Exploring the Acquisition and Consumption Behaviour of Modern Recorded Music Consumers: Findings from a Finnish Interview Study

Markus Makkonen¹, Veikko Halttunen² and Lauri Frank³

Department of Computer Science and Information Systems, University of Jyväskylä, P.O. Box 35, FI-40014, University of Jyväskylä, Finland ¹ markus.makkonen@jyu.fi, ² veikko.halttunen@jyu.fi, ³ lauri.frank@jyu.fi

Abstract: During recent years, our ways of acquiring and consuming recorded music have changed drastically. This paper provides an exploration of the acquisition and consumption behaviour of modern recorded music consumers by examining (1) how modern consumers acquire and consume recorded music, and (2) what kind of perceptions of relative advantages and disadvantages drive their usage of different acquisition channels. The paper approaches the topic from a holistic and interpretive perspective and is based on a semi-structured interview study of 14 young Finnish consumers of recorded music. The findings of the study show significant divergence in the acquisition and consumption behaviour between different consumers. They also suggest that the acquisition channel choices in the context of recorded music consumption are driven by very divergent perceptions of the relative advantages and disadvantages associated with the channels. These perceptions vary vastly from both one channel and one consumer to another. The implications of these findings for the business models of digital music stores and services are discussed in the concluding section of the paper.

Keywords: recorded music, acquisition behaviour, consumption behaviour, channel choices, interview study.

I. Introduction

During the past 10 to 15 years, our ways of acquiring and consuming recorded music have changed drastically. Whereas traditionally most music recordings were either purchased from brick-and-mortar record stores in different types of physical formats (e.g., CDs, LPs, and cassettes) or listened to for free on the radio, today the Internet has become an increasingly important acquisition channel for more and more people. This change process began already in the mid-1990s, when several online stores, such as Amazon, started selling music recordings on the Internet. This implicated significant improvements to the traditional ways of purchasing recorded music as the recordings could now be ordered online basically anytime and anywhere without visiting a brick-and-mortar record store. However, although the purchasing process was digitised, the delivery process still remained physical. In other words, the recordings were still delivered to consumers as physical products, typically through the traditional postal service. In this sense, the improvements were only incremental in relation to mail-order selling and many mail-order music clubs established already in the mid-1900s. A more radical change took place in the late 1990s, when advancements in information and communication technology (ICT) enabled the recordings to be easily and efficiently delivered over the Internet in different types of digital formats (e.g., computer files and streaming content). This disruptive innovation (cf. [1]) has since resulted in two different lines of development. On one hand, we have witnessed the emergence of novel digital music stores and services on the Internet. On the other hand, the easy and efficient digital delivery of music recordings has also resulted in an explosive growth of illegal content sharing among consumers.

Today, this illegal content sharing (i.e., digital piracy) is typically seen as a major threat to the entire recorded music industry. Many even see it as the main reason for the dramatic decrease in global recorded music sales that has continued since the turn of the millennium [2]. These arguments have also gained support from several academic studies (e.g., [3]–[11]), although some have found no empirical evidence to back them (e.g., [12]–[14]). Irrespective of what the effects of illegal content sharing on recorded music sales actually are, this type of activity still seems to be extremely prevalent in our society, especially among younger people. For example, it has been estimated that illegal file sharing totalled more than 40 billion music files in 2008, meaning that globally around 95 % of all music files were downloaded illegally [15].

In contrast, legal digital retailing has taken off much more slowly although it has shown steady growth in recent years. In 2010, sales of digital formats already accounted for 29 % of global recorded music sales, constituting a market of \$4.6 billion [16]. However, the increase in sales of digital formats has still been far too slow to offset the decrease in sales of physical formats, and there also seem to be some significant differences in the adoption and diffusion rates of digital music stores and services between different geographical areas [2]. Also the real success stories of digital music stores and services have so far remained relatively rare [17]. The reasons behind these problems are probably partly related to the prevalence of digital piracy, but many also see them relating to the technologies and business models used in the stores and services themselves, which far too seldom seem to match the fundamental consumer needs, wants, and expectations, thus resulting in low usage rates. For example, a recent study has found this to be the case with the business models of digital music distribution in the German market [17].

To address this mismatch, a considerable amount of prior research has been conducted on consumer behaviour in the context of digital music distribution. As noted in [18], three main research streams seem to have emerged. The first stream has concentrated on consumer behaviour in the context of legal music retailing and investigated issues such as the usage of digital music stores and services as well as the willingness to pay for the content sold in them. Some examples of the studies belonging to this stream include [17]–[25]. In contrast, the second stream has concentrated on consumer behaviour in the context of illegal music sharing and investigated issues such as the involvement with illegal music sharing as well as the usage of peer-to-peer (P2P) file sharing networks. Some examples of the studies belonging to this stream include [26]–[40]. The focus of the third stream has been more broadly on the comparisons and consumer choices between legal and illegal as well as digital and physical acquisition channels. This stream has been, by far, the least voluble of the three, and examples of the few available studies include [41]-[43]. As a potential fourth stream, one could also mention the studies such as [3]-[14] and [44]-[49], which have concentrated on examining the economic effects of illegal music sharing on legal music retailing as well as the structural changes in the recorded music industry. However, compared to the other streams, the focus of this stream has been more on macro-level and less on micro-level consumer behaviour.

When considering this review of prior research, two significant shortcomings seem evident. First, as exemplified by the popularity of the first two research streams, most prior studies have adopted a rather reductionist approach to the topic, concentrating on either the legal or the illegal aspects of digital music distribution. This is a major shortcoming because it may seriously oversimplify the channel choices that modern recorded music consumers are compelled to make in real life, thus leading to faulty findings and conclusions. In contrast, few prior studies have approached the topic more holistically and considered the full assortment of acquisition channels available to modern recorded music consumers. Second, prior studies have also been dominated by quantitative research and the positivist paradigm of consumer research (cf. [50]), which has typically aimed at generating law-like generalisations about the examined phenomena. Although these studies have provided many valuable findings, especially in terms of their explanatory and predictive power, they have not necessarily been optimal in increasing our understanding of the topic. For example, we may have gained the knowledge that concepts like perceived usefulness and perceived ease of use increase our intentions to purchase music online [18], [19], but the meaning of these concepts in the context of digital music distribution has remained rather poorly understood. To gain a richer understanding, we see that more qualitative research adhering to the interpretive paradigm of consumer research (cf. [50]) is desperately needed.

In this paper, we aim at addressing both of these two shortcomings by adopting a more holistic and interpretive approach to the topic. In other words, our objective is to consider the full assortment of acquisition channels available to modern recorded music consumers and to concentrate on the behavioural patterns and preferences of using them as well as on the fundamental motivational factors that drive their usage. Of these fundamental motivational factors, we will focus specifically on the perceptions of the relative advantages and disadvantages associated with the channels and their usage, which have commonly been found as important factors in explaining and predicting human behaviour. For example, Rogers [51] suggests that the perceptions of the relative advantages (or disadvantages) of an innovation are one of the most important attributes affecting its adoption and diffusion. The more advantageous (or disadvantageous) an innovation is perceived in relation to the idea or object it supersedes, the faster (or slower) it is assumed to spread in a social system. Respectively, Fishbein and Ajzen [52]-[56] posit in their theory of reasoned action (TRA) and theory of planned behaviour (TPB) that our beliefs on the advantages and disadvantages of performing a behaviour (i.e., our beliefs on the behavioural outcomes) determine our attitudes towards the behaviour, which, in turn, affect our behavioural intentions and actual behaviour. The same idea is also applied in the various extensions of TRA and TPB, such as the technology acceptance model (TAM) by Davis [57], [58] and the unified theory of acceptance and use of technology (UTAUT) by Venkatesh et al. [59], although in these models and theories, the beliefs on the advantages and disadvantages are typically referred to using different terminology, such as perceived usefulness or performance expectations.

Thus, our explicit research questions can be formulated as follows: (1) how do modern consumers acquire and consume recorded music, and (2) what kind of perceptions of relative advantages and disadvantages drive their usage of different acquisition channels? The examination of these two research questions is based on a semi-structured interview study of 14 young Finnish consumers of recorded music conducted in September 2009.

The paper is composed of six main sections. After this introductory section, we will propose a categorisation for the acquisition channels of recorded music in Section II. Section III describes the methodology of the study, and the findings of the study are reported in Section IV. Section V discusses the most important findings and draws conclusions from them, especially concerning the business models of digital music stores and services. Finally, the limitations of the study and potential paths of future research are considered in Section VI.

II. Acquisition Channels of Recorded Music

Before moving on to the methodology and findings of the interview study, we will first propose a framework for categorising the acquisition channels of recorded music. This framework was used as a conceptual basis for designing the interview instrument as well as analysing the interview data. The framework obviously presents only one possible way for conducting such categorisation, but we consider it to be the most unambiguous and understandable from the perspective of an average recorded music consumer. A similar framework has been previously proposed in [41] as a part of a more extensive model for music acquisition behaviour.

In the framework, the acquisition channels of recorded music are classified into four distinct categories by using two dichotomous dimensions: tangibility and chargeability (Figure 1). Tangibility refers to whether music content is delivered to consumers on tangible physical carriers (e.g., CDs, LPs, or cassettes) or as intangible digital deliverables (e.g., computer files or streaming content). Respectively, chargeability refers to whether consumers have to pay a monetary charge for the content or whether the content is free of charge to them. As it was already mentioned above, these two dimensions were chosen because we consider them to be the most unambiguous and understandable from the perspective of an average recorded music consumer when compared with other possible dimensions, such as the legality of the content. For example, there is typically very little doubt for consumers whether or not they have to pay for the content that is acquired through some specific channel or whether the content is delivered to them on physical carriers or as digital deliverables. In contrast, there is typically much more doubt related to the legality of the content, especially if the channel is not controlled by an administrative authority that explicitly enforces this issue.



Figure 1. Framework for categorising the acquisition channels of recorded music

The resulting four categories are paid tangible channels, paid intangible channels, free intangible channels, and free tangible channels. Typical examples of *paid tangible channels* are the traditional brick-and-mortar and online record stores that sell and deliver music recordings as different types of physical carriers, such as CDs, LPs, or cassettes. Respectively, *paid intangible channels* are exemplified by the novel digital music stores and services that sell and deliver music recordings as different types of digital deliverables over the Internet. These stores and services can base their operations on many different technologies and business models. Today, most operate as music download stores, music subscription services, or their hybrids, but also other operation models exist [60].

Music download stores are online stores that sell music as downloadable files on a pay-per-download (or à la carte) basis. In other words, they charge a separate fee for each downloaded file. The files typically conform to some common audio file format, such as AAC, MP3, or WMA, and have traditionally been protected by some digital rights management (DRM) system. In recent years, however, there has been a strong shift from DRM-protected music towards DRM-free music (e.g., [61]). A good example of music download stores is the iTunes Store, which was launched by Apple in April 2003 and has since grown into one of the largest music retailers in the world [62], [63]. In 2010, Apple announced that the iTunes Store had sold more than 10 billion songs and had a music catalogue of more than 12 million songs [64].

Music subscription services are online services that also sell music as downloadable files, or alternatively as streaming content, but operate on a subscription (or buffet) basis. In other words, they only charge a flat subscription fee that typically entitles use of the service without further charges for a fixed amount of time. A good example of music subscription services is Spotify, a Swedish service launched in October 2008, which, in 2010, had more than 10 million subscribers across Europe and a music catalogue of more than 10 million songs [65]-[67]. Spotify actually incorporates several of our categories into the same service because its "freemium" business model includes two different types of subscriptions: free advertisement-supported subscriptions and paid premium subscriptions for €4.99 or €9.99 per month [68]. However, the latter subscriptions constituted less than 10 % of Spotify's subscription base in 2010 [66]. In addition, Spotify offers the possibility to purchase songs and albums via its partnership with 7digital [69].

The category of *free intangible channels* is the most divergent of the four, and it can be further divided into two distinct subcategories. First, there are the traditional radio stations that broadcast their programmes either nationally or internationally. Second, there are the various free online sources that deliver music content digitally over the Internet. Traditionally, many of these latter sources, such as P2P file sharing networks, have been associated with illegal content sharing. Today, however, many of them operate without committing any copyright infringements. Online radio stations are one example of this, and the free advertisement-supported subscriptions of Spotify and other music subscription services can be used as another.

The category of *free tangible channels* is, by far, the least common of the four, and it is not discussed further in this paper. Examples of the sources belonging to this category are promotional products handed out as a part of some advertising and marketing campaigns as well as illegal disc and cassette copying among consumers.

III. Methodology

To answer the two research questions presented in Section I, we conducted an interview study that explored the acquisition and consumption behaviour of 14 young Finnish consumers of recorded music. The interviews were semi-structured, so instead of having a long list of questions that would be asked from the interviewees in a standardised manner, we only had a short list of themes with a few open-ended questions that we discussed with them. The usage of a semi-structured method instead of a structured method derived from our previously discussed desire to explore the topic using a holistic and interpretive approach. To do this, we needed an interview instrument that could be adapted according to each individual interviewee so that in-depth data about his or her behavioural patterns, preferences, and drivers could be gathered. At the same time, we avoided employing an entirely unstructured method to maintain comparability between the argumentation given by different interviewees.

The discussed themes were derived from the framework illustrated in Figure 1, and they covered the consumption of content products as well as the acquisition of content products through free and paid intangible channels as well as paid tangible channels. As important background information, we also discussed with the interviewees their usage of computers and the Internet, especially in terms of online shopping. Other themes that were discussed during the interviews covered the role of communality and recommendations in content acquisition as well as the sharing of content products and digital piracy. However, these themes are not discussed in detail in this paper. A more detailed discussion on the sharing of content products and digital piracy is available in [70].

The interviewees were recruited by sending an invitation e-mail to two student associations of our university, which together represented the undergraduate students majoring in sociology, social politics, social work, mathematics, physics, and mathematical information science. The e-mail disclosed the topic of the interview study and promised a free cinema ticket as compensation for participation. We received about 30 applications and, due to our limited research resources, eventually decided to recruit seven male and seven female interviewees. The recruitment strategy was to maximise the representativeness of the sample in terms of gender and age. Apart from these two demographic variables, the interviewees were picked randomly from the pool of applicants.

Table 1. Descriptive statistics of the sample

Interviewee	Gender	Age	Income	Status
Interviewee 1	Woman	19	€600	Student
Interviewee 2	Woman	22	€600	Student
Interviewee 3	Woman	23	€500	Student
Interviewee 4	Woman	23	€500	Student
Interviewee 5	Woman	23	€700	Student
Interviewee 6	Woman	25	€700	Student
Interviewee 7	Woman	28	€1 500	Working
Interviewee 8	Man	20	€400	Student
Interviewee 9	Man	21	€500	Student
Interviewee 10	Man	23	€500	Student
Interviewee 11	Man	24	€500	Student
Interviewee 12	Man	24	€500	Student
Interviewee 13	Man	26	€700	Student
Interviewee 14	Man	31	€2 000	Working

Table 1 presents descriptive statistics of the sample. Because the interviewees were recruited through the two student associations, 12 of them were still full-time undergraduate students and only two of them were working full-time. Their ages varied from 19 to 31 years (mean 23.7 years), and their monthly net income varied from $\notin 400$ to $\notin 2\ 000$ (mean $\notin 729$). Overall, all the interviewees were relatively experienced users of computers and the Internet. They all owned a computer and used it several hours a day for tasks like communicating, studying, reading news, listening to music, watching films, and playing games. They all also had at least some experience in online shopping, and most made purchases online at least a couple of times per year. The purchased products were mainly physical content products, such as books, CDs, and DVDs.

Before the actual interviews, the interview instrument was pre-tested with two postgraduate students and, based on the received feedback, a few minor modifications were made. The actual interviews were arranged at the university campus in September 2009, and they lasted from 49 to 99 minutes (mean 71 minutes). All the interviews were recorded, and both principle authors were present during them and participated in their analysis to promote reliability and validity. The analysis was conducted in two phases and followed the general guidelines given in [71] and [72]. In the first phase, the relevant parts of the recorded interviews were transcribed and coded to associate the interview segments with the themes. In the second phase, the interview segments associated with the themes were analysed and interpreted in more detail to answer the two research questions. This was done iteratively and by following both deductive and inductive approaches. In other words, several rounds of analysis and interpretation were required to find the categories that described the relative advantages and disadvantages of the acquisition channels at an appropriate abstraction level, and this search was guided by both the framework illustrated in Figure 1 and the data. The framework defined the categories of the acquisition channels with which the relative advantages and disadvantages were associated, whereas the categories for the relative advantages and disadvantages themselves were derived from the data. Although the analysis and interpretation process primarily concentrated on the diversity of the argumentation given by different interviewees, we also recorded the frequencies of these arguments to add some quantification to our otherwise qualitative data. The findings of this process are reported in the following section.

IV. Findings

The findings of the interview study are briefly reported in the following three subsections. Subsection A concentrates on the consumption of recorded music, whereas Subsections B and C concentrate on the acquisition of recorded music through free and paid intangible channels as well as paid tangible channels.

A. Consumption of Recorded Music

Overall, all the interviewees were relatively active consumers of recorded music. They typically listened to music at least a couple of hours per day by using car and home stereo sets, mobile music players, mobile phones, and computers. The most popular listening devices seemed to be computers, followed by mobile music players and car stereo sets. Only two interviewees actively used a mobile phone for listening to music, and most interviewees had copied their entire music collection from CDs to computers and therefore no longer used (or even owned) a home stereo set. According to the interviewees, the most significant relative advantage of computers, compared to car and home stereo sets, was the convenience in which music could be listened to. For example, there was no longer need to swap discs and cassettes, and it was easy to create one's own personalised playlists and compilations. The most significant relative disadvantage was that computers were typically more difficult to use and slower to start up than car and home stereo sets. Also their audio quality was seen as inferior to hi-fi stereo sets.

In addition to consuming recorded music, most interviewees visited live music concerts and festivals at least a couple of times per year. Many also considered themselves eager music enthusiast, played one or more musical instruments, and were acquainted with amateur or semi-professional musicians.

B. Acquisition through Free Intangible Channels vs. Paid Intangible Channels

Intangible channels were actively used by almost all the interviewees for acquiring recorded music. Only one of the interviewees mentioned being a relatively inactive user of both traditional radio stations and novel online channels, whereas all the others used them on a daily or weekly basis. Most of the used channels were free channels. Paid channels had been used by only two interviewees, who both had made purchases in a music download store (iTunes Store and Nokia Music Store). None of the interviewees currently had a paid subscription to a music subscription service. Free channels had been used by all the interviewees, and the most popular ones were traditional radio stations, Spotify, and P2P file sharing networks. Other popular free channels were online radio stations and social network services, such as MySpace. Many interviewees also mentioned listening to music on YouTube.

Traditional radio stations were actively listened to by about half of the interviewees, especially as background music when at home or work, or when in a car. Spotify was actively used by seven interviewees. All of them were currently using the free subscription, but five of them were willing to consider upgrading to the paid subscription for €10 per month if the free subscription suddenly became unavailable. Six interviewees admitted that they were active users of P2P file sharing networks (BitTorrent, Direct Connect, and Soulseek) and that they mainly used them for illegal music content acquisition. Half of them were using P2P file sharing networks as their primary acquisition channel, whereas the other half were complementing their usage of other tangible and intangible channels. However, an additional seven interviewees admitted that they had been using P2P file sharing networks or other free online channels for illegal music content acquisition in the past but were no longer actively using them. When we asked about the reasons for this, five interviewees mentioned the availability of legal free online channels, such as Spotify, as the main reason. Other reasons mentioned were related to changes in ethical and moral considerations as well as in technological resources (e.g., slower Internet connectivity).

To explore the reasons why so many interviewees preferred free to paid when using intangible channels, we next asked the interviewees about their perceptions of the advantages and disadvantages of paid intangible channels in relation to free intangible channels. Not surprisingly, the most significant relative disadvantage of paid intangible channels seemed to be the necessity to pay for the acquired music content. This was perceived as a disadvantage for two different kinds of reasons. On one hand, some interviewees were unwilling to pay for the content because of obvious monetary reasons. They either did not have much money to spend on entertainment content like music, perceived the current digital deliverables as being overpriced compared to the value they provided, or simply saw no reason in paying for something that could also be acquired for free. The negative effects of monetary costs and price on the usage of digital music stores and services have also been highlighted in prior studies, such as [18] and [19]. On the other hand, some interviewees were unwilling to pay for the content because of the reasons related to payment processes and payment methods. They either perceived the current payment processes implemented in digital music stores and services as too complex or not secure and scalable enough, or were not offered a payment method that they could use (e.g., many interviewees did not yet own a credit card).

Two other significant relative disadvantages of paid intangible channels concerned usability and music selection. These issues have been found important to many consumers also in prior studies (e.g., [17], [20]), although some have found ease of use having no direct effects on the usage of digital music stores and services (e.g., [18], [19]). Overall, many interviewees perceived the current digital music stores and services providing poor usability and an inadequate music selection, particularly when compared with the most popular free online channels, such as Spotify and P2P file sharing networks. The only significant exception to this seemed to be the iTunes Store, which several interviewees praised for its ease of use and ample music selection. The issues concerning usability were mainly related to complex payment processes and to the fact that most of the digital music stores and services the interviewees had encountered were file-based and relied on web browser interfaces instead of separate client software. This tends to make the stores and services easy to trial but difficult to use because the users have to manually perform many file management operations, such as uncompressing compressed files as well as copying and moving them from one folder to another. Separate client software typically relieves the users from these kinds of operations by performing them automatically, but at the expense of reduced trialability. The issues concerning music selection were mainly related to its inadequacy in regard to the absolute number of songs and albums available as well as in regard to the availability of the most recent hits and rarities.

Another relative disadvantage of paid intangible channels concerned content sampling. Also this issue has been found important to many consumers in prior studies (e.g., [17], [20]). Many interviewees thought that the current pre-listening possibilities implemented in digital music stores and services were insufficient and sidestepped this shortcoming by using free online channels, which offered them better possibilities to sample unfamiliar music. If new favourites were found, they were typically acquired also through paid tangible channels later on. This finding would seem to give support to the potentially positive effects of content sampling on recorded music sales suggested in [73] and [74].

Only two interviewees mentioned DRM as a major relative disadvantage of paid intangible channels. This was a slightly surprising finding because most of the content sold in digital music stores and services has traditionally been protected by some DRM system, and consumers have typically been taking negative stands towards the restrictions that DRM may impose on the fair use and fair trade of the content [17]. Of course, the finding can, to some extent, be explained by the recent strong shift from DRM-protected music towards DRM-free music (e.g., [61]) as well as by the fact that most interviewees had quite limited experience and knowledge of paid intangible channels. For example, nine interviewees could not recall ever encountering DRM-protected music, and some were not even aware of its existence. Because of their limited experience and knowledge, few interviewees also had a strong stand for or against DRM. When specifically asked about these stands, about half of the interviewees expressed positive or neutral attitudes towards them, whereas the attitudes expressed by the other half were much more negative. Some even referred to DRM systems as an outright waste of resources that will only increase illegal content sharing instead of decreasing it. In addition to strict restrictions on copying and moving music content between different devices and burning it onto CDs, the interviewees also took quite a negative stand towards softer monitoring measures, such as digital watermarking. However, many still preferred them to strict restrictions.

The most significant relative advantage of paid intangible channels was assurance about the fact that they conformed to the current copyright legislation. Thus, they were seen as less risky to use in terms of legal sanctions as well as ethically and morally more acceptable than many free intangible channels, particularly P2P file sharing networks. In the case of P2P file sharing networks, some interviewees were also concerned about malware and viruses, but these concerns were not shared by all the interviewees. Others were more concerned about the overall quality of the acquired content, but this applied more to video content than to music content. In the case of some free intangible channels, excessive advertising was also seen as a disadvantage by some interviewees, but this view was once again not shared by all the interviewees. For example, whereas two interviewees were irritated by the advertisements included in the free advertisement-supported subscriptions of Spotify, all the others were more than willing to tolerate them as long as the subscriptions remained free of charge. Many even thought that the amount of the advertisements was exceptionally low compared to several other free intangible channels, such as commercial radio stations.

Finally, we asked the interviewees about their ideas and insights on how paid intangible channels should be developed in the future. Many considered that the most important thing would be to make the channels as easy to use and offering as good a music selection as channels like the iTunes Store, Spotify, and P2P file sharing networks. One suggested way for achieving this could be to combine the numerous small digital music stores and services found today into one or a few larger entities, which would offer consumers a great selection of music as well as a better selection of payment methods and pricing policies. Some even suggested special pricing schemes for youngsters, students, and other consumer segments with limited income. One interviewee thought that the stores and services should advertise themselves more, both on the Internet and on traditional media. Others considered that the number of intermediaries between consumers and artists should be dramatically cut down so that the artists would be more directly remunerated for their work. Also the stores and services run by the artists themselves were seen as a good idea.

C. Acquisition through Paid Tangible Channels vs. Paid Intangible Channels

Surprisingly many interviewees were still using paid tangible channels for acquiring recorded music. Eight interviewees were using these channels actively, although for only one of them, they were used as the primary acquisition channel. For the other six interviewees, they were used along with free and paid intangible channels. The frequency of using paid tangible channels varied vastly among the interviewees. For example, whereas most interviewees were purchasing a couple of CDs per year, one interviewee was purchasing the same amount of CDs per month. The most popular purchasing places were traditional brick-and-mortar and online record stores, such as Amazon, CDON.com, and Play.com. The purchased CDs were mainly those of familiar or favourite artists, and many interviewees also mentioned having purchased the same music that they had already acquired earlier through free online channels, such as Spotify and P2P file sharing networks.

To explore the reasons why paid tangible channels were still used so actively, we once again asked the interviewees about their perceptions of the advantages and disadvantages of paid intangible channels, but this time in relation to paid tangible channels. Many of the relative advantages of paid intangible channels were similar to those found in prior studies on online shopping (cf. [75], [76]). However, also some advantages deriving more directly from the immateriality of digital deliverables were mentioned. Many of these were similar to those previously found in [21]. The most significant relative advantage was the convenience in which music recordings could be purchased and the immediacy in which they could be delivered to consumers. In other words, it was no more necessary to visit a brick-and-mortar record store, but the recordings could be ordered basically anytime and anywhere, and were typically delivered in a matter of seconds. Also the music selection of digital music stores and services was seen as superior compared to that of an average brick-and-mortar record store, and there was no more danger of out-of-stock situations. Many interviewees also considered the lower prices of digital deliverables an advantage, although others thought that the prices should be even lower when taking into account the savings in their reproduction and delivery costs (some estimates of these savings are presented in [46]). According to them, the prices of downloadable files should be about $\notin 0.50$ per song and from €5 to €10 per album, whereas the prices of subscription services should be from €10 to €20 per month. Similar willingness to pay for single songs has been found in prior studies, such [17] and [23].

Another relative advantage of paid intangible channels was the possibility to purchase single songs in addition to full albums, which made it possible to acquire music content more selectively. However, this advantage was not appreciated by all the interviewees, and some still preferred purchasing full albums instead of single songs because they perceived albums as works of art which should not be split into pieces. Many interviewees also appreciated the immateriality of digital deliverables, which makes their carriage and storage easier and can be considered friendlier for the environment.

Paradoxically, the immateriality of digital deliverables and the absence of physical carriers also seemed to be the most significant relative disadvantage of paid intangible channels. For example, only one interviewee was more or less willing to totally cast aside physical carriers, whereas all the others still wanted to keep them around for one reason or another. For some, these reasons were mainly habitual, but also many other reasons were mentioned. For example, some interviewees preferred CDs because they contained music content in an uncompressed format. This not only offered them the best available audio quality (found important to many consumers also in [20]) but allowed them to copy the content from CDs to other media by using the compression rates and formats of their own choosing. Others preferred physical carriers for more emotional and materialistic reasons, such as the lower emotional value of digital deliverables (cf. [77]) and the sense that they were somehow not getting their money's worth when purchasing purely immaterial products. Yet for others, the reasons were more related to the symbolic and status value of possessions and their linkages to sense of self (cf. [78], [79]). For them, the visible ownership of a physical carrier or a collection of physical carriers was important because it expressed something of their owners. In other words, "[seeing somebody's music collection] tells you many things about that person", as phrased by one interviewee. There were also those who preferred physical carriers and their packaging for more aesthetic and artistic reasons. For them, disc and cover artwork were not only beautiful to look at but "an integral part of a work of art", as phrased by another interviewee.

Surprisingly many interviewees were also concerned about the perishability of digital deliverables. For example, what would happen if they encountered technical troubles while downloading the files or if their hard drive broke down? Could the files be re-downloaded and how easy or hard would this be? Others were more concerned about the perishability of entire stores and services. For example, what would happen if they needed to re-download the files from a store that no longer existed? Or if a service shut down after they had already paid the subscription fee? These concerns actually seemed to be the most significant risks that the interviewees associated with digital music stores and services. In contrast, security and privacy risks as well as more traditional trust issues, which have been found important to many consumers in prior studies (e.g., [18], [20]), seemed to worry few interviewees.

Some interviewees also preferred physical carriers because of better compatibility with their current music consumption practices as well as fewer interdependencies with computers and Internet connectivity. The latter issue was emphasised especially in the case of streaming services, which is why most interviewees favoured file-based services if having to choose between these two. Many interviewees were also interested in hybrid services, which would mainly be streaming-based but would allow some music content to be cached locally.

V. Discussion and Conclusions

In this paper, we provided an exploration of the acquisition and consumption behaviour of modern recorded music consumers by examining (1) how modern consumers acquire and consume recorded music, and (2) what kind of perceptions of relative advantages and disadvantages drive their usage of different acquisition channels. The exploration approached the topic from a holistic and interpretive perspective and was based on a semi-structured interview study of 14 young Finnish consumers of recorded music. The findings of the study showed some significant divergence in the ways the interviewees acquired and consumed recorded music. They also provided interesting particulars on the usage patterns and preferences of different acquisition channels. For example, although novel online channels were already actively used by almost all the interviewees, most of the used channels were free channels. In contrast, the usage of paid channels remained relatively rare. Paid tangible channels, in turn, still remained surprisingly popular among the interviewees. In other words, it seemed that most interviewees still resorted to CDs and other physical carriers when they were actually willing to pay for the acquired music content.

This finding has some important implications for the business models of digital music stores and services. Most importantly, if the objective is to maximise the usage of digital music stores and services in particular, the business models should concentrate on competing for potential users not only against free intangible channels but also against paid tangible channels. Of course, this may not necessarily be the objective. For example, for many record companies, it may be sufficient that consumers acquire music content through paid channels, irrespective of whether they are tangible or intangible. However, if we are ourselves running a digital music store or service, our objectives are likely to be different. In this case, the business models should aim at three different targets. First, they should attempt to convert the users of free intangible channels into the users of paid channels, but without reverting them into the users of tangible channels. Second, they should attempt to convert the users of paid tangible channels into the users of intangible channels, but without converting them into the users of free channels. Third, they should also aim at retaining these users. These three targets can be best achieved by business models which accentuate the advantages and address the disadvantages of paid intangible channels in relation to both free intangible channels and paid tangible channels, not only one of these categories.

Some of these disadvantages are quite straightforward (although not necessarily simple) to address. For example, if the disadvantages concern the poor usability as well as the limited music selection and sampling possibilities of digital music stores and services in relation to free online channels, these issues should obviously be given more attention in their business models. However, there are also disadvantages that cannot be addressed so straightforwardly. Two examples of these are the necessity to pay for the acquired music content as well as the absence of physical carriers on which the acquired music content is stored. These disadvantages are especially problematic because they cannot be entirely eliminated if one wants the channels to remain paid and intangible. However, they can still be significantly alleviated by addressing the reasons why the necessity to pay and the absence physical carriers are perceived as relative disadvantages of paid intangible channels (cf. Subsections B and C of Section IV).

For example, when considering the reasons why the necessity to pay is perceived as a disadvantage, it is important to realise that these reasons may relate not only to monetary aspects but also to problems concerning payment processes and payment methods. Therefore, the competition strategies against free intangible channels should concentrate not only on pricing policies and price reductions but also on making the payment processes of digital music stores and services as easy, secure, and scalable as possible as well as making sure that all consumers who are actually willing to pay for the acquired music content are offered a payment method that they can use. Here, it is important to note that price reductions also do not necessarily have to translate into significant reductions in the revenues of the stores and services, but their effects can often be offset by resorting to alternative revenue sources, such as advertising and merchandising.

Respectively, when considering the reasons why the absence of physical carriers is perceived as a disadvantage, it is important to take into account all the different aspects that were mentioned in Subsection C. For example, if the reasons are related to audio quality, a suitable strategy might be to offer consumers the possibility to acquire digital deliverables also in an uncompressed format, or at least offer them more choices in compression rates and formats. If, in turn, the reasons are related to the perishability of digital deliverables, a suitable strategy might be to offer consumers less restrictive re-download policies. And if the reasons are more related to materialistic, emotional, aesthetic, and artistic aspects as well as to symbolic and status value, a suitable strategy might be to make the ownership of digital deliverables more visible and to ensure that their value proposition matches or preferably exceeds that of physical carriers. This could be achieved, for example, by bundling the content sold in digital music stores and services with digital replicas of the accessories that have traditionally been bundled with physical carriers, such as lyrics and liner notes as well as cover and disc artwork. Of course, these accessories do not necessarily have to be mere replicas of their physical counterparts, but they can be enhanced with interactive and value-added features as it is done in formats like Apple's iTunes LP [80]. Instead of this strategy, an entirely opposite strategy could be to respect the attachment that many consumers still seem to show towards physical carriers and not to compel them to substitute physical carriers for digital deliverables. In other words, music content would still be delivered to consumers on physical carriers, and digital deliverables would only be used to complement this offering in issues like content sampling.

Another interesting finding of the study was that the acquisition channel choices of the interviewees seemed to be driven by very divergent perceptions of the relative advantages and disadvantages associated with the channels. Some of these advantages and disadvantages were more utilitarian in nature, whereas others derived from hedonic or symbolic evaluations. The perceptions also varied vastly from one interviewee to another, as did the reasons why specific aspects of the channels were perceived as either advantages or disadvantages (cf. the reasons why the necessity to pay was perceived as a disadvantage of paid intangible channels). There were also cases in which a specific aspect was seen as an advantage by one interviewee but as a disadvantage by another interviewee. In some cases, a specific aspect was even seen as a source of both advantages and disadvantages by the very same interviewee (cf. the advantages and disadvantages related to the absence of physical carriers).

Also this finding has some important implications for the business models of digital music stores and services. Most importantly, it seems that the acquisition channel choices in the context of recorded music consumption are far from being as simple and straightforward processes as they have often been portrayed in prior research. On the contrary, they appear to be extremely complex processes in which there exists considerable divergence from both one channel and one consumer to another. This complexity and divergence should be taken into better account in the business models of digital music stores and services. In other words, if the stores and services want to target very broad consumer segments with very heterogeneous behavioural patterns, preferences, and drivers, they have to be very flexible. This flexibility, which has previously been highlighted in [21], should cover all the essential elements of their business models, ranging from minor operational details to major strategic decisions as well as from technical to business domains. Of course, some stores and services may opt to target narrower consumer segments with more homogeneous behavioural patterns, preferences, and drivers, in which case flexibility may not be as important in their business models.

In conclusion, it seems that the recent increase in the assortment of acquisition channels has drastically changed our ways of acquiring and consuming recorded music. Overall, our acquisition and consumption behaviour has become more and more divergent and this divergence is also reflected in the fundamental motivational factors that drive our behaviour. This paper provided illustrations of this divergence in the case of 14 young Finnish consumers of recorded music. However, a much better understanding of the acquisition and consumption behaviour as well as its drivers is desperately needed when crafting future business models and success stories for digital music retailing. After all, how could we have hope in fulfilling the fundamental consumer needs, wants, and expectations without first understanding what they actually are?

VI. Limitations and Future Research

We consider our study having three main limitations. The first one stems from the small size and homogeneity of the sample. Because we only interviewed 14 young Finnish consumers of recorded music, most of whom were undergraduate students in their early 20s, the generalisability of our findings and conclusions obviously remains rather limited. It is further limited by the fact that most interviewees were quite highly involved with music, which may also partly explain their high involvement with physical carriers [43]. However, as it is typically the case with the interpretive paradigm of consumer research (cf. [50]), this kind of generalisability was not our main objective. Moreover, we do not consider it a critical limitation, especially in terms of our findings and conclusions concerning the complexity and divergence of the acquisition channel choices. If in our small and homogenous sample we could find a multitude of factors affecting these choices, it can be reasonably assumed that even more of these factors would have been found if a larger and more heterogeneous sample had been used instead.

Second, most interviewees had quite limited experience and knowledge of paid intangible channels, which is why their conceptions of them seemed to be based more on subjective perceptions and beliefs than on objective facts. However, also this limitation cannot be considered very critical because, as emphasised already by the early Chicago School of Sociology, human behaviour is often based more on perceptions than on facts [51]. This same idea is also applied in the TRA and TPB by Fishbein and Ajzen [52]–[56], which posit beliefs as the main antecedents of our attitudes and, consequently, our behavioural intentions and actual behaviour. Therefore, it is the perceptions and beliefs of the relative advantages and disadvantages associated with the channels, not the facts on them, which are likely to matter the most when making the acquisition channel choices.

Third, in addition to the perceptions of relative advantages and disadvantages, there are also other factors that may affect the acquisition channel choices. These include the perceptions of compatibility, complexity, trialability, and observability suggested by Rogers [51] as well as subjective norm and perceived behavioural control included in the TRA and TPB by Fishbein and Ajzen [52]–[56]. The effects of these factors were not explicitly examined in this study but should be given more consideration in future research.

We consider that one potential path of future research, one that is perhaps the most natural, could be to conduct similar interview studies using larger and more heterogeneous samples to see what kind of additional perceptions of the relative advantages and disadvantages associated with the acquisition channels could be discovered. Another potential path of future research could be to resort to the positivist paradigm of consumer research (cf. [50]) and to statistically study the relative significance of these perceptions in terms of their effects on the usage of the channels.

Acknowledgment

The authors wish to thank all the interviewees who took part in the study for their time and effort.

References

- C. M. Christensen, *The Innovator's Dilemma: When* New Technologies Cause Great Firms to Fail. Boston, MA: Harvard Business Press, 1997.
- [2] IFPI, "Recording Industry in Numbers," 2010.
- [3] D. Blackburn, "On-line Piracy and Recorded Music Sales," Working paper, Department of Economics, Harvard University, Cambridge, MA, 2004.
- [4] M. Peitz and P. Waelbroeck, "The Effect of Internet Piracy on Music Sales: Cross-Section Evidence,"

Review of Economic Research on Copyright Issues, vol. 1, no. 2, pp. 71–79, 2004.

- [5] S. J. Liebowitz, "File-Sharing: Creative Destruction or Just Plain Destruction?" *Journal of Law and Economics*, vol. 49, no. 1, pp. 1–28, 2006.
- [6] N. J. Michel, "The Impact of Digital File Sharing on the Music Industry: An Empirical Analysis," *Topics in Economic Analysis & Policy*, vol. 6, no. 1, article 18, 2006.
- [7] R. Rob and J. Waldfogel, "Piracy on the High C's: Music Downloading, Sales Displacement, and Social Welfare in a Sample of College Students," *Journal of Law and Economics*, vol. 49, no. 1, pp. 29–62, 2006.
- [8] A. Zentner, "Measuring the Effect of File Sharing on Music Purchases," *Journal of Law and Economics*, vol. 49, no. 1, pp. 63–90, 2006.
- [9] S.-H. Hong, "The recent growth of the internet and changes in household-level demand for entertainment," *Information Economics and Policy*, vol. 19, no. 3–4, pp. 304–318, 2007.
- [10] S. J. Liebowitz, "Testing File Sharing's Impact on Music Album Sales in Cities," *Management Science*, vol. 54, no. 4, pp. 852–859, 2008.
- [11] J. Waldfogel, "Music file sharing and sales displacement in the iTunes era," *Information Economics and Policy*, vol. 22, no. 4, pp. 306–314, 2010.
- [12] F. Oberholzer-Gee and K. Strumpf, "The Effect of File Sharing on Record Sales: An Empirical Analysis," *Journal of Political Economy*, vol. 115, no. 1, pp. 1–42, 2007.
- [13] J. McKenzie, "Illegal Music Downloading and Its Impact on Legitimate Sales: Australian Empirical Evidence," *Australian Economic Papers*, vol. 48, no. 4, pp. 296–307, 2009.
- [14] B. Andersen and M. Frenz, "Don't blame the P2P file-sharers: the impact of free music downloads on the purchase of music CDs in Canada," *Journal of Evolutionary Economics*, vol. 20, no. 5, pp. 715–740, 2010.
- [15] IFPI. (2009). Digital Music Report 2009. Available: http://www.ifpi.org/content/library/DMR2009.pdf
- [16] IFPI. (2011). Digital Music Report 2011. Available: http://www.ifpi.org/content/library/DMR2011.pdf
- [17] M. Amberg and M. Schröder, "E-business models and consumer expectations for digital audio distribution," *Journal of Enterprise Information Management*, vol. 20, no. 3, pp. 291–303, 2007.
- [18] M. Bounagui and J. Nel, "Towards understanding intention to purchase online music downloads," *Management Dynamics*, vol. 18, no. 1, pp. 15–26, 2009.
- [19] C.-W. Chu and H.-P. Lu, "Factors influencing online music purchase intention in Taiwan: An empirical study based on the value-intention framework," *Internet Research*, vol. 17, no. 2, pp. 139–155, 2007.
- [20] O. Kunze and L.-W. Mai, "Consumer adoption of online music services: The influence of perceived risks and risk-relief strategies," *International Journal of Retail & Distribution Management*, vol. 35, no. 11, pp. 862–877, 2007.
- [21] M. Styvén, "Exploring the Online Music Market: Consumer Characteristics and Value Perceptions," Ph.D. thesis, Department of Business Administration

and Social Sciences, Luleå University of Technology, Luleå, Sweden, 2007.

- [22] S. W. Kwong and J. Park, "Digital music services: consumer intention and adoption," *Service Industries Journal*, vol. 28, no. 10, pp. 1463–1481, 2008.
- [23] E. P. Chiang and D. Assane, "Estimating the Willingness to Pay for Digital Music," *Contemporary Economic Policy*, vol. 27, no. 4, pp. 512–522, 2009.
- [24] T. Regner and J. A. Barria, "Do consumers pay voluntarily? The case of online music," *Journal of Economic Behavior & Organization*, vol. 71, no. 2, pp. 395–406, 2009.
- [25] G. Jeong and J. Lee, "Estimating consumer preferences for online music services," *Applied Economics*, vol. 42, no. 30, pp. 3885–3893, 2010.
- [26] S. Bhattacharjee, R. D. Gopal, and G. L. Sanders, "Digital Music and Online Sharing: Software Piracy 2.0?" *Communications of the ACM*, vol. 46, no. 7, pp. 107–111, 2003.
- [27] R. D. Gopal, G. L. Sanders, S. Bhattacharjee, M. Agrawal, and S. C. Wagner, "A Behavioral Model of Digital Music Piracy," *Journal of Organizational Computing and Electronic Commerce*, vol. 14, no. 2, pp. 89–105, 2004.
- [28] J.-S. Chiou, C.-y. Huang, and H.-h. Lee, "The Antecedents of Music Piracy Attitudes and Intentions," *Journal of Business Ethics*, vol. 57, no. 2, pp. 161–174, 2005.
- [29] A. d'Astous, F. Colbert, and D. Montpetit, "Music Piracy on the Web – How Effective Are Anti-Piracy Arguments? Evidence from the Theory of Planned Behaviour," *Journal of Consumer Policy*, vol. 28, no. 3, pp. 289–310, 2005.
- [30] C.-Y. Huang, "File Sharing as a Form of Music Consumption," *International Journal of Electronic Commerce*, vol. 9, no. 4, pp. 37–55, 2005.
- [31] S. Al-Rafee and T. P. Cronan, "Digital Piracy: Factors that Influence Attitude Toward Behavior," *Journal of Business Ethics*, vol. 63, no. 3, pp. 237–259, 2006.
- [32] E. P. Chiang and D. Assane, "Determinants of music copyright violations on the university campus," *Journal of Cultural Economics*, vol. 31, no. 3, pp. 187–204, 2007.
- [33] E. P. Chiang and D. Assane, "Music piracy among students on the university campus: Do males and females react differently?" *Journal of Socio-Economics*, vol. 37, no. 4, pp. 1371–1380, 2008.
- [34] T. P. Cronan and S. Al-Rafee, "Factors that Influence the Intention to Pirate Software and Media," *Journal of Business Ethics*, vol. 78, no. 4, pp. 527–545, 2008.
- [35] S. Lysonski and S. Durvasula, "Digital piracy of MP3s: consumer and ethical predispositions," *Journal of Consumer Marketing*, vol. 25, no. 3, pp. 167–178, 2008.
- [36] R.-A. Shang, Y.-C. Chen, and P.-C. Chen, "Ethical Decisions About Sharing Music Files in the P2P Environment," *Journal of Business Ethics*, vol. 80, no. 2, pp. 349–365, 2008.
- [37] R. K. Sinha and N. Mandel, "Preventing Digital Music Piracy: The Carrot or the Stick?" *Journal of Marketing*, vol. 72, no. 1, pp. 1–15, 2008.
- [38] J. R. Coyle, S. J. Gould, P. Gupta, and R. Gupta, ""To buy or to pirate": The matrix of music consumers'

acquisition-mode decision-making," *Journal of Business Research*, vol. 62, no. 10, pp. 1031–1037, 2009.

- [39] S. A. Taylor, C. Ishida, and D. W. Wallace, "Intention to Engage in Digital Piracy: A Conceptual Model and Empirical Test," *Journal of Service Research*, vol. 11, no. 3, pp. 246–262, 2009.
- [40] R. K. Sinha, F. S. Machado, and C. Sellman, "Don't Think Twice, It's All Right: Music Piracy and Pricing in a DRM-Free Environment," *Journal of Marketing*, vol. 74, no. 2, pp. 40–54, 2010.
- [41] G. Walsh, V.-W. Mitchell, T. Frenzel, and K.-P. Wiedmann, "Internet-induced changes in consumer music procurement behavior: a German perspective," *Marketing Intelligence & Planning*, vol. 21, no. 5, pp. 305–317, 2003.
- [42] J.-F. Ouellet, "The Purchase Versus Illegal Download of Music by Consumers: The Influence of Consumer Response towards the Artist and Music," *Canadian Journal of Administrative Sciences*, vol. 24, no. 2, pp. 107–119, 2007.
- [43] M. E. Styvén, "The need to touch: Exploring the link between music involvement and tangibility preference," *Journal of Business Research*, vol. 63, no. 9–10, pp. 1088–1094, 2010.
- [44] C. K. M. Lam and B. C. Y. Tan, "The Internet Is Changing the Music Industry," *Communications of the ACM*, vol. 44, no. 8, pp. 62–68, 2001.
- [45] E. K. Clemons, B. Gu, and K. R. Lang, "Newly Vulnerable Markets in an Age of Pure Information Products: An Analysis of Online Music and Online News," *Journal of Management Information Systems*, vol. 19, no. 3, pp. 17–42, 2003.
- [46] G. P. Premkumar, "Alternate Distribution Strategies for Digital Music," *Communications of the ACM*, vol. 46, no. 9, pp. 89–95, 2003.
- [47] J. C. Bockstedt, R. J. Kauffman, and F. J. Riggins, "The Move to Artist-Led On-Line Music Distribution: A Theory-Based Assessment and Prospects for Structural Changes in the Digital Music Market," *International Journal of Electronic Commerce*, vol. 10, no. 3, pp. 7–38, 2006.
- [48] P. M. C. Swatman, C. Kruger, and K. van der Beek, "The changing digital content landscape: An evaluation of e-business model development in European online news and music," *Internet Research*, vol. 16, no. 1, pp. 53–80, 2006.
- [49] S. Bhattacharjee, R. D. Gopal, J. R. Marsden, and R. Sankaranarayanan, "Re-Tuning the Music Industry Can They Re-Attain Business Resonance?" *Communications of the ACM*, vol. 52, no. 6, pp. 136–140, 2009.
- [50] L. A. Hudson and J. L. Ozanne, "Alternative Ways of Seeking Knowledge in Consumer Research," *Journal of Consumer Research*, vol. 14, no. 4, pp. 508–521, 1988.
- [51] E. M. Rogers, *Diffusion of Innovations*, 5th ed. New York, NY: Free Press, 2003.
- [52] M. Fishbein and I. Ajzen, Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research. Reading, MA: Addison-Wesley, 1975.
- [53] I. Ajzen and M. Fishbein, Understanding Attitudes and Predicting Social Behavior. Englewood Cliffs, NJ: Prentice-Hall, 1980.

- [54] I. Ajzen, "From intentions to actions: A theory of planned behavior," in *Action-control: From cognition to behavior*, J. Kuhl and J. Beckman, Eds. Heidelberg, Germany: Springer, 1985, pp. 11–39.
- [55] I. Ajzen, "The Theory of Planned Behavior," Organizational Behavior and Human Decision Processes, vol. 50, no. 2, pp. 179–211, 1991.
- [56] M. Fishbein and I. Ajzen, *Predicting and changing behavior: The reasoned action approach*. New York, NY: Psychology Press, 2010.
- [57] F. D. Davis, "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, vol. 13, no. 3, pp. 319–340, 1989.
- [58] F. D. Davis, R. P. Bagozzi, P. R. Warshaw, "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," *Management Science*, vol. 35, no. 8, pp. 982–1003, 1989.
- [59] V. Venkatesh, M. G. Morris, G. B. Davis, and F. D. Davis, "User Acceptance of Information Technology: Toward a Unified View," *MIS Quarterly*, vol. 27, no. 3, pp. 425–478, 2003.
- [60] M. Dubosson-Torbay, Y. Pigneur, and J.-C. Usunier, "Business Models for Music Distribution after the P2P Revolution," in *Proceedings of the Fourth International Conference on Web Delivering of Music*, Barcelona, Spain, 2004, pp. 172–179.
- [61] Apple. (2009). *Changes Coming to the iTunes Store* [Online]. Available: http://www.apple.com/pr/library/ 2009/01/06itunes.html
- [62] Apple. (2003). Apple Launches the iTunes Music Store [Online]. Available: http://www.apple.com/pr/library/ 2003/apr/28musicstore.html
- [63] Apple. (2008). iTunes Store Top Music Retailer in the US [Online]. Available: http://www.apple.com/pr/ library/2008/04/03itunes.html
- [64] Apple. (2010). *iTunes Store Tops 10 Billion Songs Sold* [Online]. Available: http://www.apple.com/pr/library/ 2010/02/25itunes.html
- [65] Spotify. (2008). We've only just begun! [Online]. Available: http://www.spotify.com/blog/archives/2008/ 10/07/weve-only-just-begun/
- [66] Music Ally Blog. (2010). Spotify closing in on 10 million users across Europe [Online]. Available: http://musically.com/blog/2010/09/15/spotify-closingin-on-10-million-users-across-europe/
- [67] Spotify. (2011). *Music catalogue info* [Online]. Available: http://www.spotify.com/about/music-catalogue-info/
- [68] Spotify. (2011). *Premium, Unlimited, Open* [Online]. Available: http://www.spotify.com/get-spotify/overview/
- [69] Spotify. (2011). *Buying music* [Online]. Available: http://www.spotify.com/about/features/buying-music/
- [70] V. Halttunen, M. Makkonen, and L. Frank, "Indifferent Behaviour of Young Digital Content Consumers – An Interview Study," *Information Assurance and Security Letters*, vol. 2, pp. 66–71, 2011.

- [71] S. Spiggle, "Analysis and Interpretation of Qualitative Data in Consumer Research," *Journal of Consumer Research*, vol. 21, no. 3, pp. 491–503, 1994.
- [72] M. Q. Patton, *Qualitative Research & Evaluation Methods*, 3rd ed. Thousand Oaks, CA: Sage, 2002.
- [73] M. Peitz and P. Waelbroeck, "Piracy of digital products: A critical review of the theoretical literature," *Information Economics and Policy*, vol. 18, no. 4, pp. 449–476, 2006.
- [74] M. Peitz and P. Waelbroeck, "Why the music industry may gain from free downloading – The role of sampling," *International Journal of Industrial Organization*, vol. 24, no. 5, pp. 907–913, 2006.
- [75] M. K. Chang, W. Cheung, and V. S. Lai, "Literature derived reference models for the adoption of online shopping," *Information & Management*, vol. 42, no. 4, pp. 543–559, 2005.
- [76] L. Zhou, L. Dai, and D. Zhang "Online Shopping Acceptance Model – A Critical Survey of Consumer Factors in Online Shopping," *Journal of Electronic Commerce Research*, vol. 8, no. 1, pp. 41–62, 2007.
- [77] T. McCourt, "Collecting Music in the Digital Realm," *Popular Music and Society*, vol. 28, no. 2, pp. 249–252, 2005.
- [78] R. W. Belk, "Possessions and the Extended Self," *Journal of Consumer Research*, vol. 15, no. 2, pp. 139–168, 1988.
- [79] R. W. Belk, M. Wallendorf, J. Sherry, M. Holbrook, and S. Roberts, "Collectors and Collecting," *Advances in Consumer Research*, vol. 15, pp. 548–553, 1988.
- [80] Apple. (2011). *iTunes LP and iTunes Extras* [Online]. Available: http://www.apple.com/itunes/lp-and-extras/

Author Biographies



Markus Makkonen is a researcher at the Department of Computer Science and Information Systems at the University of Jyväskylä. He received his M.Sc. (Information Systems) from the University of Jyväskylä in 2006. His research interests include electronic commerce, business models, and consumer behaviour, especially in the context of digital contents.



Veikko Halttunen is a researcher at the Department of Computer Science and Information Systems at the University of Jyväskylä. He received his M.Sc. (Computer Science) and Ph.Lic. (Information Systems) from the University of Jyväskylä in 1988 and 1997. His research interests include information systems planning and strategies, information architectures and modeling, and consumer behaviour in the context of digital contents.



Lauri Frank is a senior assistant in electronic commerce at the Department of Computer Science and Information Systems at the University of Jyväskylä. He received his Ph.D. (Technology Research) from the Lappeenranta University of Technology in 2003. His current research interests include the diffusion and management of ICT innovations, the evolution of the telecom operator software market, and the uptake of the information society.