross platform availability is perceived as an important aspect by customers [12].

The elements that differentiate the three stereotypes are summarised in table 2:

<table>
<thead>
<tr>
<th></th>
<th>Value Creation</th>
<th>Value Capture</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Focus</td>
<td>Social interaction,</td>
<td>Social benefits,</td>
</tr>
<tr>
<td></td>
<td>High availability,</td>
<td>Subscription fee,</td>
</tr>
<tr>
<td></td>
<td>Application</td>
<td>Usage based pricing,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Partially free</td>
</tr>
<tr>
<td>Artist Focus</td>
<td>Close artist-fan relationship,</td>
<td>Subscription fee,</td>
</tr>
<tr>
<td></td>
<td>High quality,</td>
<td>Usage based pricing</td>
</tr>
<tr>
<td></td>
<td>Application,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Radio station,</td>
<td></td>
</tr>
<tr>
<td>Extra value focus</td>
<td>Extra value element,</td>
<td>Usage based pricing</td>
</tr>
<tr>
<td></td>
<td>High quality</td>
<td></td>
</tr>
</tbody>
</table>

6. DISCUSSION

The three stereotypes provide a direction for new digital music services and should not be interpreted as a blueprint for success in the digital music sector. It is likely that future music services incorporate elements from one or more stereotypes at the same time, but it is assumed that each new and successful digital music service still resembles one of the three mentioned stereotypes.

In order to analyse the viability of the three stereotypes, a stakeholder approach similar to that in Premkumar [31] is taken. The following stakeholders are identified: the artist, the record company, the distributors (or intermediaries in general), the retailers and the consumer [31]. A digital music service is considered to be a retailer in this value chain. These
different stakeholders might have a different preferred music service stereotype.

The artist would prefer ‘artist focused’ business models as these direct the most attention to individual artists in comparison to the other business models. This attention should translate in larger revenue from digital music sales for artists.

Record labels and intermediaries will most likely profit the most from ‘social focus’ based business models, due to their high availability of content. The logic here being that the more the consumer is exposed to music content originating from an intermediary and/or record company, the more revenue is generated for those parties.

Finally the consumer might have a preference for any of the three stereotypes as these were all discovered from a consumer perspective, which implicates a consumer need for all three stereotypes.

This gives the impression that the success of a future digital music service is largely tied to the correct alignment of the value chain design corresponding to the chosen stereotype.

7. CONCLUSIONS

This paper has investigated future possibilities for value creation and value capture from digital music from a consumer perspective.

Digital music was defined as a digitized or digitally produced audible format which is stored or transferred in a digital, intangible fashion. This defines the product that is offered by digital music services. Such a service being “an Internet enabled service that principally offers music in an audible format to its consumers” [16].

This research suggests three stereotypes to define what business models of future digital music services should incorporate in terms of value creation and value capture:

Social focus

In the social focus related business models, a strong emphasis is placed on social interaction to stimulate sharing and discovery of music. Additionally social interaction can result in financial benefit for the users. These models stress that the music content should be accessible from any internet enabled device, at any time, anywhere. To capture from the mentioned value proposition, pricing methods are a subscription fee and usage based billing. Furthermore, advertisement space is sold to allow some content to be offered for free.

Artist focus

These are business models that emphasise the role of the artist in the user experience, which creates a close artist – fan relationship. The music content is offered in a technically high quality fashion through a website or an application. Cooperation with radio stations should ensure a big audience for the artist and gain users for the music service. Pricing methods range from subscription fees to usage based billing as well as offering parts of the content for free.

Extra value focus

The last stereotype includes business models that incorporate a value element that is substantially different than digital music related value. These business models offer their service exclusively through a website that distributes the content in a high quality manner. Usage based pricing is the only pricing method identified for such music services. Aside from the sale of digital music and advertisement space, activities surrounding the extra value element may also serve as a source of revenue.

These stereotypes were identified by performing grounded theory analysis on business models. These business models were gathered using focus groups with people between 15 and 25 years of age. This focus group approach proved to be successful in generating a large amount of diverse, eligible business models for grounded theory analysis. Focus groups in combination with business modelling can be considered a promising method to explore new business ideas.

This research finally gave a strong impression that all three stereotypes have a chance to be successful. However, this success is strongly dependent on the proper alignment of the value chain design.

7.1 Final Remarks & Further Research

All business models, regardless their focus, suggested using an external payment service provider, using existing subscriptions or both as a payment method. The latter of the two might require further explanation. Some business models proposed bundling the cost of the music service for the customer with subscription fees which the customer is already paying. An example: if the customer already has a television subscription at a telecom company, the telecom company might charge extra in return for the use of the music service. Proposed existing subscriptions were: television, internet and phone subscriptions. The implications and opportunities for such partnerships require further research.

As the supplier of music content both artists and record labels were mentioned in the various business models. The ‘social focus’ and ‘extra value focus’ business models mentioned both as their suppliers of music. The artist focused business models however, surpass the record labels and acquire their music directly from the artists. None of those business models involved any intermediary party. When influential music services would surpass intermediaries such as record labels and distributors, a significant change in the cash flows of the entire music industry might be noticeable.

These payment method and content supplier remarks indicate that further research is required. This research should incorporate the value network and possibly the value architecture business model dimensions into the core focus of the study.

This paper tackled the investigation of new business models by taking a consumer perspective. Investigating new business models from the perspective of a different stakeholder might reveal whether these have different visions for the future of digital music services.

Finally, a quantitative financial analysis of the three stereotypes might expose the profitability for each of the stakeholders and its implications for the music industry.

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9. REFERENCES


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