Digital Music Distribution and the Market Needs

An investigation of the digital music distribution and the unsatisfied demands on the present market

MICHELLE KADIR, KNUT NGO and JOHAN WILLIAMSON

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Master's Thesis in Business Development and Media Technology (20 credits)
at the School of Computer Science and Engineering, the School of Electrical Engineering and the School of Mechanical Engineering
Royal Institute of Technology year 2005
Supervisor was Christopher Rosenqvist, HHS
Examiner was Nils Enlund
This thesis describes the digital music distribution and the market needs for related products and services.

Five hypothesis regarding critical issues for the future downloading industry are stated. It continues with an extensive market research throughout the value chain from record labels to the end consumer, where advantages and disadvantages are enlightened. Eventually an evaluation of the initial hypothesis is performed by a comparison with demands derived from this market research.

The report is then broken down into three personas with different characteristics - The Technical Freak, the Fan and the Mainstreamer. These personas are based on statements from focus group participants who were faced with specific questions related to the industry. The focus groups identify present obstacles and hence future business opportunities for big record labels. Thereafter, different proposals are devised in order to correspond to the identified obstacles. The proposals include a redefinition of the value chain, two profit making methods and a preventive measure for the music industry.

Overall, the thesis serves to describe the digital music industry and give some guidelines for big record labels regarding future business opportunities. The report is illuminated from a consumer, market and technology perspective. The research is performed on a global level, as it does not exclude any geographic areas. The global perspective has shown to be suitable as many actors and services are operating on a global level. Issues from US and Asia seem to influence the European market, which further justifies the liberation. Nevertheless, the focus is on the Swedish and European market as it was the initial purpose.
SAMMANFATTNING
Detta examensarbete beskriver den digitala musikmarknaden och efterfrågan av relaterade tjänster och produkter.


Målet med examensarbetet är att beskriva utvecklingen av den digitala musikmarknaden samt ge en vägledning om hur stora skivbolag kan utnyttja de nuvarande samt framtida affärsmöjligheterna inom branschen. Rapporten beskriver detta ur konsumentens, marknadens och teknikens synvinkel.

Preface
This report is a thesis completing a Master Degree of Science at the Royal Institute of Technology in Stockholm. The thesis is written for the department of media technology at NADA in cooperation with Stockholm School of Economics. Sony Music Sweden assigned the research, which constitutes the thesis.

We would first of all like to thank Per Sundin, the CEO at Sony Music and Christopher Rosenqvist, our supervisor from SSE, who gave us the opportunity to study such an interesting topic. We would also like to thank Birgitta Bokström and Victor Fredell at Sony Music for giving us invaluable information and Lena Olander for her continuous assistance. Finally, we thank the actors on the market and the youth who attended the focus group sessions providing us with interviews and insights. Their ideas and feedback helped us tremendously throughout the project.

For questions regarding the thesis, do not hesitate to contact the authors via the email addresses below.

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Stockholm, November 2004
READING DIRECTIVES
This section will help the reader to find specific areas of interests. The recommendation is to read all the chapters to gain the best overview and deepest insights. But it is also possible to read some of the chapters separately.

Persons with a general interest in the subject but with less previous knowledge should read all chapters of the thesis. This will give a better overview as well as a good understanding of the digital music industry. It will help the reader to comprehend the latter part of the report as conclusions are made upon issues within the report.

For the ones with an explicit interest in the questionnaire and results, the chapters *Introduction*, *Hypotheses*, *Evaluation of Hypotheses* and *Discussions* are recommended. The hypotheses and the evaluation of hypotheses will give a sense of the current market and how it might turn out to be in the future.

For those primary interested in the state of the market and the different actors it is recommended to read the prime investigation in the middle of the report, which consists of, Entertainment Central, Music Services, Collaborations, Personalization and Models of Payment.
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INTRODUCTION

The initial chapter aim to give the reader a quick overview of the report. It explains the background, main purpose, definitions, assumptions and target group. Finally, it declares the framework of the thesis.
Background

The record labels have traditionally put a lot of trust in CD distribution as profitable margins historically prevailed. However, in recent years digital music distribution has gained attention. As digital music consumption became popular and advanced mobile handsets entered the market, even further opportunities were revealed. The latest trend is digital distribution through mobile phones. Increased downloading to desktops is also to be expected. These are the fundamental drivers of the trend shift:

Consumer demand. Due to the increased popularity of digital content among consumers, there is no longer a doubt concerning the industry’s potential.

Technical developments. The technical makeup of desktops and mobile phones make them to excellent receivers of digital content.

Law restrictions. As new legal restrictions prohibiting free downloading reveals, big opportunities for legal actors manifest.

Profitable first movers. As first movers have shown increased turnovers and positive margins, other actors have realized the opportunities within the industry.

Purpose

The main purpose within this thesis is to evaluate how big record labels can profit from the prevailing situation they are experiencing and how future issues can affect their way of doing business. The report aims to address the following inquiries:

- What are the consumers desires regarding digital music consumption? What is popular at the present and what do they want to consume in the future?

- How do the actors correspond to the consumer demand in this industry and in what way do they have to adjust according to future demands?

- How well do the technical prerequisites support the consumer demand and what is to be developed in order to support future desires?
Framework

Introduction

This chapter aims to give the reader a sense of the report's scope and nature. It provides the reader with essential background information as well as necessary conditions for further reading.

Method

In this section, the thesis' execution is explained. The reader will be aware of the investigation methods throughout the report and why they were chosen. Furthermore, some theories are applied in order to confirm the selected methods.

Hypothesis Formulation

Hypotheses are formulated regarding five different issues. They are based on desktop researches and pre-investigation experiences and thoughts.

The Empirical Investigation

An extensive investigation from a consumer, market and technical perspective is performed. The investigation is based on empirical material such as interviews and focus groups consisting of youth from the Swedish market.

Hypothesis Evaluation

The initial hypotheses are evaluated by the use of demand specifications. The demand specifications are derived from the hypotheses, as the demands are crucial for the validities. The specifications are compared with issues from the empirical investigation. The match between the specification and the empirical investigation decides whether the hypotheses will be supported or rejected.
Discussions

Under this chapter we present three personas with different characteristics derived from the prior investigation and hypothesis evaluation. An identification of the market needs is carried out and finally positive and negative issues throughout the thesis work are explained.

Definitions

As the music industry is under a great trend shift the conditions are changing rapidly. As a consequence, it is important to strictly define the definitions on a report of this kind. Although definitions are somewhat subjective and can be chosen to be unconstrained, the following ones were selected due to a limited time frame and the correctness of the report:

- The deadline for research was September 15, 2004. Changes regarding the consumer, the market and the technique after this date are not taken into consideration in the report.
- The thesis comprehends as the world market at the defined geographic area, although the European and Swedish markets are emphasized.

Target Group

The thesis is intended for people involved in the music industry and will serve as useful research when record labels are deciding future strategies. Nevertheless, the paper is written on a moderate level as all business specific words are well explained and hence it will also be an interesting reading for people without prior knowledge of the music industry.

- People involved in the music industry.
- People with no prior knowledge of the industry, but with an interest in the digital music distribution.

Assumption

It is almost never an initial incentive to assume issues regarding the investigated area. In this particular case however, the following assumption was to be made in order to achieve a consistent report.
• Downloading copyrighted material will become illegal in Europe and Sweden in the near future.

Different Areas of Responsibility

As mentioned earlier, the work and the report are taking aspects from a consumer, market and technical perspective into consideration. Since the number of perspective equals the amount of project members on this Master’s project, the initial thought was to assign the different perspectives to each of the project members. By doing this, we would have our own areas of responsibility while conducting the research, analysis and writing of thesis. At that time Michelle were assigned the responsibility of the consumer perspective, Knut the technical perspective and finally Johan the market perspective. Each of us was to write three separate reports about the different areas of responsibility.

While carrying out the work in the different areas, we arrived at the conclusion that it was not possible to write separate reports, however. Due to the nature of this industry, each of the three perspectives could not be separated from each another while maintaining the same thorough understanding of the conclusions. After consultation with supervisor Christopher Rosenqvist and examiner Nils Enlund, we decided to maintain the assigned areas of responsibility while doing research and analysis. The three different perspectives are merged into one common thesis with summaries of the consumer, market and technical aspects. However we decided to be in charge of different chapters, which is further declared in appendix 1.
The methods utilized for the research will be explained in this chapter. Theories and interviews of different scopes were applied. The working process consisted of different steps; pre-study, desktop research, hypothesis, interviews, focus groups, studies of interviews and focus groups, evaluation and conclusion. They were all necessary to gain the information and conclusions that were needed to accomplish the thesis. In this section each and every step is being discussed and described. This chapter also explains external significant factors with an impact on the working process. The result of the thesis was affected by these factors and therefore is important to discuss.
Pre-study

To gain information about Sony Music and its business model, meetings with the supervisor Christopher Rosenqvist were assigned. A conference was also held with Birgitta Bokström who later became our supervisor from Sony Music. The discussion provided us with the initial information and helped us understand the requests and objectives of Sony Music.

Desktop Research

In order to obtain insights in today’s music market we made a desktop research. Music and industry related magazines such as Billboard, MP3, Internet World and Wireless were also read to gain a variety of information regarding issues such as:

- Contemporary popular music services
- Imminent digital music technologies
- What music devices are the consumers interested in?
- What are the latest trends?

For more comprehensive insights, the Internet provided a wide, if incomplete, market analysis. Research concerning the record labels, retailers, aggregators, digital service providers, complete music services, operators and authorities were performed with information from their respective websites. Selected information was noted for further examination.

A subscription of Music Week was made and weekly emails with the latest music news were examined. This provided a great insight in the continuously changing music business.

Hypothesis

Five hypotheses were stated after the desktop research. These hypotheses have according demands that are going to be matched with related facts from the empirical investigation, in order to be accepted or rejected. The match of the hypotheses is carried out in the Evaluation and Conclusion sections.

A hypothesis is an idea about the world, according to Peter Pehlan. To justify an idea about the world research that either fulfill or reject the hypothesis has to be made. Pehlan
continues diversifying some hypothesis while he names them empirical hypothesis. These are hypothesis stated because of the fact that people have noticed events, which evokes the ideas. This can be applied to our hypotheses, after the desktop research we observed the state of market which brought ideas of how the future might look like. However, without further research, it would be impossible to identify the reliability of our hypothesis. Pehlan also talks about this, mentioning that the data used to bring forth the hypothesis has to be diverse from the data used when evaluating it.\textsuperscript{1} Pehlan continues stating that all hypotheses cannot be evaluated and it is thus essential that the ideas are concrete. Testing a hypothesis similar to ours is done by using information collected from the different areas.\textsuperscript{2} It is then straightforward to determine whether the hypothesis should be accepted or rejected.

**Interviews**

After meetings with Per Sundin, the CEO of Sony Music, a division of the market was made into two parts since it is the way Sony Music works. The two segments are EMD (Electronic Music Distribution) and Wireless. To make the market analysis complete, interviews with actors from the diverse parts were necessary. The interviews were made by phone, email or face-to-face, depending on desires of the interviewed persons.

The initial interviews were carried out at Sony Music, interviewing employees with solid experiences and reliable information of the current market because of the day-to-day work. While the purpose was to schedule a meeting with as many actors as possible throughout the entire value chain, these initial interviews provided us with references by their personal networks. These references constituted as starting points. During the interview process, further references were requested of the interviewees. By doing this, contacts with actors across the value chain were established systematically.

**Focus Groups**

To gain knowledge about the consumers’ present opinions concerning music services we decided to perform focus group sessions. After conferring with Per Sundin, it was decided that youths would be the participants in our focus groups since they are the main consumers of new services while they also set the new trends. An advertisement was printed in the newspaper Metro and on Lunarstorm’s website. More than 80 youths answered the advertisements by sending an email with their name and telephone numbers. Everyone was asked a couple of questions over the phone since an appropriate group of youth was desirable. They were asked if they ever had downloaded a ringtone and/or a music file. This information helped us with the selection of desirable youth and also with the constellation of

\textsuperscript{1} Pehlan, Peter. p 218
\textsuperscript{2} Pehlan, Peter. p 219
each group. The youths who attended the focus group sessions were between 13 and 20 years old. They were divided into five groups, one group with boys and four groups with girls. The decision regarding separation of girls and boys was made because of their delicate age. We did not want anyone to be embarrassed or feel hindered to state his or her opinion. The intention was to have a larger number of female participants since Per Sundin especially named young females as trendsetters. The five focus groups were spread over two weeks and each one of them was scheduled for two hours. Each group had two moderators.

**Group 1**: Girls 13-15 years, 3 participants  
**Group 2**: Boys 15-18 years, 7 participants  
**Group 3**: Girls 17-20 years, 5 participants  
**Group 4**: Girls 14-16 years, 4 participants  
**Group 5**: Girls 17-20 years, 4 participants

Unfortunately, some of the invited participants did not attend, hence the diverse numbers of participants in the focus groups.

It is essential to make focus groups participants feel comfortable so they can easily speak their minds, according to Joshua Grossnickle. He continues to point out the environment as an important factor to feel at ease. The focus groups at Sony Music were held at the top floor where the environment was nice and quiet. Refreshments were offered which further contributed to a relaxed atmosphere. Focus groups can easily generate new ideas that previously have not been given any attention. And it is thus important for the moderators to ask questions that make the participants reflect over the answers. Focus groups have successfully been used when companies have wanted to explore new products. This is a great reason why focus groups were applied to this rather new digital distribution area. During focus groups it is essential that the moderators have time to listen and ask appropriate questions. This was performed by writing down thoughts and comments. Video cameras were used to record each session. This is also one of Grossnickles suggestions, “Because it’s next to impossible to take good written notes while you are attempting to interact with the focus group, making audio or videotapes is essential.” Subsequently, the tapes were thoroughly evaluated. Grossnickle also mentions that focus groups are not an effective tool concerning feedback on present products and services. Because of this there was a hand out survey before and after the sessions in our focus groups. By doing this we gained information regarding thoughts of present and future products and services.

**The different steps during the focus groups:**

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3 Grossnickle, Joshua. p 57  
4 Grossnickle, Joshua. p 58  
5 Grossnickle, Joshua. P 69  
6 Grossnickle, Joshua. p 58
• **Introduction** – the moderators and group participants presented themselves.

• **Survey, part 1** – the survey were handed out and the answers later discussed.

• “The perfect mobile” – the group members were asked to make a list of what functions a perfect mobile phone should contain.

• **Discussion and specific questions** – specific questions were asked and the answers were discussed.

• **Survey, part 2** – the surveys were handed out again, but not discussed.

• **Survey, part 3** – the participants were asked to pick the three most desirable services from the survey.

**Studies of Results from Interviews and Focus Group Sessions**

The interviews and focus groups provided us with a lot of information for examination. It gave us a clear overview of the state of the market. The studies were written down in segmented chapters depending on the relevant area, where each chapter contains a consumer, market and technology aspect. All results are written from an objective point of view and personal opinions are not included.

**Evaluation and Conclusion**

The evaluation and conclusion are separated into two parts. One part is directed to KTH where the evaluation contains our reflections about the studies. The presented result is a match between the empirical studies and hypotheses driven demands. This match determines whether the hypotheses will be accepted or rejected. Personas will also be included in the end. The other part will be directed to Sony Music. This part consists of an execution plan that is non-disclosed for external actors.

**Persona**

The consumer analysis provided us with the information that was elaborated into personas. A persona is a fictitious person brought out from analysis; it is a personification of stereotyped characters.\(^7\) The researches performed unveiled three different personas of non-

\(^7\) Sterneberg, Ernest. p 62
majority thoughts, even though they had characteristic opinions. A persona consists of three major parts – personification, attributes and allegories\(^8\). The personas in the thesis are determined from these factors.

- **Personification**: A presentation of the character is made. Its desires, interests and life situation are to be stated here. The reader should easily get a sense of the person’s personality.

- **Attribute**: This part will explain the appearance of the persona. It is elucidated with an according picture. “Since a face often convey personal attributes…”\(^9\)

- **Allegory**: This technique facilitates to describe the persona’s actions in specific situations. In our personas the characters music consumption is described and their according behavior upon it.

Finally strong opinions of the characters are listed. This will facilitate to understand the standpoints of the personas.

\(^8\) Sterneberg, Ernest. p 71-78
\(^9\) Sterneberg, Ernest. p 74
The Significance of External Factors

During the time spent on conducting market research in order to gather information for this report, we encountered obstacles as well as factors of constructive impact. All of these aspects are discussed in this section to create awareness as well as simplify the work of future researches. The factors of drawbacks during the work are being discussed in short, followed by a presentation of constructive points of impacts.

Drawbacks during the work

Conducting Interviews during the Summer

The first section of a thesis work traditionally consists of internal and external interviews of the concerned company, desktop research and mapping of the market. This thesis work begun over the summer, which made it difficult to establish contact with the proposed companies, due to vacation issues. Nevertheless, most of the contacts were accessible later on.

Competition Issues

As the thesis work went on, we discovered new business opportunities to consider in the report. Some of them were beyond Sony Music’s present area of work while others were already a part of their business. It then appeared that it was complicated to execute interviews with competitors to Sony Music, for obvious reasons. This issue probably concerns all investigations carried out by commercial companies and is therefore not to neglect for other thesis works either.

The Non-Diversified Focus Groups

As the search for focus groups participants begun, it was critical to find people according to the desires of the managing director of Sony Music and the directors of the thesis. With the enticement of a couple of CDs, many people showed interests in the focus group sessions. Although we managed to find valid persons who fulfilled the criteria, the group of participants was homogeneous to some extent. All of them except one came from Stockholm and almost everyone was member of the music community “Volym” at Lunarstorm. Nevertheless, this was not a big surprise, due to the choice of advertising channels. For future researches of similar kind it is probably better to pursue a greater diversity of people when the concerned products aim for mainstream consumption.
Fast Moving Industry

Trends and fads are switching very fast in the music industry due to a couple of reasons. The competition on the market is immense which results in fast development of products and services. At the same time, the consumers’ buying patterns are constantly changing. These factors make the industry very hard to map in a time-limited report since things become out of date rapidly. Nevertheless, this makes the industry interesting to investigate and does not result in a bad outcome. However, for future reports concerning this industry, the directors should be aware of this fact and hence state a distinct date when all research work and writing should be completed.

Constructive Impacts on the Working Process

The Swedish Market

As the research process was progressing, we realized that actors outside the Swedish market needed to be taken into consideration as well. The reason for this is because the development of the Swedish market in this business area is dependent of the development of products and services on a global basis. Because of this, actors outside the Swedish market were contacted in order to conduct a market analysis. However, the experience of foreign actors and local Swedish actors are different in this aspect. An important issue is to talk to persons with the right area of responsibility. The distribution of contact information is tightly controlled by the switchboards, which hindered the work of establishing contact with foreign actors. Swedish actors on the other hand, are more open and cooperative, which greatly simplified the work.

The Entire Value Chain

Establishing contact with Swedish actors was seldom a problem. We exploited this opportunity and made interviews with actors from the entire value chain in order to gain better insights regarding the present market issues. This resulted in a compilation of extensive information, which supported the market analysis. Aside from this, another positive effect was that the work of finding the right contact was made easier with every actor we contacted. Everyone had a personal network of contacts they gladly shared with us, which effectively expanded our network of contacts.
Another explanation to why it was easy to establish contact with different actors and to achieve interesting and relevant information might relate to the topic. The topic of commercializing the digital distribution of music content touches a business area that is merely in its emerging process, which probably is the reason why new products and services are constantly emerging. The effect of this was evident as the news was streaming in through all kinds of information channels.
TERMINOLOGY & ACTORS

In this section, non-familiar words are explained in a short definition. Furthermore categorizations of the stated and interviewed actors are carried out.
Word explanation

3G (The third generations mobile net): Bandwidth for the mobile phone that enables the consumer to for instance download content in a higher speed or watch video conversations.

AAC (Advanced Audio Codec): Digital sound format based on MPEG-2 and MPEG-4. It is an international standard since 1997 and is used by iTunes music service.

Aggregators: Vend products to both end-users and retailers.


Bit Rate: A unit that measures speed of data.

Buffering: Is a common technique used when unequal speed rates are to be transformed into a unified speed.

CA (Conditional Access): Meaning that a random actor can get conditional broadcasting access on a MUX.

Complete music services: Operates as a DSP plus retailer. Stores the music and sells it to the end-user through its own website.

Content Provider: An actor providing other actors material such as pictures and ringtones.

CPA (Content Provider Agreement): A signed agreement regarding revenue share between an operator and a content provider.

DAB (Digital Audio Broadcasting): A fully digital radio service provided by SR on the Swedish market.

DRM protection (Digital Right Management): A secure mechanism for data files. Prevent illegal music file distribution. The consumer is restricted from transferring songs to an unlimited number of devices.
DSP (Digital Service Providers): Acts like a delivery service that provides digital music files from record labels, stores it and delivers it to the end user.

Flash-Memory: A memory stick developed by Sony.

Funtones: Comic clips that can be used as ringtones.

GPRS (General Packet Radio Service): Standard for data packages. Complement to the GSM net, also called 2,5G.

GSM (Global System for Mobile Communications): Second generation’s mobile net also called 2G.

Illegal downloading: Occurs when people download music files from file sharing systems like KaZaa and DirectConnect for instance.

iPod: A portable player for digital music playback, manufactured by Apple.

ISP (Internet Service Provider): An actor providing Internet access. In some contexts also called an operator.

Legal downloading services: Music services who offers the consumers payable music files.

MiniDisc: A mini record that contains as much music as a regular CD. The music uses 1/5 as much memory as a CD and the encrypt technology within is called ATRAC or ATRAC3.

MMS (Multi Media Message): Message that the user sends from its mobile phone containing a picture plus text.

Mobile Manufacturers: An actor who manufactures mobile phones.

MUX (Multiplexer): Within a MUX a random actor can commit to broadcast a special amount of content while they rent out the rest of the frequency at other actors disposal.
**Network Operators:** Actors with control over the distribution net. An operator can control a various number of nets or just parts of them. This concerns all kind of nets such as broadband Internet nets and mobile nets.

**OMTP (Open Mobile Terminal Platform):** An organization focusing on improving advanced mobile platforms using open standards and technologies.

**P2P (Peer-To-Peer):** network that enables users to share files.

**PAD (Program Associated Data):** PAD contains data that is connected to a sound program and is sent as a part of the sound stream. Dynamic Labels is an example of this combined text and sound

**Polyphonic Ringtones:** Ringtones for mobile phones which are covers and not the original song.

**Premium SMS/MMS,** messaging services which provides interaction between a consumer handset and a terminal by the network operators.

**Retailers:** Provides music files and ringtones from DSPs and sells it to the end-user through its website.

**Ringbacktone:** Either a truetone or a funtone that are played for the call initiator until the phone is answered.

**SMS (Short Message Service):** Messages sent on GSM networks.

**SonicSelector:** Is a music jukebox provided by OD2. It enables consumers to play, manage and purchase digital music. The service uses Microsoft Windows Media Player 9.

**Store in Store:** When an actor is selling its content through a branded virtual shop on another actor’s webpage.

**Streamed Media Files:** Digital media containing video, voice and data transferred simultaneously and hence it is displayed in real-time.

**Truetones:** Ringtones which are the original song.
WAP (Wireless Application Protocol): A protocol that defines page description from a programming language.

WMA (Windows Media Audio): Digital sound format created by Microsoft.

Actors Mentioned in This Report

Operators
3
Amena
Chaoticom
Club Internet
Djuice
Eurotel
Free
Hutchinson
KPN
mmO2
Motorola
Noos
NTT DoCoMo
One Austria
Orange T-Mobile
Smart Communications
Tele2
Telecom Italia Mobile
Telefónica Móviles
Telenor
Telia Sonera
Tiscali
Vodafone
Wanaoo
DSPs
Inprodicon
OD2/Loudeye

Mobile manufacturers
Motorola
Nokia
Sony Ericsson

Content providers
Cellus
Eurobate
Mobilehits
Music Brigade

Complete Music Services
Connect
iTunes
MotoMusic
Napster
Weedshare

Non-Charging Music Services
Bearshare (based on the gnutella networks)
BitTorrent
Direct Connect
KaZaa (based on the gnutella networks)
Morpheus (based on the gnutella networks)

Record Labels
BMG
EMI
Sony Music
Warner Music

**MP3 Manufacturers**
Adamond
Jens of Sweden
ReignCom Ltd (Producer of the iRiver MP3 players)

**Computer Manufacturers**
Apple
Compaq
Dell
Packard Bell

**Software Manufacturers & Developers**
Microsoft
Nullsoft
Texas Instruments

**Retailers of Music**
Aftonbladet
Best Buy
BuyMusic
CD Baby
CDON.COM
Jambarine
MSN
MTV
MusicMatch
MyCokeMusic
Poplife
Regulation Authorities & Organizations

Morgan

Netsize

PTS (The National Post and Telecom Agency), is the authority that monitors and regulates the market of electronic communications.

RIAA (Recording Industry Association of America), an industry association fighting against piracy in the music industry.

STIM (Svenska Tonsättares Internationella Musikbyrå), a copyright organization that look after and manage the composers’ rights to compensation as their work are being distributed. Thereafter the money is shared between the members.

SR (Swedish Broadcasting Corporation), a non-profit corporation providing radio to the Swedish market.

ERB (The Ethical Council for Premium Rate Services), working with ethical issues, such as standardizing of contracts and regulation of new services


Other Actors

Blocket (A virtual merchandise and trade service)

BMW (Car manufacturer)

F-Secure (Anti-virus software creator)

Gnutella (Provider of file sharing networks)

NTL (Broadband provider)

Philips (Diversified hardware manufacturer)

Psion (A handheld computer manufacturer)

The Sun (Printed media/newspaper)
Interviewed Actors

Aggregators/Content Providers

Operators

DSPs

Music Labels

Mobile Manufacturers
### Other Actors

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HYPOTHESES

Five hypotheses are being formed and discussed in this chapter. Background information is presented for each of them, followed by a statement and a short analysis. The different hypotheses concern:

- Entertainment Central
- Music Services
- Collaborations
- Personalization
- Models of Payment
Entertainment Central

The Consumer Demand of MP3 Players

The MP3 music file format was created by a German research group, the Fraunhofer Institute of Integrated Circuits, in 1992. However, the barrier of high cost for disc storage and limited modem speed did not fall until 1997. That was when the MP3 revolution began.\(^9\) Intense music consumption has steadily become more convenient. Home PC users with adequate amount of disc storage and modem speed could easily run a file sharing program to obtain music files shared by other users within the same file sharing network. As personal music collections became increasingly popular, the desire of mobile music consumption increased. The market for portable MP3 players exploded and many actors started to launch these kinds of digital music players.

The Korean company ReignCom within the digital music player business established the iRiver trademark in 2002 with small portable MP3 players in its product portfolio. In 2003, iRiver had sold 1.2 million units of these music players worldwide with tripled sales revenues ($193.3 million) and the profit five folded to $35 million.\(^9\) The market for these portable music players is continuously expanding. Despite the enormous sales growth of iRiver units, there is still room for other actors on the market. Apple launched the iPod music player 2001. To date, a total of 3.7 million units have been sold worldwide. For the 3\(^{rd}\) quarter of 2004, the increase of sales accounted for $138 million, which is a growth of 124%. For the first 9 months of fiscal year 2004, the growth is 243% with sales revenues rising over $545 million. The United States is not the only market for portable MP3 players. In Sweden, these players became very popular 2003 as JoS (Jens of Sweden) was founded, offering the consumers a series of small digital music players. The growth of the Swedish MP3 player market rose 350\(^%\)\(^{12}\), and JoS players accounted for almost 100,000 units sold in Scandinavia alone.\(^{13}\) The turnover of the first fiscal year is expected to become 70 million SEK.

IDC, the global intelligence and advisory firm in the information technology and telecommunication industry, has written a book of forecast and analysis of the worldwide market of portable music players (“MP3 Everywhere”).\(^{14}\) They expect $44 billion in turnover for the entire market in 2007, with an increase of 30% each year. Amount of units sold in 2007 is expected to be 37 millions compared to 11.6 millions in 2002. Undeniably, the consumer demand of portable MP3 players is here to stay.

The Development of the Mobile Phone

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\(^9\) Guadamuz, Andrés. Music downloading: the basics
\(^{11}\) BusinessWeek Online. Korea's ReignCom: Moving Up The MP3 Charts
\(^\text{12}\) DN.Ekonomi. Försäljningssuccé för mp3-spelare
\(^\text{13}\) Digital Lifestyles. Jens Nylander (Jens of Sweden) on the Future of Digital Music Devices: Digital Lifestyler interview
\(^{14}\) IDC. Worldwide and US. Compressed Audio Player Forecast and Analysis, 2002-2007: MP3 Everywhere
Practically, everyone has a mobile phone. Nokia expects the amount of units sold to surpass 600 million for the full year of 2004\textsuperscript{15}, while Sony Ericsson estimates sales of 550 million units.\textsuperscript{16} Despite a bright forecast, the manufacturers will struggle with enormous efforts in R&D in order to differentiate their offerings towards the consumers. It is the development of the mobile phone that is interesting in this aspect.

For the Swedish market, by the second quarter of 2004, half of the mobile phones sold were equipped with a built-in camera while 70\% have a color display.\textsuperscript{17} Modern mobile phones are becoming like multimedia machines with ability to access the Internet and play advanced games as well as listening to music by radio or downloaded music files. An increasing amount of actors are taking steps to secure their share of the emerging entertainment market in mobile business. Philips is going to provide multimedia content to subscribers in collaboration with Nokia and Vodafone. Microsoft announces its entrance in the mobile gaming business in collaboration with EMI, and Sony is enriching consumer experience of the TeliaSonera subscribers in Finland by providing access to music and news services.\textsuperscript{18} These kinds of services are expected to become a huge business among 3G services. What we see now is merely the beginning of an emerging industry and actors like Nokia are preparing themselves with multimedia handsets that are compatible with these services. In this case, Nokia has signed a license agreement with Coding Technologies, which in turn has contracts with operators like Vodafone and mmO2.\textsuperscript{19} By doing this, Nokia has made sure that their mobile phones will be able to fully utilize the future services offered by the network operators.

**Subjective thoughts from the desktop research**

The indication of the mobile phone turning into a multimedia machine is clear. These handsets are turned into a channel of entertainment consumption as the consumers are becoming increasingly comfortable with the idea of an all-around multimedia machine. Studies show that multimedia services are perfect for the consumer to kill time in situations when there is nothing else better to do, as in waiting for a bus at the station.\textsuperscript{20} There are people that prefer listening to music by portable music players instead of playing games on their mobile phone, but nothing prevents these separate devices from becoming one. Most consumers of music also have a mobile phone and bringing two devices along is much more of a hassle. Therefore, a convergence of these products into one device, which covers multiple entertainment needs, will be seen as an entertainment central.

**Hypothesis 1: The Mobile Phone Becomes an Entertainment Central**

\textsuperscript{15} Nokia. *Nokia reports second-quarter net sales of EUR 6 640 million, EPS EUR 0.15*
\textsuperscript{16} IDG.se. *Sony Ericsson ökar på alla fronter*
\textsuperscript{17} Computer Sweden. *Mobiltelefoner slår försäljningsrekord*
\textsuperscript{18} Computer Sweden. *Nöjesindustrin blir mobil*
\textsuperscript{19} Computer Sweden. *Svenskar fixar ljudet i Nokias mobiltelefoner*
\textsuperscript{20} Focus Group Sessions
Music Services

File sharing services

Digital music distribution became common as the usage of Internet started to grow. But it was not that popular in the mainstream until Shawn Fanning started up Napster in May 1999. Napster’s P2P (Peer-To-Peer) file sharing strategy soon became the major distribution channel of digital music content. The RIAA (Recording Industry Association of America) originally filed a lawsuit against Napster in December (Johan, what year?), on the grounds that the Napster application had created a safe heaven for Internet music piracy. But immediately after the lawsuit, P2P services began work around the legal issues that hindered Napster and maintained the industry of free file sharing. US government has now implemented a law that furthermore will hinder the spread of free digital files over the Internet, and the same law expect to prevail in Europe in a close future. This new law will probably not completely terminate the piracy, as new file sharing services most likely will be developed.

There are more actors that seem to share the interest of fighting illegal file sharing on the Internet. Music labels in France have established collaborations with ISPs (Internet Service Providers) in order to suppress piracy. Internet users who distribute files illegally will receive an alert and their subscription may be terminated from Internet access. This has been made possible by an agreement with the government of France. Providers such as Free, Noos, Club Internet, Wanadoo and Tiscali France have all signed the agreement. Recently, the job of the RIAA was aided by a lawsuit to force ISPs to identify subscribers involved in illegal file sharing. The outcome of this case applies to New York, but it is expected to have a strong impact on the rest of the USA.A. as well.

DSPs and Complete Music Services

As the battle against music piracy continues, the consumer has been showing an increased interest in legal downloading services. Today a wide range of digital music stores have been launched over the Internet. Some of them work as retailers and partner with a DSP (Digital Service Provider), while others combine the role of a DSP and retailer into a complete music service. During the first 26 weeks in 2004, approximately 54 million songs were sold by the big retailers in the US.

Complete music services like iTunes and Napster keep their own database of music files. Apple launched iTunes in the late 2002 and has experienced an increasing number of customers and

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21 BBC News. The man behind Napster
22 MusikNytt Nyhetsbrev 33 2004
23 Jupitermedia. Jupiterresearch forecasts digital music sales will hit $1.7 billion in 2009, but won't replace CDs
24 The trademark “Napster” was bought by another company after the termination and re-entered the market as a payable music service.
downloaded songs ever since the start-up. On July 11, 2004 more than 100 million tracks were sold.25 When iTunes and Napster launched in Europe their sales margins rose by 28 respectively, 22 percentage in one week.26 As services for full length music downloading towards desktops becomes profitable, some actors have been developing downloading services for mobile phones as well. Motorola recently launched a service called MotoMusic for their model E398. This service provides full-length music downloads as well as truetones. A function called MotoMasher allows users to remix their downloaded songs on their own.27 Telenor, together with Chaoticom, provides full-length music downloading for mobile phones with Djuice subscriptions. BMG and Warner Music are also a part of the deal as they provide music content.28

Subjective thoughts from the desktop research

DSPs and complete music services like iTunes will be the major digital music distributors in the future due to the size of the organizations and the knowledge of distribution within the music industry. There will always be retailers willing to sell tracks provided by DSPs as long as they have a positive margin. Even if the business is not profitable in the beginning, they might still carry it out as a pure marketing channel for other kinds of content. The concept can be compared to the way free newspapers are doing business. This is feasible due to low entry barriers for retailers as they do not need to carry out the burden of development cost and core knowledge of the business that comes with building up a solid database of legal music tracks. This is the job of a DSP, and it might thus be tougher for DSPs to find their business profitable in competition against an increased number of complete music services. However, the large amount of retailers will help the DSPs to achieve a positive cashflow. Complete music services have better margins of the music contents, but the high entry barrier evens out the comparison. As a consequence, both of these distributions will prevail in the future.

However, illegal downloading from file sharing services expects to face a decreased number of consumers. It is naive to say that illegal file sharing will fade out since there will always be people willing to put a lot of effort into getting music tracks for free. But due to new upcoming laws and decent legal alternatives, free services will depreciate. Other issues that further reinforces this belief is the improvement of DRM protections and anti-piracy collaboration between companies. An increased popularity of full length downloading of DRM protected files towards mobile phones will also reinforce the battle against piracy.

Hypothesis 2: Illegal Downloading Will Decrease

25 CNN Money. 100M songs downloaded on iTunes
26 MusikNytt Nyhetsbrev 28 2004
27 MusikNytt Nyhetsbrev 28 2004
28 Chaoticom. Chaoticom and Telenor Mobil Launch Mobile Music Service
Collaborations

Collaboration between mobile phone manufacturers, network operators and content providers is a common phenomenon on the market. Different actors understand that it can be beneficial to cooperate in order to enrich the leverage value to the consumer. Therefore, uncommon collaborations have materialized as well. Motorola had recently implemented software from Apple in its mobile phones. Consumers with a Motorola mobile phone will thus be able to easily transfer music from the iTunes Music Store. Motorola also announced that mobile phones with support for instant downloading from iTunes will reveal in the beginning of 2005.

There are other examples of collaborations. Telenor is providing the service of downloading full-length music tracks to mobile phones for Djuice subscribers. This service is launched in collaboration with Chaoticom, which is providing the necessary technology behind the offer. Along with Telenor lunching the new service, Chaoticom established agreements with BMG and Warner Music in order to offer wider range content.

Apple has launched collaboration with BMW in which they co-developed an audio adapter that will allow owners of recent BMW models to connect the iPod, a digital music player, to the car audio system. The device will reportedly allow users to control the iPod through an auxiliary headset unit or remote control mounted on the steering wheel. The device will also allow users to view play lists or song tracks, and charge their iPod.

Subjective thoughts from the desktop research

Unexpected collaborations will be even more popular in the future. As the market of legal distribution of digital music is only in its infancy, innovative offerings and business collaborations are yet to be formed. Less evident collaborations that provide better products and services may thus be carried out to a greater extent in the future. Hopefully, this means increased consumption and thus increased revenues for the actors involved. This should be incentive enough to start engage in collaborations.

Hypothesis 3: More Unpredicted Collaborations within Mobile Music Will Develop

29 MusikNytt Nyhetsbrev 33 2004  
30 Motorola. Motorola and Apple Bring iTunes® Music Player to Motorola’s Next-generation Mobile Phones  
31 MusikNytt Nyhetsbrev 33 2004  
32 Appleinsider. Apple and BMW team up to produce car audio device
Personalization

We are all individuals with distinct personalities, and the high-tech tools that have become an integral part of our everyday lives should be just as unique as we are. The ability to adapt technology to reflect our expectations, tastes, lifestyles and mood also lets us share unique features and functions with business associates, friends or family. It can also be a means of expression, a way to stand out in a crowd and declare one’s individuality.

Current options for customizing personal electronic devices include handset design (smaller and sleeker, new color, retro styling or transformable) and a very wide variety of downloadable custom applications. After reaching total sales of €58 million in 2002, the downloadable content market continued to grow by 60% in 2003 and topped €100 million in 2003. It has already caught up with the CD singles market, turning handset customization into one of the most lucrative services in Europe.\(^{33}\)

Customizing your mobile phone means personalizing your phone’s ringtone, image, screensaver and picture options. In the past, the only way to personalize your phone was by choosing the latest phone design or adding a clip-on cover. Nokia was the first mobile phone manufacturer to offer the possibility of downloading content to customize phones by changing their ringtone and logo. Now, as the popularity of these services increases, more handsets are equipped with the ability to download content.

Subjective thoughts from the desktop research

There is no doubt about the profitability of ringtones and other mobile contents in means of customization. However, providing access to these products and services through emerging digital media (such as 3G) might prove to be a complicated solution from the consumers’ standpoint. Inconsistent design and package of the services creates obstacle too great for consumers to even connect to the services. The accessibility can be enhanced and simplified by having consumer experience in focus, effectively improving the leverage value of the products. Today, graphical layout of mobile portals as well as menu systems of the mobile phones varies a lot. Some kind of standardization is therefore needed in order to simplify the process of personalizing their personal handsets. Furthermore, as new services and products are constantly emerging, massive marketing campaigns is needed to achieve awareness. Evidently, there is still a lot to do for the companies before consumers are provided with an optimal environment for personalization. Hence companies will continue making products and services personalized for different types of consumers.

Hypothesis 4: Further Personalization of Products and Services

\(^{33}\) The Netsize Guide
Models of Payment

Attractive models of payments have become an important issue as the market of digital music strives for maturity. Today iTunes charges 99 cents in the US., 79 pence in the UK. and 0.99 euro in Europe for a song while you are eligible to download the software for free. The consumer will have access to 30-second previews of all songs before deciding whether to buy it or not. No subscriptions are currently available. Napster on the other hand, has a subscription fee of $9.95 per month whereupon the consumer can download desired songs for 80 cent. Napster also gives a free trial for 7 days. The Nordic DSP, Inprodicon, sells their content through retailers who charge approximately 14SEK for a song while no subscription fee is mandatory. Weedshare is an American company that has a bit different billing and distribution system. Weed-files are valid for free distribution over the Internet and can be played three times in the Windows Media player. Thereafter, continuous access is being charged for, controlled by the Microsoft’s DRM protection. The artists receive 50% of the price of each sold track while the one who distribute it further receive 20%. CD Baby recently engaged in Weed-file collaboration with Shared Media Licensing.

The main actors are starting to battle up in order to sign more subscriptions. Napster has engaged in a discount commitment with six universities in the US.. This unconfirmed deal will allow the students to subscribe for $3 instead of $9.95. One might see this as a strategic move to discourage students from the use of illegal file sharing services and create new revenue streams. Napster has also launched promotion collaboration with The Sun. During two months the readers will be offered free downloading from Napster’s UK. store. Napster and NTL have formed an agreement for broadband users. One million broadband subscribers are to be offered a free trial for one month. If they decide to continue they will be charged by £9.95 for the Broadband Plus subscription which includes access to Napster. NTL already has the same kind of deal with OD2. OD2 further released its SonicSelector jukebox in the UK. recently. Within this service the consumers pay 75 pence to download a song and 1 penny to get the streamed version. No subscription is necessary and the Jukebox is attainable at retailers like MSN, MTV, Packard Bell and Tiscali.

BMG and 3 launch videos meant for mobile phones in the UK. The music videos come in shape of a top list and will be available four to six weeks prior to the physical CD release.

The fee will be £ 1.5 for downloading a song and £ 10 for access to the entire music video storage during one month. A similar service has also been made available in Europe lately.
Subjective thoughts from the desktop research

Bundled offers where the consumers get the entire content package of his/her favorite artist will be launched in the future. You will basically achieve the music track, the truetone and the ringbacktone of your favourite song in the same deal. When it comes to payment systems we believe a couple of models will coexist. Monthly subscriptions will be the most embraced model for the frequently consumer, since he/she will get less charged out of this way of payment. A single price for each song will be the model for the non-committed user who needs the track instantly with no hitches. There will also be some kind of rental service where the user will be having a fixed size of content to their disposal. Then you will have access to the entire storage although it would not be feasible to keep too much of a load at the same time. The basic limit of rental storage could be chosen to 20Mb for full-length tracks and then you are eligible to trade your songs as much as you want to. But if overreaching this limit an extra bill will be sent. The consumer will of course get rid of all the content when the subscription is cancelled.

Hypothesis 5: Different Models of Payments Will Coexist
As mobile phones and mobile handsets have become an advanced product providing the user with new services, it has the technical potential to become an entertainment central in the future. In order to investigate whether this will actually happen, it is valuable to evaluate the existing entertainment portals and full-length music services towards mobile phones. The quality of those two factors is of utter essence for a mobile entertainment central to materialize. As a matter of that, this chapter will enlighten entertainment portals’ and full-length music services towards mobile phones’ popularity and potential.
Entertainment Portals

Interactivity through the mobile phones in terms of entertainment portals is an identified trend on the market. Historically, content providers have used a service called Premium SMS in order to distribute their content. This service requires SMS messages to be sent back and forth, which is rather onerous. Moreover, this service utilizes a technology that limits the amount of data being transferred. Popular products or services of today are therefore also being distributed through mobile portals, which is an emerging trend that increases in popularity. These services include polyphonic ringtones, true and funtones, ringbacktones, music videos, images and games.

Polyphonic Ringtones

The interest of media companies' for mobile ringtones has been immense since the concept was launched. Due to David Hudert, the idea of commercializing mobile ringtones originated from commercial campaigns devised for record labels. The campaigns utilized samples of mobile ringtones to promote the artists. As the ringtones became popular, various actors realized the potential of profit. Today reports are showing that the number of sold polyphonic ringtones have eclipsed the amount of sold music singles.

There are companies helping the record labels to develop ringtones upon new releases from the artists. +46 is a company that has business relations with the major record labels and develops polyphonic versions of new songs. As polyphonic ringtones are not the original songs, they are considered covers. In order to decide which format to use when producing these covers, the company has established relations with mobile manufacturers in order to keep track of future formats that will be supported by the mobile phones. Some polyphonic ringtones are pre-programmed in mobile phones upon the delivery from mobile manufacturers, but it is mostly delivered to consumers through aggregators like Eurobate or Mobilehits.

The distribution of polyphonic ringtones is still being done through Premium SMS provided by the network operators. Basically, this means that the actual ringtone is being sent to the mobile handset through SMS technology. Consumers make an order by sending an SMS to a service number with a code specifying which ringtone they request. The service platform registers the SMS order and replies to the consumer's mobile handset with the desired polyphonic ringtone as a SMS.

42 David Hudert, Inprodicon, 2004-07-22  
43 The Netsize Guide  
44 Martina Johansson, Eurobate, 2004-07-06
Other contents may also be transmitted through Premium SMS services, but there is a limit to this service. SMS is a technology that limits the space for every SMS sent, meaning that the transmitted content by an SMS carrier is restricted in size. Polyphonic ringtones provides enriched sound quality compared to older ringtones and may therefore seem to require a lot of space. However, the sound instruments playing the melodies are pre-recorded to the mobile phones. Therefore, polyphonic ringtones do not require lots of storage, as all it does is to provide instructions about which tones and instrument to play.

Along with the new multimedia services, mobile entertainment portals are becoming increasingly popular. Naturally, polyphonic ringtones can be found at the mobile portals for download as well. In our research, all the participants in the focus groups had downloaded a polyphonic ringtone. Although the portals have become popular, many youths find the service rather difficult and confusing. A girl from the focus groups stated: “It is so hard to download a ringtone, you have to use the WAP function and I don’t really know how it works.” But at the same time, they think that it is a very efficient to be able to download content directly from the mobile phone. Nevertheless, the overall feeling is that it is still too difficult at this point. Another disadvantage that was discussed was the cost for downloading polyphonic ringtones. They felt that 15 SEK was too much. “The cost is a huge reason why I don’t buy ringtones, 10 SEK is the most I would like to pay, but 5 SEK would be a better price.” However, other research has shown that ringtones are tremendously popular citing that sales reached 3.5 billion last year (2003). The most popular ringtones (amongst youths) are hip-hop tunes and pop tunes like Britney Spears. Classic music,
holiday themed music and movie and TV show theme songs are also among the most popular ringtones.\(^9\)

The business relations behind polyphonic ringtones are unfair due to the power of the operators. Eurobate is not able to collect any big revenues from the present business model. The operators are charging for the payment solution and a monthly fee for the services provided. If a SMS is required, it will cost them extra. If the polyphonic tone is a song, STIM will charge 10% of the price after tax. Thereafter the marketing channel like TV3 is taking 50% out of Eurobates profit.

<table>
<thead>
<tr>
<th>Ringtone</th>
<th>15.00 SEK</th>
</tr>
</thead>
<tbody>
<tr>
<td>VAT (20%)</td>
<td>12.00 SEK</td>
</tr>
<tr>
<td>Retailer Margin (16.25%)</td>
<td>10.05 SEK</td>
</tr>
<tr>
<td>Traffic Cost (1.25 SEK)</td>
<td>8.80 SEK</td>
</tr>
<tr>
<td>Operator (15% of profit)</td>
<td>7.48 SEK</td>
</tr>
<tr>
<td>TV3 (50% of profit)</td>
<td>3.74 SEK</td>
</tr>
<tr>
<td>STIM (10% after VAT)</td>
<td>2.54 SEK</td>
</tr>
<tr>
<td><strong>Total Profit</strong></td>
<td><strong>2.54 SEK</strong></td>
</tr>
</tbody>
</table>

Figure 2

**Truetones & Funtones**

Truetones and funtones have to be downloaded by the use of mobile portals since the size is too big to be sent over a SMS. Unlike polyphonic ringtones, these are short samples of sounds being recorded and stored as data files, utilizing the same concept as the popular MP3 files. Although the samples are being compressed with advanced mathematical algorithms (set of theories that specifies how to carry out the compression of data), a large quantity of data is still required for a satisfactory reconstruction of the sound. Contents being transferred through mobile portals are not restricted to the size of a SMS. Therefore, these kinds of ringtones are ideally being provided through mobile portals for download.

\(^9\) Shoppingblog [Shoppingblog website](#)
Figure 3. Truetones and funtones have to be downloaded by the use of mobile portals since the size is too big to be sent over a SMS.

The opinion about the difficulty of downloading content remains for the participants in the focus groups but they were overall more positive about truetones compared to polyphonic ringtones. One of the girls stated: “Truetones are much better than polyphonic ringtones since you know exactly what you get”. She was referring to the fact that the qualities of many polyphonic covers are questionable. Many of the participants would pay a little more for truetones if it had improved quality; others thought that it was still too expensive. Funtones were more appreciated by the boys in the focus groups: “I would rather pay for a funtone than anything else since it is what it says, fun!”

Truetones and funtones are primarily sold by aggregators and operators through Internet and mobile portals. As the competition increases, the need of a fine and attractive portal becomes important. Aggregators provide a wide range of content available for customers with different operators, while the operators are primarily targeting their own subscribers with content from different aggregators. For instance, Eurobate provide operators in Sweden, Norway and a few additional countries with content on the mobile portals of the operators, while they at the same time run their own portal. The business model differs from countries due to the CPA (Content Provider Agreement). It depends on where the operator wants to be in the value chain. One approach is to take on a global strategy like Vodafone, as they use the same concept all over Europe. Tele2 and Telia on the other hand, wants the aggregators to develop the content on their portals. Martina Johansson at Eurobate believes this is the way to do it as she stated “Let the operators build up the infrastructure with flexible solutions, while experts take care of the content development”. She also endorses that record labels should be given the chance to sell their own content as she says: “Record labels are probably best at selling music related material while game developers are best at selling games.”

Ringbacktones

“Truetones are much better than polyphonic ringtones since you know exactly what you get”.

50 Focus Groups Sessions
51 Focus Groups Sessions
52 Focus Groups Sessions
53 Focus Groups Sessions
This type of ringtone is being stored on a server at the network operators, as opposed to other ringtones where they are stored locally to the mobile handsets. The tones consist of either a truetone song or a funtone, but it is never heard by the owner. Those who call the owner will be able to hear the chosen tone. Due to regulations, the song or funtone cannot be implemented without the regular tone indicating that the phone has not yet been picked up. The ordering of ringbacktones is done through the mobile portal of the operator, and the administration of the chosen tone is done through a web interface.

Figure 4. The action Scheme of a ringbaclone.

Although the marketing effort of ringbacktones was extensive, it has not yet become a hit.54 Almost all the participants in the focus groups agreed that ringbacktones are unnecessary and even annoying. “It is annoying and almost confusing, it sounds like commercial,” a participant from the focus groups stated.55 The fact that it is perceived as expensive does not enrich the leverage value for the consumers. Eurobate has a marketshare of 85% in the market of ringbacktones. Of the top 15 most sold ringbacktones, nine or ten are humorous ones and not music. Consumers are more likely to pay for this kind of tones rather than for a song.56 Regarding the market outside of Sweden, the ringbacktones have become very popular. “Ringbacktones are achieving a 35% penetration amongst subscribers and generating USD 91.4 million in revenue for operators in 2003”.57 If ringbacktones will become as popular in Sweden, the future will tell.

54 Birgitta Bokström, Sony Music, 2004
55 Focus Groups Sessions
56 Martina Johansson, Eurobate, 2004-07-06
57 ewirelessnews. ewireless website
Music Videos

Streamed video is a service that seems to appear as a more attractive alternative compared to download because of limited storage capacity. Another reason for the positive attitude towards streaming video is because the record labels seem to be more cooperative when working with streamed material as consumers cannot keep the file or spread it to another handset. It is also easier to profit on streamed files since the consumer might buy the file more than once.\(^{56}\) For this kind of service, it is most common to either charge for data traffic or the downloaded content itself. Telia charges for data traffic and the price is presently 20SEK/MB in Sweden.\(^^{59}\) In Finland, they use another model as the consumer pre-pays for a certain amount of traffic. In this model, the cost for the consumer decreases while the operator ensures a fixed income in advance. Pia Svirsky at Telia do not know when or if this payment model will be launched in Sweden.\(^^{60}\)

3 is the only operator in Sweden who has a straight collaboration with record labels. The reason for this is because the aggregators lack of music videos and other exclusive material. Music Brigade is the only aggregator who provides music videos although the material is many times old fashion. 3 wants to be in the forefront as they target early adopters and young people with a wide range of music content. However they do not see the function of middlemen if they can get it all from their partner music label.\(^{61}\) They would also like to engage in collaborations where they will be able to pre-launch music videos before they release it in television.

The participants in our focus groups had different opinions about downloading music videos directly to their mobile phones. The positive ones claimed it to be a good idea because it would be a good time-killer, for instance, when waiting for the bus. Others who were not as positive, stated that there were disadvantages due to price and bad quality; “I think it is a very good thing to be able to download music videos but it isn’t worth it in the end, since the price is so high and the quality is not satisfactory.”\(^{62}\)

Images

Images have become somewhat of a standard in mobile phones and consumers see it as a way to personalize them. They use it as backgrounds on the phones so it is instantly seen when they look at their mobile phone. The participants in the focus groups did not find backgrounds of artists as favorable; in fact commercial pictures were not popular at all.\(^{63}\)

\(^{56}\) Anette Bohman, 3, 2004-08-24
\(^{59}\) Pia Svirsky, Telia, 2004-07-20
\(^{60}\) Pia Svirsky, Telia, 2004-07-20
\(^{61}\) Anette Bohman, 3, 2004-08-24
\(^{62}\) Focus Groups Sessions
\(^{63}\) Focus Groups Sessions
Youths preferred taking pictures with their mobile phone and use it as background pictures. For commercial pictures, the operator 3 chooses to strike deals with record labels in order to include images of pop stars in their bundled music packages. They believe this will enrich the value for the customers.

**Games**

Games are another product offering that can be downloaded to the mobile phone. It is one of the most downloaded content at the operator 3. Ever since Nokia’s early game called Snake was launched, the consumer has shown more interest in gaming on the mobile phone. The market is now becoming humongous and it is easier to download games as the process is being simplified. As the market for mobile gaming is becoming bigger, possible collaboration between the game developers and record labels where music are to be integrated into the games may become interesting.

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Anette Bohman, 3, 2004-08-24

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64 Anette Bohman, 3, 2004-08-24
Full Length Music Services towards Mobile Phones

If an entertainment central is to incorporate full length music services towards mobile phones, they have to become popular and widely used by the consumers. Early adopters are then important for success. Hence, this consumer segment is discussed followed by an investigation of other factors that will have a big impact on services towards mobile phones. These factors are DRM protection, memory in the mobile phones, transfer rate for downloads and consumer experiences.

Early Adopters

Many actors believe that instant downloading towards mobile phones will be a part of the future and have already adopted this to their products and services. The mobile manufacturers have had two clear approaches toward music consumption on mobile handsets; implementing radio receivers and mobile phones capable to play music files. Despite these efforts, music consumption on mobile phones has not been widely adopted. The market is in need of enough available memory in the mobile phones, a descent transfer rate, good digital right management (DRM) and an increased consumer experience of these services in order to attract more consumers. Nevertheless, the market for mobile downloading looks very exiting and big profits are to be made for cunning actors.

Anette Bohman at 3 believes customers will be ready for full-length downloading in the near future since video downloading has increased. She advocates that 3 has the intention to bring out new services on the market. She stated: “If we can work with present material and release it before our competitors, I believe we will come out strong and that is in alignment with our plans.” She also says that nowadays the mobile market is much more than just ringtones and hence companies have to act in order to promote sales of new services. However some companies have already started to provide full-length music downloads or announced they will do in the future.

T-Mobile Austria is an early adoptor, as they will be offering its customers a jukebox on their mobiles in the form of a “Mobile Jukebox”. Within this service T-Mobile customers can download their favorite tracks direct to their multimedia mobiles and then listen to them at any time. T-Mobile is offering songs in an exclusive mobile mix format. Tracks are specially edited for the mobile mix listening experience. Mobile Jukebox is Europe’s first music service to be based on an open standard. Initially, Mobile Jukebox will be supported by UMTS-

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65 MusikNytt Nyhetsbrev 41
enabled Nokia 7600 end devices, which will be available in all T-Mobile stores and from its partners. The Mobile Jukebox allows users to select a track via t-zones\textsuperscript{66}, listen to a sample and then download to a UMTS or GPRS mobile. Once a track has been downloaded it can be listened to, if you are offline, at any time and free of charge. To kick things off, the Mobile Jukebox will feature several hundred tracks to choose from. The selection will be continually expanded throughout the year. The tracks are between 90 and 120 seconds in length but T-Mobile will also provide full-length tracks at some point in the future.\textsuperscript{67}

Telenor is another early adopter as they provide Djuice customers with full-length downloading in collaboration with the Czech Republic operator Chaoticom. Djuice subscriptions are available in Norway, Sweden and Hungary, but Chaoticom has similar partnerships with Orange and Eurotel. By leveraging the Chaoticom solution their partner subscribers can browse, preview and download full-length and original music tracks directly to their mobile phones. Some competitive solutions only offer customers short previews of songs but Chaoticom gives the consumer the ability to purchase the full track. This capability is made possible through Chaoticom’s revolutionary KOZ technology. The KOZ solution consumes significantly less battery power and requires less processing power than other solutions available today. This solution also delivers progressive downloading, which means that the consumer can listen to their music before the download is complete. As a part of this service for Telenor, Chaoticom has also entered partnerships with Warner Music International and BMG, which are among the labels providing music for the Djuice service. The partnership with Warner and BMG marks the latest in series of steps by Chaoticom.\textsuperscript{68}

**DRM Protected File Formats**

Decent DRM alternatives need to be available if more actors should put efforts in downloading towards mobile phones. Of course, DRM protections need to be implemented on the mobile phones, but the issue does not stop there. The manufacturers of music players have been facing strategic difficulties as they early choose to support exclusive DRM protected file formats. Recently, the file format WMA from Microsoft seem to be the most widely adopted format among DSPs and no one knows if there will be another format taking over in the future. Unless the mobile phones have a vast amount of unutilized capacity available making it possible to implement support for all file formats, the choice of supported DRM protected file formats is an important issue to be taken into consideration.

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\textsuperscript{66} T-Mobile's own portal for mobile downloading of content
\textsuperscript{67} T-Mobile. Mobile Jukebox
\textsuperscript{68} Chaoticom. Chaoticom and Telenor Mobil Launch Mobile Music Service
Memory in the Mobile Phones

The amount of storage in the mobile phones is an essential issue for the consumer when it comes to music listening. Storage concerns are therefore important to take into consideration. The new mobile phones have two different types of storage, a built-in memory and an external memory card. Although there are mobile phones with a combination of the two, the memory card is the most interesting solution. The manufacturers of memory cards have come very far in the development of this product, and the storage offered is thus much higher than traditional built-in memory.

Another advantage of external memory cards is the price compared to other alternatives. Since this product has been in the market for some time, the price has dropped and is therefore much cheaper in relation to the storage offered. Today, a lot of popular portable music players are offering storage of 256MB. For a memory card, this amount of storage is affordable among consumers. Furthermore, memory cards can be utilized to several other kinds of devices and consumers might already have other memory cards. If this is the case, these consumers will not even have to buy a memory card for music consumption on the mobile phone.

Transfer Rate

For legal services to be established on the wireless market, transfer rate of the wireless network is important. 3G mobile network has been launched in most countries, and the opportunity to make business in this area has therefore become interesting. As the technology of mobile networks improve, the issue of transfer rate will decrease in importance.

In a short-term perspective, the transfer rate might be an issue of file format rather than an issue of pressing the advancement of network technology. The reason is the difference between the diversity of file formats. Partly due to the DRM technology implemented in it, but also due to the technology that is used to store music. Earlier the storage for music files went through a compression algorithm in order to minimize the amount of data being stored without comprising the quality of the music. The compression technology has been improved extensively, and current compressions makes music files much smaller than the traditional MP3 file format. This fact further decreases the importance of transfer rate.
The Consumer Experience

Customer oriented user interface has become increasingly important in all kind of applications that requires any form of interactive between human and machine. Technical devices have historically been stuffed with advanced functions with intention to facilitate the end user. Unfortunately, poor design of user interface creates a bad communication with the end user, creating a resentful attitude toward the functions. It is thus important to make the devices user-friendly by implementing functions that facilitate user control through a good design of the user interface. However, there is no idea re-inventing the wheel. Small portable digital music players had its boom in 2003, which utilizes user-friendly interfaces that has been widely adopted by consumers. Implementing an interface similar to these will gain recognition among the consumers and enhance the experience of mobile phone music listening.

Due to the participants in our focus groups there are a lot of improvements that need to be done to the existing services in mobile phones. Many of the participants wanted their mobile phones integrated with MP3-player, digital camera and radio\(^{69}\). The participants wanted the comfort that comes with one integrated device but sees it also as the latest trend, like a “must-have.” This affects the market and technology for mobile phones considerably. Along with the consumers needs comes the strict opinion that the new functions shall not worsen the existing quality of the mobile phones. Battery life is something that the participants in the focus groups were worried about. “But if I get all the functions that I want in my mobile phone, the battery life will not be enough since I would use it more”\(^{70}\) stated one boy from the focus groups. Others were worried about memory space for their music files. “If I won’t be able to store as many songs as I wish on my mobile phone, I would rather use an MP3-player,” a girl from one focus group said. Others agreed. Moreover, problems such as usability also worried the participants. They were concerned that new functions would make the mobile phones more complicated to use. The youths were not convinced that new improvements would make the mobile phones easier to deal with. “I think that mobile phones have become more and more complicated along with all the new functionalities, a few years ago there were just two or three things you could do. Now you get confused immediately when you look at a new mobile phone.” It is important that one comfort does not eliminate another. “I really like the idea of downloading content to my mobile phone, but if it takes an eternity I would rather just skip it”.

The most challenging issue is to match the consumers’ needs and criteria with the development of technology. It is important that new services towards mobile phones simplify the consumer’s everyday life. If the match cannot be made it might scare the consumers away from the new service and hence the entertainment central might not become reality.

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\(^{69}\) Focus Groups Sessions

\(^{70}\) Focus Groups Sessions
Summary

The Consumer Perspective

Downloading content to mobile phones is popular although there are two great issues that hinder the consumer to buy as much content as they would like to. The price is considered to high and the process of downloading is considered difficult. Truetones are more attractive than polyphonic tones due to the quality and the fact that it is a real song. Ringbacktones are not interesting since it is too expensive and is experienced as an annoying sound.

If the consumers are to be interested in music video downloads, issues such as quality and price-setting must become more favorable. Images used as background pictures on the mobile phones are very popular since it makes the phone more personalized to the consumers.

There are many new services toward mobile phones that are interesting for the future. Many consumers would like to have an integrated mobile phone with camera, MP3-player and a radio. However, it is important that one comfort does not eliminate another. The battery endurance, memory space and the transfer rate must be much better.

The Market Perspective

Entertainment portals seem to be a competitive business from a market perspective. Many actors have started to engage due to the increased popularity of larger sized mobile content among consumers. Aggregators provide a wide range of content available for customers with different operators, while the operators are primarily targeting their own subscribers with content from different aggregators. The business model differs from countries due to the CPA (Content Provider Agreement).

Historically, polyphonic ring tones have been very popular to distribute for the content providers. It can be achieved either through a premium SMS or from an entertainment portal and it currently overreach the number of sold CD singles. True and fun tones are primarily sold on entertainment portals due to their size. The variety of true and fun tones on entertainment portals is a competitive issue among companies since it increases in popularity among consumers. Ringback tones were expected to become a profitable service and were therefore launched under a great marketing effort.

Music videos have been most popular in streamed formats and therefore companies have started to collaborate within this area. Record labels will have an easier time to profit on
streamed material since the consumer cannot keep the files. Operators will profit on the distribution method as they apply their traffic charges.

Images have not been a huge success for companies so far, although the operator 3 have chosen to include images of pop stars in their bundled music packages. Games have been more popular for mobile downloading and hence new collaborations between game developers and record labels where music are to be integrated into the games may become interesting.

Regarding full-length music services towards mobile phones, 3 has the intention to bring out new services on the market while some other companies have already started to provide full-length music downloads or announced they will do so in the future. The mobile market is much more than just ringtones and hence companies have to act in order to promote sales of new services. Straight partnerships between record labels and mobile operators have become common as full-length downloading of music material reveals.

The Technical Perspective

Entertainment portals have become popular and offer different products and services, such as polyphonic ringtones, truetones, funtones, ringbacktones, music videos, images and games. Traditionally, services like polyphonic ringtones have utilized SMS technology for distribution. This technology has become a service called Premium SMS at the mobile network operators. However, truetones, funtones, music videos, images and games are all too large for this kind of distribution and utilize WAP technology instead. Ringbacktones on the other hand, is a service that is stored by the operator rather than by the consumers. The service allows people to hear music instead of the traditional tone while waiting for the phone to be picked up.

Downloading music content to the mobile phones is still in its emerging stages. Important factors from the technical perspective need to be taken into consideration in this business in order to success. These factors include DRM protection, storage capacity and transfer rate of the mobile network. Of all the different file formats with DRM protection, WMA seems to be the most widely adopted on the market. Mobile phones with the ability to play music are competing against traditional portable digital music players, and hence the memory should be able to store at least the same amount of data as the competitors. Regarding the transfer rate, there are two different factors with impact on the speed. Either the mobile network has to transfer at high speed (such as 3G network), or the amount of data has to be minimized through data compression.
To find out whether the hypothesis concerning music services will prevail or not it is essential to take a further look into the most popular ways of distributing digital music. Three different music services are to be considered: 1) File sharing services which enable illegal downloading for the consumer, 2) DSPs which together with a retailer reach the consumers with their downloadable content, 3) Complete music services which controls all the distribution steps by itselfs.
Illegal File Sharing

In order to achieve an overview of the file sharing industry, we have chosen to use a SWOT analysis as an instrument. All factors within strengths, weaknesses, opportunities and threats are being discussed in depth. Each of them is presented in the table below.

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<th>Strengths</th>
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<td>• Virus infection</td>
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<td>• High awareness</td>
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<td>• Time-saving</td>
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<td>• Enhanced file sharing networks</td>
<td>• Legal file sharing</td>
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<td></td>
<td>• DRM protection</td>
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**Strengths**

**Free**

When the illegal file sharing of music was spread through the world its greatest benefit was of course the fact that it was free, with lack of difficult payment models. People could now consume music in a whole different way. In one focus group a girl stated: “Now you can listen to music that you were not able to listen to before, since you can download as much as you want. And if you do not like it, you just erase it from your computer.” Some mentioned that music is something that should be free and other stated that they feel sorry for the artists when they download their music. Either way the priceless music files have affected the music industry in a way that would have been impossible just ten years ago. People’s attitudes have changed, music can be free and this is a pattern that is going to take a lot of effort to change for the music industry.

**Wide Range of Music Contents**

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71 Focus Groups Sessions
There are a few technological reasons behind the digital revolution, boosting the popularity of file sharing services with a wide range of music content as a result. Copying of music is not a new phenomenon, but the breakthrough of digital music technology came when the Fraunhofer Institute for Integrated Circuits started working on algorithms that would enable compression of CD quality music without significant loss of the quality. Due to Gonzales & Cervera, listening tests have shown that music and speech samples compressed at high bitrates are virtually indistinguishable from the original samples. However, the research group finished its work in 1992, and the new music file format was born, the MP3. As the storage capacity of computers increased and high-speed modems became available in the following years, people began to share music content.

At first, the MP3 movement was mostly an underground phenomenon amongst the computer literate and hackers. However, the format gained popularity as the Internet grew. Word-of-mouth and newsgroups services were the initial factors that planted the awareness of the MP3 among people. Some business adopted the file format early and created software to cash in early on the MP3 hype that came with the music sharing program Napster. One of the companies was Nullsoft, creator of the popular MP3 player Winamp, enabling convenient consumption of MP3 songs.

The easiest way to gain customers is to provide a fast downloading speed and a wide range of content. As speed reaches its maximum available content becomes the unique selling point, in order to gain consumers. File sharing services with illegal downloads are quite aware of this issue and today almost every service enables downloading in form of music, videos and various programs to enhance its customer base. One youth from a focus group stated: "When I use my free file sharing networks I know that I can get exactly what I want, since someone will always share it." The extensive supply of content is one of the main reasons why free file sharing is so tough to compete with for legal services.

The collection of music files in the free file services is homongous and there is no segmentation between the consumers. No matter the music style, age, genus or ethnicity, the free file sharing system provides something for everyone. People are aware of this fact and it makes the service even more attractive.

High Awareness

The common occurrence of file sharing networks makes it well known to the public. In the early days it did take some word of mouth to make it commercial. But these days it is no doubt that free file downloading services such as KaZaa or Direct Connect is known by young people, although everyone might not have used it. This publicity is great marketing.

72 Julio Gonzalez & Teresa Cervera, Taylor & Francis: The effect of MPEG audio compression on multidimensional set of voice parameters
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It is no doubt that free file downloading services such as KaZaa or Direct Connect is known by young people.
since many of these service uses the same technique. When a market is mature there will be
business opportunities for more actors. In the same way Dell pushed out cheap computers to
experienced users, free downloading services have started to encounter Internet users.

Since free file sharing systems have a great brand awareness people know where to find
what they want and how to find it. Word-of-mouth is behind the widespread usage of free file
sharing systems. There is no strategic marketing in this area.

**Timesaving**

In comparison with the legal file sharing systems the common opinion is that the free ones
are timesaving. “You do not have to register or go through payment steps in order to
download a song.” This is even more important when you want to download more than one
music file.

**Weaknesses**

**Virus Infections**

Viruses that come with MP3 files is a widespread phenomenon known by most consumers.
However, deeper research puts the concept of MP3 viruses in question. A virus, by definition,
is a program, a set of predefined codes that executes when the computer tries to run it. MP3
files, on the other hand, are a bunch of data read by an MP3 player, converting the data to
audio. In the process of loading the MP3 into an MP3 player, it does not make any difference
between virus codes or music data - it is all data. Strange noise is the worst scenario if the
data is something else than music. On the other hand, if the computer tries to load a
program, it tries to execute the set of codes within the program. Traditionally, this is how a
virus become activated, having the computer execute its own codes as a part of another
program. This is why some computer literates are considering MP3 viruses as hoax. At a
time, anti-virus software creator F-Secure had made a press release, supporting this
statement. However the release is somewhat old and new virus technologies might evolve.
The truth of this phenomenon is therefore uncertain, but it poses a threat towards illegal file
sharing as long as consumers believe in it.

To address this issue, consumers have to be equipped with anti-virus programs such as
Norton Antivirus to protect their computers. For young consumers who are not aware of this

74 Focus Groups Sessions
75 JayAllen.org. MP3Concept: A Mac MP3 virus or hoax?
76 F-Secure. Hoax Warnings
knowledge it might be difficult for them to download anti-virus programs. A participant in the focus group mentioned that if something happened to her computer she wouldn’t have any music left. This issue becomes even more urgent within free services since no backup for loss files will be available.

**Poor Quality**

File sharing networks are providing vast accessibility of illegal content, and are therefore subject to why new releases of music files are spread through the world at an incredible speed. In the struggle of the music industry, these networks are utilized to become a weapon toward the pirates themselves. The rapid multiplication of content throughout the world is being used to distribute music with bad quality or fake content; complicating the search process for illegal downloads.

Evidently this is a problem for the consumer since it takes a lot of effort to avoid those harmed files. The participants in the focus groups mentioned this as a big problem and as a good reason to download music from free file sharing systems.

**Prerequisites**

Computer skills are not only necessary when it comes to anti-virus programs but even when it comes to get started with the downloading software. This is a weakness for the free file sharing systems since the consumer has to be able to download the program and get familiar with all the different functionalities. This can take a lot of time and effort for many consumers and can be a reason why some may choose legal file sharing systems instead.

**Opportunities**

**Diversity of Content**

One benefit within most free file sharing services is the diversity of available content. As mentioned within “Strengths” you are able to download a wide range of formats from the same service. This is something legal services have not applied up till now and hence they are not yet to be called complete downloading services in its true senses. Nevertheless this is a unique selling point and a true business opportunity for free services since it increases the value for its customers.
Enhanced File Sharing Networks

New technologies are constantly evolving. In the beginning of the MP3 hype, Napster was a program that provided access to a network of connected users where people could search for songs they desired to download through a central directory. In short, the program was enabling sharing feature of music content within the community and became incredible popular and successful. This annoyed the Record Industry Association of America (RIAA), which represents the major record labels. In December 1999, the RIAA sued Napster for copyright infringement.77

The move by RIAA inspired the web community to start building the successor of Napster in case it should be shut down. Early in 2000, the file sharing program Gnutella was launched by Nullsoft, although the company quickly withdrew its support for the software. Programmers started to hack it apart and built a new file sharing network based on the same technology. By 2003, the site www.gnutelliums.com was listing 14 programs based on Gnutella, including Bearshare, Morpheus and KaZaa. Today, most popular software for sharing content includes KaZaa, Direct Connect and BitTorrent, software that are based on entirely different technologies with benefits in niche areas. BitTorrent is a new enhanced technology gaining popularity by each day. However, the strength of this technology lies within sharing of large files, which constitute a bigger threat toward the movie industry. Within this service the stress of great bandwidth becomes a non-issue, due to a new way of downloading and uploading.78 If free services keep follow this development curve they will always have something unique to offer its customer and hence this is a business opportunity. One might say that this is a necessity for them to survive as new legal alternatives grow strong.

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77 Sean McManus. A short history of file sharing
76 BitTorrent. BitTorrent Website
**Threats**

**Legal Restrictions**

A legal restriction against free file sharing is a big threat for actors in this business. Of course there will always be users that will do what it takes to get files for free. But it will probably have an impact to the general consumer and the actors who compete in this business. As the managing director of Sony Music, Nordic, says regarding downloading files without paying: “When you walk into a supermarket, would you then assume you can grab what you want and just walk straight out without paying for it?” This issue will probably prevent many consumers from illegal downloading and the same issue might apply to the providers of the illegal content as well. Lee Marshall argues in his article “[...] that the only way for the recording industry to prevent substantial online piracy is by creating and winning a moral argument”. Nevertheless it will be more elements to take into account for the free file sharing services before actors start up their business due to these law restrictions. It will also take a lot of effort for these actors to keep their businesses away from lawsuits if they still decide to continue with their illegal operations.

The participants in the focus groups agreed on that the music industry has to come up with a good alternative on the Internet to be able to compete with the free file sharing systems. It was especially important to be able to listen to the song you are about to download. When payment comes into the picture it will be impossible for the consumers to download a song for trial. As a consequence the music industry has to come up with a smart and efficient way to prohibit the music sites to become a jukebox where consumers can listen to the music without downloading it.

**Legal File Sharing**

New upcoming legal services will constitute a big threat for illegal actors as they grow strong. iTunes, Napster and a couple of DSPs together with its partner retailers will gain customers on free services’ actors’ expenses. Legal services provide non harmed files to a consistent downloading speed. This consistency might be tough to compete with since free services’ actors allow the users to put up their content by themselves with disregard to upload capacity or quality of files. Legal services will increase as various actors realize the profit possibilities within the industry and when they increase their database of content they will become a tough legal competitor. Consumers who want to follow the new law restriction but yet still want to be able to download their music will turn to new downloading sites where they have to pay for their music. One of the girls in the focus groups said: “If the legal file sharing systems provides music files with good quality and additional content about the artists in a favorable way, it would definitely be worth the money spent”.

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79 Focus Groups Sessions
80 Marshall Lee; p 1.
81 Focus Groups Sessions
sharing systems provides music files with good quality and additional content about the artists in a favorable way, it would definitely be worth the money spent.\textsuperscript{82}

**DRM**

Music content purchased through legal services has DRM protection implemented. Today, one example of the DRM restrictions is the 3-3-3 philosophy. One may download the song three times from the site of purchase, burn the song to three different CDs and transfer the song to three audio players. In comparison to regular MP3 files, these purchased music files are heavily restricted in terms of distribution, effectively disturbing the sharing opportunity through pirate networks.

*Figure 6. The 3-3-3 philosophy. Where one may download the song three times, burn it to three different CDs and transfer it to three different devices.*

\textsuperscript{82} Focus Groups Sessions
Digital Service Providers

In this section, the role of the Digital Service Providers (DSP) is defined followed by a presentation of the different type of actors. Some actors are global while others are regional, which makes a difference in their vision and strategy. Important factors, such as collaborating partners and the technical platform, are being discussed.

The Role of a DSP in the Value Chain

DSPs are not only taking the role of wholesalers, but also providing the technical platform to distribute music content to retailers. They understand that consumers do not really care how or where the content are coming from, as long as they get what they want when they surf into a website to make the purchase. In an interview, Robert Gustavsson from Inprodicon stated that the general philosophy of a DSP is to act like a delivery service, picking up the product from record companies, storing, and finally deliver it to the end user through retailer websites.

Ever since the early days of Napster, the problem of illegal downloads has increased. Legal alternatives have had to take form and the DSPs came to the record labels rescue. Since it was difficult for the record labels to reorganize their business model accordingly to the market needs, the importance of digital providers and retailers became an issue. The DSPs are competing with illegal downloads which offer great accessibility and wide range of songs. This can be a problem for the DSPs if they do not adjust to it.

DSPs can be categorized as regional limited providers and potential worldwide providers, but this diversity does not make a difference for the consumer. There are two main consumer concerns with an impact on the DSPs:

- The range of songs available for download
- The price of the downloads

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83 Robert Gustavsson, Inprodicon, 2004-07-23
84 This allude to the first version of Napster, when they applied free downloading of music
Consumer research\textsuperscript{65} has shown the importance of diversified content. “Quote: if I have to pay for my music, it has to be in a place where I can find everything that I want”. The consumers are aware of large retailers’ beneficial prices because of advertising. If the DSPs have a large database of music provided from record labels, the retailers can make a better virtual shop for the consumers due to price discounts. The knowledge about the customers’ customer is essential for a DSP and needs to be taken into account.

For the DSPs to increase their leverage value for the consumers, they have to make more and better agreements with the record labels.

**Worldwide and Regional DSP**

Today we have a few DSPs operating on different markets. Loudeye/OD2 is one of the largest as they operate in the US. as well as in Europe. Inprodicon is more of a local restricted actor as they put their efforts in becoming the number one DSP in the Nordic area. One thing that all DSPs have in common is the struggle of an increased database of content. Because of this, the DSPs propose to various music labels in order to form agreements. Large DSPs with well-known trademarks seem to have an easier time doing this. In an interview, Jambarine said: “Everyone wants to work with a winner.”\textsuperscript{66} Nevertheless, more local restricted DSPs might achieve better information of new upcoming local talents and benefit by utilizing this knowledge. Inprodicon do not see larger worldwide providers as a big threat for their business as they expect many independent record labels to deny collaboration proposals from the worldwide actors. There will always be business opportunities for local actors with a specialized range of content. He also believes that digital music distribution has room for more than one actor and Inprodicon will rather benefit by the entrance of a new competitor. It will also enrich the leverage value for music consumers as there will be more alternatives available.\textsuperscript{67}

One would say that large DSPs and large companies in general might not be as flexible as small ones. It might be easier for small DSPs to swing around its concept and adapt to upcoming trends more accurately. But this does not apply to DSPs as the technical platform required is very expensive. Billboard estimates the cost for building up a suitable platform to $30-40 million.\textsuperscript{68} Even greater development expenses will reveal if a DSP wish to enable downloading towards mobile phones and therefore, it takes a wealthy organization to be in the forefront. The idea behind Inprodicon had its birth twenty years ago and was not realized before this year, partly due to big development expenses. However, if Inprodicon were to implement mobile downloading, they not only have to develop the platform – they also need a good relationship with the mobile manufacturers to secure that mobile handsets are supporting their products. David Hudert at Inprodicon works to keep terminal manufacturers

\textsuperscript{65} Focus Groups Sessions
\textsuperscript{66} Johan and Alex, Jambarine, 2004-08-16
\textsuperscript{67} Robert Gustavsson, Inprodicon, 2004-07-23
\textsuperscript{68} Robert Gustavsson, Inprodicon, 2004-07-23
such as Sony Ericsson updated about new music services. Nevertheless, it seems to be less expensive to establish a DSP compared to a complete music service due to saved marketing expenses. A DSP are not in need of direct marketing towards its end customers in order to build a brand. They do not need a brand.

**Obstacles in becoming a DSP**

To sell more digital content, it is essential to collaborate with the retailers to a greater extent. However, to make profitable agreements with the best retailers, the DSPs have to be able to show a solid database of diversified content. This content comes from negotiations with various record labels such as Sony Music. One might say that this should not be an issue as record labels should be eager to form partners to maximize the vending. But a serious record label only partner with serious DSPs and therefore it is essential to become a respected DSP. This might be a tough issue for new upcoming DSPs, but other factors are also to be taken into account. Robert Gustavsson said that they needed a partner with great experience in the business before they could launch the idea behind Inprodicon. They also needed to show great accounting routines, DRM protection and marketing strategies.

**Increased Turnovers Comes from Intense Joint Efforts**

DSPs distribute their music content through retailers on the net. Most common they sell the music content branded by a retailer, but a “store in store” concept can also be applied. Inprodicon uses both models as they sell music through Poplife on Aftonbladet’s homepage as well as through regular retailers such as Åhléns and CDON.COM. The retailers in Sweden charges an average of 14 SEK for a track and their margins are close to zero. David Hudert at Inprodicon thinks that the record labels also need to shrink their margins. He believes that they are taking too much out of the profit and should realize that the music industry is going through a reconstruction. The record labels need to shrink their margins as much as everyone else in order to boost the digital downloading industry. Furthermore it is essential that DSPs and their partner retailers cooperate in order to sell the digital content. They have to realize that their online music store is like any other store and need marketing to attract customers. Today every retailer’s homepage looks very much alike without any particular distinction. This poor exhibition needs to be changed in collaboration between retailers and their DSP, since it is a mutual interest. David Hudert recommends record labels to keep records of sold content for each customer. By doing this every single buyer can be exposed by push-marketing similar to what amazon.com is doing in the online book store industry. This approach is also appreciated by record labels, although they would like another actor to carry it out.

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89 David Hudert, Inprodicon, 2004-07-22
90 David Hudert, Inprodicon, 2004-07-22
91 Viktor Fredell, Sony Music, 2004-09-13
The Platform of a DSP

Considering the technical aspect of DSPs, there are more issues to it than mere storing and distribution. Security is one of the core subjects in this business. Restrictions to further distribution need to be set and controlled to prevent the music content to be further distributed illegally through file sharing networks on the Internet after the downloading from a purchase site. In this aspect, a security mechanism called Digital Right Management (DRM) is implemented into music content before it reaches the end user.

Traditionally, whenever speaking of digital music content, the word MP3 leaps to mind. This is however a rather old file type with no restrictions or security implemented. When Carey and Wall discuss the emergence of MP3-files, they mentioned that early evidence suggests that it is unlikely that MP3 will cause the demise of record labels or of the copyright law, but it is certainly the case that MP3 and its associated technologies will have a transformative effect upon both. Nevertheless, MP3 files are not the only format in use as the digital music distributors exploring new venture opportunities. DRM technologies are implemented into most of the new file types, such as AAC and WMA. Digital Service Providers need approval of the specific file type they choose from the record companies. In this case, Inprodicon chose to work with the file type WMA.

For a DSP, the technical platform is the biggest investment in this venture. As mentioned earlier, $30-40 million is the estimated cost for such a system to be developed from scratch. The advantage of an in-house development of such a system compared to a purchase is further customization options to fit future changes of the business model. For example, Inprodicon believes in a future market of mobile music, and hence, they are making further developments of the platform to support downloads from mobile handsets.

Preview of the Future Market

The option of customizing and the adaptability of the platform might prove to be an important key to success in the fast evolving market. The digital revolution has changed the music consumption pattern of regular consumers, and it might further evolve to a point where the requirements of the platforms are entirely different from what we currently are experience. In an interview with David Hudert, he spoke of his vision regarding this business. David Hudert wants to provide freedom to the consumers and believes that the prevailing DRM system does not serve this purpose to its fullest extent. Instead for having consumers purchase a song with restrictions, he wants the consumer to purchase a license of the song. The DRM

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92 Carey Mark, Wall David; p 35.
93 Robert Gustavsson, Inprodicon, 2004-07-23
protection will restrict the consumer from transferring songs to an unlimited number of devices. With a license the consumer will be able to play the song from any supported media. The consumer will no longer be restricted to where or how when consuming music content.\textsuperscript{34}

\textsuperscript{34} David Hudert, Inprodicon, 2004-07-22
Complete Music Services

In this section, the term Complete Music Services is defined. We will also explain the main strategic differences between DSPs and Complete Music Services. Brand recognition, co-selling of digital music players and unique consumer benefits will also be discussed as they have come to play a significant role in this business.

The Business Distinction between DSPs and Complete Music Services

Traditional DSPs have to rely on retailers for vending the music content they have gathered from various music labels. Complete music services, however, are taking care of the vending part as well, effectively combining the role of a DSP and a retailer. Except for a difference in consumer experience when comparing scattered retailing sites and a single interface toward consumers, there are other issues to be taken into consideration.

An interview with David Hudert revealed that the greatest investment of a DSP is the technical platform that has to be either developed in-house or purchased from a developer. Since the vending part of the business is being relied upon retailers, the DSP only has to make agreements with big retailers and utilize the retailers brand recognition in the business. This is a strategic decision of Inprodicon. Building a widely recognized brand requires too much work and resources to be carried out. Instead they choose to focus on the in-house development of the technical platform. Apple on the other hand, is an example of a bigger actor, which possesses the resources and is capable of branding. By combining the role of a DSP and retailer, Apple has created a complete music service with iTunes. Other examples are Napster and Connect.

Brand Recognition

Creating a brand that is widely recognized is not an easy task, and therefore a stronger incentive is needed as opposed for a mere DSP. A benefit of becoming a complete music service is the opportunity to control the last two steps of the value chain, which Apple utilizes for marketing and vending of iPod players. A similar initiative has been taken by Sony as they launch Connect with its corresponding portable music players.

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95 David Hudert, Inprodicon, 2004-07-22
Nevertheless, it might be hard to manage too many steps in the value chain for a single actor. David Hudert mentioned that it takes more than extensive brand recognition to win the consumers' faith as he stated, “You cannot win the consumers' reliance all through a strong brand like Coca Cola, for instance. You have to promote the artists in a proper manner.” As a consequence, complete music services like iTunes have to incorporate external actors in order to execute this in a good manner. They can do it by themselves but it seems like a tough issue for an actor with restricted artist experience. Managing the role of a retailer seems to be an easier issue from a competitive point of view. Due to Victor Fredell at Sony Music prevailing retailers do not know how to sell digital music in an efficient way and this is something complete music services can benefit since they control every joint of their distribution. One would say that Sony’s Connect would be the ultimate service to succeed with all the critical steps due to extensive promoting experience and a solid trademark in the music industry. The weakness might be the digital platform of music content and the ability to strike deals with artists from other record labels. The latter has shown not to be an issue, since Connect has agreements with various artists from a wide range of record labels. The platform seem to be working satisfactory as well, although a DSP might have an easier time to further develop their platform for future business opportunities. It is the core competence of a DSP. And future distribution mediums is a hot spot for some DSPs as Robert Gustavsson at Inprodicon stated, “In the future Inprodicon wants to provide the consumer or partnered retailers with digital content independently of time and space.”

The Co-Selling of Music Players

One marketing benefit with complete music services is the related music players. iTunes has its iPod while Sony Connect has a couple of supported devices. Those devices can make a great marketing impact for the music services. iTunes and the iPod are running a music file format called AAC, provided through a separate software program that enables easy transfer of music content between the hardware player and the software from the computer desktop. Connect has a similar feature, although the exclusive format of the music contents is called ATRAC. The music players provided by Apple and Sony can play other format as well, but as long as DRM protection is integrated in the formats concerned, the music players will not be able to play it except for their own exclusive formats that are supported. This is a serious drawback from the consumers’ perspective. As new companies specialized on music players which support all file formats increases, the Sony and Apple kind of strategy faces an intense two-fronted competition from other music services as well as from other music player manufacturers. This is a tough battle which could bring down the business for iTunes and Connect.
For the legal file formats that are concerned, the Microsoft developed WMA format seem to be the most widely adopted. Since the DSPs and their retailers are playing a significant role on the market from the perspective of stimulating an expanding the market, their choice of supported file format is important. However, the choice of a DSP is based on consent of the music industry to a great extent. The music labels are therefore controlling a significant part of the file formats adopted by the market. From their current standpoint, WMA seem to be the choice of the music labels.\(^{100}\)

As WMA has become increasingly popular as a legal alternative, other formats have taken harm from this advancement. Sony, whose players previously had not supported DRM protected WMA files as a strategic choice, has been forced to implement WMA support. Apple on the other hand, still does not support DRM protected WMA files in the iPods.

Napster is another actor of the category complete music services. It has an own software and distinctive interface, but does not benefit from co-selling hardware music players as opposed to iTunes and Connect. On the other hand, Napster is such a huge brand with a wide recognition and thus has not had to go through the exhausting work of building a brand. Napster was the first software to provide the option of sharing music content through a network of online users. The software was widely recognized, but the illegal alternative was shut down by lawsuits from the music labels.

**The Consumer Benefits**

Establishing a regular customer base is the most competitive factor among music services. This can be done differently depending on how much of an impact you have in the value chain. A complete music service has the opportunity to enhance the customer experience by themselves, which is partly done within iTunes. The site is easy to navigate on. It is uncomplicated to search for a special artist and the music files can without difficulty be transferred to different supported devices. For instance, music files downloaded from iTunes can be burned to an unlimited number of CDs, played on five PCs or Macintosh computers and transferred to an unlimited number of iPods.\(^{101}\) The consumers have to feel comfortable and Sony Connect offers an option to personalize by specifying the favourite genre. By doing this the consumers will always have their taste of music displayed by default.\(^{102}\)

Children and teenagers are large consumer segments, but they do not have a credit card to pay for the music purchases. Complete music services must therefore devise a solution for this problem. Today, some of the actors provide a special type of account, an allowance account where parents set up a limit of how much money their children can spend on music.

\(^{100}\) Viktor Fredell, Sony Music, 2004-09-28  
\(^{101}\) Apple. *iTunes Website*  
\(^{102}\) Connect. *Connect Website*
contents without an inquiry of credit card. Almost the same can be done by gift certificates for friends and family. iTunes uses a counter on their website displaying the remaining credits of the gift certificates.

The music sites are often connected to radio stations. On Napster’s website you can listen to over 50 free commercial stations. If you like a song on the radio but do not know the name, you can connect to iTunes and see the name of the song as they are connected to over 1000 radio stations in US. Radio stations from Europe will probably also support this service in a close future as iTunes recently has gone from a US-UK music provider to a US.- Europe provider. Other kinds of music enlighteners are also done by many of the complete music services. Some sites have celebrities naming their favorite songs and others have the own staff listing their favorite songs.

Other benefits that are exclusive for the customers are:

- Access to music videos on the site
- Opportunity to download a free song every week
- Be able to mix your own songs and let others share it
- Pre-release tracks
- Send samples of the music files you like to friends and family
- Get suggestions of songs based on other music files you have been downloading
- Find new music by looking at what other subscribers are listening to in real time

Based upon the facts above the complete music services seem to be a step ahead with consumer experience. Retailers truly have to improve their current business model in order to stay competitive. Otherwise, complete music services may increase their share of downloaded digital content.

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103 iTunes Website and Napster Website
104 iTunes Website
105 Napster Website
106 iTunes Website
Summary

The Consumer Perspective

The advantage of free file sharing services for the consumer is obvious – it’s free. It also provides a wide range of content and the downloading speed is fast. Problems that occur are the risks of virus infections and the lack of quality. The problems together with downloading obstacles require some computer skills from the consumer.

There are many different positive and negative factors with the present legal downloading services. The most essential issues regarding full-length downloading are the lack of diversified content and the price setting. Consumers are used to downloading music files for free and it is thus important that the DSPs, retailers and complete music services have these factors in mind.

For the complete music services it is important to provide a good consumer experience since they face competition from other complete music services as well as from retailers. Services such as iTunes and Napster have become popular since they many times fulfill the consumers’ needs. The sites are easy to navigate; there are payment solutions for children and the files can easily be transferred to other devices.

The Market Perspective

The result of free file sharing services will affect the popularity of legal alternatives although other factors will also be of greater importance. If legal alternatives enhance the customer experience by leveraging an extraordinary service, it will succeed despite the competition from illegal alternatives. Hence, illegal alternatives are to be taken into consideration when developing legal services. Actors have to realize the strengths within the existing free services in order to surpass their popularity with legal alternatives.

DSP-retailers are competing with file sharing services of illegal downloads which offer great accessibility and a wide range of songs. DSP-retailers have to increase the leverage value to be considered for the frequent file sharing users. This includes better agreements with record labels in order to increase the amount of available music files, better price-setting and better collaborations with their retailers.

Similar to a DSP and its partner retailers’ complete music services are competing against file sharing services. They combining the role of a DSP and retailer as they use their trademark for the vending part of the business as well. A benefit within being a complete music services
is the opportunity to control the last two steps of the value chain. Apple and their music complete music service iTunes utilize this by marketing and vending the iPod player.

The Technical Perspective

Illegal file sharing is the biggest threat for legal music. New improved networks are constantly emerging, which puts the music piracy constantly one step ahead of legal alternatives. As an example, although the free distribution of music by Napster was closed down, KaZaa, Direct Connect and BitTorrent are file sharing programs that have become popular and replaced Napster.

The technical platform is one of the most important factors for actors who intend to provide a legal alternative for music downloads towards desktop computers. The investment cost of this platform is estimated to $30-40 million if it were to be built from scratch. It is thus essential for the actor to make sure that it supports all the requirements that are important in the business. The important factors are DRM protection, different file types (such as AAC and WMA) and the option to expand the platform to support future needs.

This platform is needed for both a DSP and the actors who want to provide a complete music service, such as iTunes. From the technical perspective, another factor to be considered is the option to utilize the available technology, tune it in and thus make it support the business of vending digital music content. As an example, iTunes is providing music content in a format called AAC, while most of the other actors that provides legal alternatives for music download choose WMA. AAC is an exclusive format supported by the iPod players, which are being sold as a device in relation to the iTunes downloading service.
COLLABORATIONS

Unexpected collaborations that affect mobile downloading of music need to take the mobile network operators into consideration. Historically, the network operators have had a big impact on distribution of content towards mobile phones, since they are controlling the network traffic. This chapter begins with an explanation of their power position and their profitable services. A declaration of actors working against this monopoly kind of situation is then carried out. In the second section, innovative collaboration constellations and their incentives are then enlightened. Last but not least, a potential collaboration partner for record labels and content providers is described as this group effort has the potential to equalize the power of the operators.
The Power of the Operators

There is no doubt that network operators possess a beneficial position when content providers want to reach the mobile consumer. Therefore, the popular service (Premium SMS) for content distribution is being presented and the profitable traffic charges discussed. External actors are struggling to equalize the power of the operators and will thus be mentioned. One interesting actor is the OMTP group, which might be able to create an opportunity for increased revenues and will be discussed. DAB is a technology that can be utilized for new marketing strategies. Actors that control DAB are therefore emerging alternative collaboration partners.

Premium SMS

Content providers like Eurobate, Mobilehits and Cellus are distributing ringtones and other contents through Premium SMS, Premium MMS or WAP. The Premium services constitute a traditional distribution channel based on messaging interaction between a consumer handset and a terminal, which is provided by the network operators. WAP on the other hand, is a modern distribution channel with the experience of surfing on the Internet. This service is provided by an ISP (Internet Service Provider), which does not necessarily have anything to do with network operators.

Premium SMS is the distribution service that is still most common on the market. The channel has been adopted by consumers as a result of massive marketing campaigns directed by the content providers to popular media like the television, magazines and Internet. It was at the time when a new market emerged, a market consisting of ringtones and background images for mobile handsets. Mayako Fagerfjäll at Morgan/Netsize talked about why the network operators started to offer Premium SMS, “… because it was technically possible rather than a distribution service that had been carefully elaborated to meet the need of the market.” 1999 was the start of Premium SMS service offered by Vodafone. Other countries started to provide the service around 2001.107

The Profitable Traffic Charges

From the perspective of the operators, Premium SMS is a service. From the perspective of the content providers, it is a distribution channel. As mentioned before, there are, however, other alternatives of services or distribution channels for contents that needs to be

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107 Mayako Fagerfjäll, Netsize/Morgan, 2004-08-16
distributed. When comparing this aspect, Premium SMS is a billing model worth a closer enquiry as well as the background of it.

The network operators are a strong group of actors on the mobile market. They are the ones to provide access to the consumers, and the market of mobile contents has been in its emerging phase for a long time. Had the market been mature with actors bigger than themselves taking interest in it, the power of the operators would have been reduced. This scenario is yet to come. Because of this, content providers have to accept the operators’ demands. Except for having the content providers pay an administration fee, monthly subscription fee and traffic charges, the operators demand 15-30% share of the net income from content providers. “It was even worse in the beginning, when the operators were demanding as much as 70% share of the net income,” says Mayako Fagerljäll of Netsize.

![Diagram of content providers working with operators]

Figure 8. Content providers need agreements with all operators in order to cover 100% cover of the contents.

Tele2 has different models where the demanded shares range from 15% to 30%, while Telia demands 20% of the net income. One might suspect that the unreasonable charges are made possible because of a unique situation that is very delicate for the network operators. The fact is that every operator controls the access to all customers in their respective networks, meaning that content providers have to sign contracts with all network operators in order to make 100% coverage. The billing models among the operators may vary a bit, but there is no significant difference. When probing for the unique selling point in an interview regarding this issue, Michael Nisell from TeliaSonera said, “… other network

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108 Christer Areskoug, PTS, 2004-07-20
109 Tele2. Tele2 Content Provider Information
110 Tele2. Tele2 Content Provider Information
111 Telia. Telia mobile Premium Services Produktinformation
112 Michael Nisell, TeliaSonera, 2004-07-12
operators are not competitors to us in this business. We cooperate in other to develop a common infrastructure.” In other words, the operators have found themselves a niche business area where they do not need to worry about competition.

Nevertheless, Scandinavia has reasonable billing models compared to the rest of the world, although there is still a lot to be done. Mayako Fagerfjäll said, “... the network operators do not put enough effort in the devising of billing models, which results in inconsistent charges.” Premium MMS was an example taken for demonstration. Although Premium SMS and Premium MMS are both perceived as messaging services, they have different charges. Towards consumers, MMS had a higher charge around 3 SEK, opposed to SMS, which costs around 0.50 SEK. The problem is that content available through MMS can be achieved through WAP, which costs nearly nothing. As a result, MMS have not had any breakthrough while WAP services are increasing in popularity. Some of the operators have realized the blunder and lowered the charges since the beginning of 2004.113

The Struggle for Equalization

PTS, the National Post and Telecom Agency, is the authority that monitors and regulates the market of electronic communications. Although PTS are showing interest in the development of the mobile market, the only business area that is strictly regulated is the market for voice calls. All other business areas are regulated by the vague general regulation stating that charges shall be in tune with the market.

Regulations are applied to markets that are defined within the EU directives. SMS and other services are regretfully not being strictly regulated because they are not defined as markets within the EU directives. Christer Areskoug from PTS thinks the reasons could be that charges for these kinds of services do not appear to be a common problem for all EU countries. There are countries where the charges are really low. From a legal perspective, it is hard to define which level of charge that is “in tune with the market” and which is not. The network operators have a very hands-on solution to this problem. They think that as long as customers are willing to pay for the services, they have a level of charge that is in tune with the market. In circumstances where an actor has taken legal actions in issues regarding this business area, the legal process seldom goes very far as it is in everyone’s interest to find a solution. There are thus no cases from the courthouse that refers to any other kinds of regulations.114

Netsize is another effort on the market struggling for equalization. The Netsize group helps companies implement mobile services by acting as a kind of aggregator. As mentioned above, content providers need to sign contracts with all the network operators in order to

113 Mayako Fagerfjäll, Netsize/Morgan, 2004-08-16
114 Christer Areskoug, PTS, 2004-07-20
gain access to their customers. Considering the current charges, the entry barrier of this particular business is rather high. In reality, the amount of transactions required for the business to be lucrative cannot be achieved by any small actor alone. Netsize is therefore collecting all the small actors to accumulate enough of transactions for the deal they have toward the network operators, effectively lowering the entry barriers of this business.

Figure 9. Netsize aggregates enough of small content providers enough to sign agreements with all operators.

Morgan is the organization representing the industry of mobile entertainment. The organization has continuous discussions with the network operators regarding various issues relevant to the industry. So far, Morgan has been rather successful bringing down the charges to current levels. Morgan has also been working on implementations of legal restrictions. Although they have not been as successful in this issue, other measures are taken for a regulated market. For example, Morgan has established a strategic relation with ERB, which is the Ethical Council for Premium Rate Services. ERB are working with ethical issues, such as standardizing of contracts and regulation of new services. From this perspective, this alliance is exceptionally fruitful as the operators are said to be frequently changing the terms of agreement, especially contracts where new services are concerned.
OMTP stands for Open Mobile Terminal Platform and reflects the mission of the organization to focus on improving advanced mobile platforms using open standards and technologies. All 2.5G and above compliant terminals are covered by the OMTP group. The group was established in June 2004 by eight international Mobile Operators – Orange, NTT DoCoMo, mmO2, Smart Communications, Telecom Italia Mobile (“TIM”), Telefónica Móviles, T-Mobile and Vodafone. The following companies have expressed their intent to join the OMTP group: Amena, Hutchinson/3, KPN, One Austria, SFR and Telenor. The intention of OMTP is to work with all sectors of the mobile industry to promote its goals, through open standards and different technologies. The mission is to create an open ecosystem for advanced mobile platforms that support enhanced subscriber experiences, tailored to meet the requirements of each operator. The founding operators have recognized a need for the OMTP group to deliver standards to subscribers’ interfaces that can be deployed in an identical manner across different handsets for each operator.

The group will work to define recommendations for the application interfaces across different technologies to allow mobile operators to enhance the subscribers’ experience. The OMTP group is designed to produce recommendations for advanced mobile terminal platforms. These recommendations will relate to the promotion of industry standards, rather than the creation of new standards. Operators, manufacturers or other industry partners will be under no obligation to comply with any standards promoted by the OMTP group.

Figure 10. Technology of mobile phones are built on layers, where the highest layer is the interface towards end users. OMTP wants to standardize the layer between application and operating system.
The OMTP group wants to clarify that promotion of standards in this area does not oppose the desire of individual actors to differentiate their products or services. The work of promoting industrial standards is merely taking the technical interfaces into consideration. This way, it is still possible for individual actors to design their products based on technologies of their own choice.

The standardized application interface is to bring several benefits to various actors in the mobile business. The consumers will be highly affected if the OMTP group establish relations with most of the operators and make their portals standardized. If this succeeds mobile phones can possibly become even more efficient and important in our lives than today. For the actors involved in the collaboration, this means obtaining mutual gains as consumer satisfaction means increased revenues.

Figure 11. The value creation process of OMTP. Mobile manufacturers, content providers and OMTP engage in collaboration to achieve increased revenues, which at the same time create incentive for the collaboration.
A Potential Collaboration – Utilization of the DAB Technology

According to Ragnar Schnell at the Swedish Radio there is a huge gap between technology and content provided by record labels. For this reason, the record labels are not aware of opportunities within the technology. Due to the digitalized world record labels and other content providers have had to adapt new technology in order to distribute their content, but it is not a proactive move. Nevertheless, he claims that DAB (Digital Audio Broadcasting) can be a technology that is subject to potential collaboration between proactive thinking content providers.115

In September 1995 the Swedish Broadcasting Corporation, SR, launched regular DAB transmissions. Commercial actors have not adopted digital radio yet, which is one of the major reasons why it has not succeeded, due to Schnell. As a result of this, many actors stay out of the DAB business. The governments’ decision of decreased coverage area was a downturn for the popularity but there are still undiscovered business opportunities within the area, Schnell said. He also mentioned that an increased use of DAB can put some pressure on the operators and he believes this scenario will be a reality when DAB increases the coverage area and commercial actors shows their interest.116

All according to Ragnar Schnell, there are currently 30 countries broadcasting digital radio. In England it is determined that there will be a half a million receivers by the end of the year. Only in London there are more than 50 digital channels. In Denmark there is 100% reception and a lot of new channels are planned to be launched. Germany has 150 digital radio channels while Canada has 73 channels and receivers are sold in more than 250 stores. In these countries both commercial and public services channels are broadcasted. In a small town like Bristol, there are 18 digital channels at the present.

Instead of obtaining a license for broadcasting, CA (Conditional Access) is also an alternative in Great Britain.117 This is made possible because of digital technology. Frequency brokers with a license run a MUX (multiplexer) to divide the frequency into smaller parts. Random actors that want to broadcast temporarily can then rent these parts, signing a CA-agreement with the frequency broker.

Given these prerequisites a few ideas were discussed with Ragnar Schnell at length. He believes that the ideas are fully possible to implement, provided that there will be an increased interest of DAB content on the Swedish market. Record labels could claim a digital

115 Ragnar Schnell, Swedish Radio, 2004-08-19
116 Ragnar Schnell, Swedish Radio, 2004-08-19
117 Sveriges Radio, Sveriges Radio - Digitalradion
radio channel as a pure marketing channel for the artists. Another option is to rent a part of another actor’s frequency during a special event. Due to Stephen Lax, alternative uses must be found for the DAB to succeed, and one area for which it might be suited is mobile data communications.\footnote{Stephen Lax. Taylor & Francis Group. The Prospects for Digital Radio Policy and technology for a new broadcasting system} When mobile phones have an integrated DAB receiver it will be possible to broadcast live concerts in every mobile phone with DAB support. In this scenario, DAB will not only create marketing opportunities but also sales opportunities. As the broadcast method support streaming of extra material, record labels can attach a link to where the currently played track can be downloaded. It will then be possible to press the link, get connected to the 3G network and download the selected track instantly to the mobile phone. The consumers do not even have to realize that they are switching from the broadcasted DAB into the 3G network. This is to be seen as a strategic push marketing and sales method as the consumer are fed by an appropriate offer and are just one click away from the point of purchase. When the operators realize the potential within this marketing channel they may be more willing to decrease traffic charges in order to boost the mobile downloading through the mobile network.
Summary

The Consumer Perspective

Many new services aimed for mobile phones confuse the consumers as they are not user-friendly. The OMTP group wants to establish standards where the consumers can recognize its environment. This will make the consumer experience much better and the usage of new mobile services attractive.

The potential within new collaborations such as DAB looks very appealing from a consumer perspective. Within this collaboration the consumer will be able to listen to enhanced radio stations on their mobile phones. They may also be given the opportunity to download music instantly to their mobile phones in a convenient way.

The Market Perspective

From a market perspective collaborations are important to equalize the power on the mobile distribution market of digital content. The network operators are a strong group of actors on the mobile market since they are the ones to provide access to the consumers.

Nevertheless, there are organizations working against the operators’ power position. But the operators believe their charges are in tune with the market as long as customers are willing to pay for the services. Furthermore, it is hard to define which level of charge that is “in tune with the market” and which is not, from a legal perspective.

Collaborations that may give the operators an incentive to compromise on traffic charges are starting to reveal within the OMTP group. If the operators will be able to decrease their development costs for new services by adapting new evaluated recommendations, they might be more willing to lower their traffic charges.

An interesting collaboration partner for content providers appears as DAB grow strong. It enables new marketing and sales opportunities. When the operators realize the potential within this marketing channel they may be more willing to decrease their traffic charges.

The Technical Perspective

The profitable charges derived from Premium SMS imply tremendous revenues for the operators. Nevertheless, WAP is another distribution technology that is slowly being adopted
by the market and will thus become an alternative service for content distribution. From the content providers' point of view, the increasing popularity of WAP is beneficial in terms of low cost distribution as well as the opportunity to transfer large size contents.

The race between actors in developing new products to impress the market is going too fast. Technology implemented in the products might thus become too different between manufacturers, resulting in high cost issues such as extensive customer support. OMTP has identified the need of standardizing work.

DAB is a technology that has been perceived as a digitalized version of traditional analog radio network. However, as the digital signal can be controlled in a different way, new business opportunities emerge. For example, broadcasting of special events can be done as a temporary matter without having to acquire a permanent channel. As the technology provides a sub-layer with information, the opportunity to customize information arises.
PERSONALIZATION

Consumers have different preferences which are reflected in the choice of products and services. This chapter raises various factors that influence the consumption. The consumption pattern of music has changed over time as new devices have emerged to fit different needs and lifestyles, which will also being discussed here. The chapter has thus been divided into two sections:

- Personalization goes into mobile phones.
- The variety of music listening devices.
The Mobile Phone as an Identification Item

Mobile phones have come to be a personalized accessory, with customization possibilities for each consumer’s needs. In this section, the theory about individual differences is first presented in short, as it seem to impact the customization pattern among individuals. Later on, empirical data from focus group sessions are brought into discussion. Participants have provided valuable insights about consumers’ opinion about popular products, which will be clarified with a few charts.

The Individual Differences

Marketing efforts that are designed to target different segments loses focus on consumers’ individuality. Since people are all individuals, it is important that actors on the market try to focus on individuals instead of large segments. Due to Blackwell, Miniard and Engell, the influence of individual differences on consumer behavior is something that cannot be neglected. The individual differences are divided into five categories:

1. Demographics, psychographics, values and personality.
   Where people live, what values they have in life and the different types of personality affects the decision processes and attitudes.

2. Consumer resources
   The consumer brings three primary resources into every purchase: (1) time, (2) money, and (3) information reception and attention. Depending on these factors of impact the decision differs between consumers.

3. Motivation
   Different studies made from psychologist have shown how motivation affects a goal-directed behavior and activates it.

4. Knowledge
   This category concerns the information stored in memory. This can be from previous course of events or advertisements that have been seen.

119 Blackwell, D. Roger; Miniard W. Paul; Engel F. James. p 211
5. **Attitudes**

Attitudes towards a specific brand or product highly affect the consumer and its purchase.\(^{120}\)

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**Personalization with Mobile Phones**

Most people have different backgrounds and thus different prerequisites in all the categories mentioned above. In addition to this, the market seems to believe that youth are especially driven by the urge to differentiate and express their individuality. This is rather clear when analyzing the marketing campaigns of products that enable the option to express individualism. Such products are typically ringtones and background images. Furthermore, almost all the participants from the focus group sessions stated that it was important with a mobile phone that can be personalized. Again, background images of mobile phones and ringtones were examples of products they liked for this reason. One of the participants said: “It is so nice when you look at your mobile phone and you see your favourite picture on the display.”\(^{121}\) However, not all participants have the same opinion about these products. Another participant said: “Background images are okay, but it is more important to keep the ringtones updated.”\(^{122}\) To give an overview of the opinions among the youths included in the focus group sessions, a few charts are presented below.

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\(^{120}\) Blackwell, D. Roger; Miniard W. Paul; Engel F. James. p 84

\(^{121}\) Focus Group Sessions

\(^{122}\) Focus Group Sessions
The charts further suggest that the opinions among focus group participants are very different, which further enhances the conclusion about individualism. Girls are overall positive to these kinds of products, especially regarding polyphonic ringtones. Boys on the other hand, show less interest here while being more positive to background images.

There are other ways of personal differentiation with a mobile phone. Except for ringtones and background images, a mobile phone and its design can also be utilized to express individuality according to The Netsize Guide. As the prices are dropping, Victor Fredell at Sony Music believes that mobile phones in the future will be replaced more often. “Mobile phones will probably be seen as a fashion item, and consumers might even replace them as soon as every month”, he speculated. Taking these facts into consideration, it is important for the actors on the market to focus on the individuality of the consumers.
The Variety of Music Listening Devices

This section is divided into three parts, stationary music consumption, portable devices and music in mobile phones. It is a natural categorization due to the different way the consumers consume their music and the technical varieties within these areas. In a market aspect it seems to be different actors and supplies in some of the sections as well.

Stationary Music Consumption

The stationary consumption of music has changed over the years according to technical issues, a shift on the market and the consumer demands. The traditional CD players are still sold frequently, but the business is facing an intense competition of computers that are becoming the main music player at home. Today many people have a desktop computer connected to speakers instead of a CD player. In many cases, the consumer demand decides whether there will be a technical change in the product or service development. But in this case, it is more or less the other way around. The advent of the Internet and the rapid growth of the computer market, centralized the computer’s position in the average home as well as providing easy access to digital music. In an article about popular music, distribution and network technologies, Steve Jones examines how technologies affect the amount of music that reaches people: “… new media technologies, particularly the Internet, create new territorializations of space and of affect.”

Many music fans have adopted the benefits of having a computer as the main music player as it supports a wide range of media formats. When having the computer as a music player you will be able to maneuver and play all music formats from the same device. Victor Fredell, EMD Manager at Sony Music, believes the computer will be an entertainment central in everyone’s home in the future. “What can be more convenient than controlling all media such as music, films and general entertainment from the same device?,” he said. Our research shows that 100% of our focus group participants had a stereo and a computer. One girl said that she sometimes turns on the TV, stereo and listen to music on the computer all at the same time, just so she won’t miss anything. The music consumption has altered and increased. The stereo brings the option to listen to CDs, LPs, tapes or radio. New and improved stereos support MP3 formats, but one important feature is still missing – the option to access new songs.

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123 Jones Steve; p 213.
124 Victor Fredell, Sony Music, 2004-09-15
125 Focus Groups Sessions
126 Focus Groups Sessions
Music downloads to the computer has become a natural habit. Only 4% of the focus group participants had never downloaded music to their computers. Music videos were something that about half of the participants had downloaded: “I download music videos because it is so frustrating when they don’t show the music that I like or when they show about half the song”. Another girl said that she didn’t download music videos; instead she looked at them on Yahoo or other websites.

Along with the computer and Internet revolution, Internet radio was founded. The opportunity to listen to radio channels from other countries has become an interesting alternative compared with the few radio stations that exist in Sweden. This is something that the elder focus group participants emphasized. Internet radio channels uses streamed media format in order to provide real time distribution of audio and video on the Internet. Streaming is simultaneous transfer of digital media (video, voice and data) so that it is received as a continuous real-time song, voice or video. Internet radio is not yet a revenue stream for companies since they do not charge the consumers for listening and the income from advertisement is modest. Consumers show interest in streamed media files; but companies have not yet put much effort in developing payment methods for this kind of content. Streamed media files can be a possible source of income and Jambarine believe a jukebox alternative will be an appropriate sale method. Nevertheless, streamed media within organizations is handy. It delivers tighter and more frequent cross-company communication, more personal and effective customer communication, empowerment of employees to speak to the entire organization, e-learning opportunities, and unmatched knowledge-sharing. Streamed media makes a message more powerful, clear, and effective. It definitely is a market for stationary computer consumption of streamed work related media within companies and hence streamed music may have potential to succeed among off workers, since they already are familiar with the distribution method.

Many believe there will also be a shift in the consumers’ music habits while they are driving their vehicles. Companies start to cooperate in order to enable digital music in cars. Recently iTunes and BMW launched an adapter that enables consumers to enjoy iPod music without the loss of sound quality that occurs with existing cassette and FM transmitter solutions. Soon consumers may even be able to listening to Internet radio or streamed media while driving the car as the market is showing interest in this application.

Portable Devices

127 Focus Groups Sessions
128 Focus Groups Sessions
129 Streaming Media. What is streaming
130 Johan and Alex, Jambarine, 2004-08-16
131 Enterprise Working Planet. Streaming Media Trickles into the Enterprise
132 Apple. iPod Your BMW
133 IDG.se. Småföretagare vill ha internet i bilen
Along with the technical development and consumers’ urge to always be able to listen to music, the portable music devices emerged. In June, 2002, right before the global penetration of small portable audio players, the Korean ReignCom Ltd had a huge problem with its company in the US. The giant retailer Best Buy, which at that time already sold another portable audio player, was reluctant to collaborate with the little-known South Korean manufacturer. They made a deal where Best Buy agreed to the product of ReignCom on one condition: ReignCom had to come up with a player that stored music on flash-memory chips. This idea became the success of the iRiver models, which is a trademark within the ReignCom Ltd. Today, the iRiver models account for 20% of all the flash-memory based audio players sold in the US. Apple, on the other hand, is still dominating the segment with hard-drive based audio players.\textsuperscript{134} Presently, these are some of the most popular types of portable audio players.

Apple’s iPod has the ability to store a large amount of songs, as opposed to the small flash-memory based players. That is the general difference between the two types of players. However, Apple’s strategy is not to sell audio players itself, but in a combination with songs through the complete music service called iTunes. By selling tracks through iTunes in a format supported by the iPod, Apple hopes to create incentives for the iPod and will thus profit from both revenue streams. Now, DRM protection is an important issue whenever speaking of legal alternatives to illegal file sharing. Although iPod is known to support most file types including the Windows Media Audio (WMA), it appears that DRM protected WMA files are not supported by the iPod players.\textsuperscript{135}

All of this puts Apple in a very delicate situation where a decision has to be made regarding supported file types of the iPod, which in turn will affect the music service provided by iTunes. One strategy would be to keep iPod as it is, with no additional support. Then iTunes stores will continue to offer DRM protected AAC format. In this case, a scenario would be to release the iTunes Music Store for Windows, and leverage its brand recognition and popularity of the iPod. Third party music providers like MusicMatch and BuyMusic are supporting the WMA format exclusively, and iPod players will therefore not be able to play music purchased through these services. If the iPod is a strong enough incentive, people may choose to stay with it. As a result they may become tied to the Apple Music Store which will drive more sales. Another strategy would be to incorporate the WMA format into the iPod players. In this scenario, customers will not be tied to one player or music service. As a result, iPod owners may feel free to explore other music services. This might cut Apple’s revenues from iTunes, but theoretically, it

\textsuperscript{134} BW Online. Korea’s ReignCom: Moving Up The MP3 Charts
\textsuperscript{135} Viktor Fredell, Sony Music, 2004-09-15
would open iPod's potential market even further. This interesting decision has yet to be seen in the market.

The focus group researcher shows that traditional portable devices still have a great share of the market. The most popular ones now are the CD-walkman, MP3-player and MiniDisc. Of all the focus group participants, 83% owned a CD-walkman, 35% a MP3-player and 35% a MiniDisc. Many of them had more than one device as the figure above is showing. Only 9% did not own a portable device, which is a small number considering the young age and financial situation.

The size of the CD-walkman is a disadvantage as well as the fact that a new CD is needed to play something new. MiniDiscs is smaller but the switching of removable discs remains as a weakness. Although the participants liked these kinds of devices, they decided the MP3-players to be the favorable device. One girl mentioned: “I like MP3-players because you don’t have to change record and if the files are unharmed there aren’t any disturbing factors to ruin the music experience.” When it comes to the size and the memory capacity of the devices there are many different opinions: “I prefer the small MP3-players with room for fewer songs than the big ones that has a lot of memory space” was the thought of one of the participants. Another said: “My MP3-player is kind of big but I have enough memory space for my collection that I have on my computer and all my CDs. I don’t want to listen to the same songs the entire day.” The latest trend is that MP3-players are seen as a fashion item. Adamond XK 1 has made a MP3-player with great quality and sound. The player is available with diamonds from 0.11 carat.

Music in Mobile Phones

Wireless Application Protocol (WAP) was introduced to mobile handsets that provided the opportunity to access WAP pages, similar to web pages on the Internet. In the beginning, the actual transfer of data was made with SMS service. This technology was later enhanced with GPRS (General Packet Radio Service) as the bearer service. It is a step between GSM and 3G networks, allowing faster data transmission through the GSM network with a range of 9.6kbps to 115kbps. Except for speed, another main benefit of the GPRS technology is that you no longer need to be constantly connected. With SMS as the bearer service, the data are transferred through traditional circuit-switched network, just like voice calls. It does not matter if one remains silent on the line; the traffic will be charged based on time. GPRS on the other hand, is very much like a computer network. The operators are now able to

136 Chaosmint. Should Apple Support Windows Media Audio (WMA) on the iPod?
137 Chaosmint. Should Apple Support Windows Media Audio (WMA) on the iPod?
138 Focus Groups Sessions
139 Focus Groups Sessions
140 Focus Groups Sessions
141 Adamond Website
142 Mobileshop.org. How WAP works on GSM systems
143 cellular-news. What is GPRS?
keep track of the traffic, and charges are therefore based on the amount of information transferred to the handsets. The greater speed and convenience that comes with the GPRS technology had created new opportunities for content aggregators and content providers. 3G is the next generation of mobile networks that, in this perspective, does nothing else than boosting the average speed of the connection to 386kbps. However, without this kind of speed, services like video-calls would not be rendered at a quality interesting enough for consumers.

Multi-media services on the mobile market are becoming increasingly popular, partially due to technical improvements of the mobile handsets. An integrated digital music player will be more or less standard in every mobile phone in the near future and downloading services towards mobile phones are being developed. Marcus Lannerbro at Ericsson believe streamed music towards mobile phones will be popular in the near future and full length downloading will be the deal later on, when a beneficial business model for each involved actor is ready. Nevertheless, the support for digital music in the prevailing mobile phones is not an issue anymore, since most of the upcoming models already provide it. Almost everyone has a mobile phone nowadays. Similar to the portable music devices mobile phones are always with you. New technologies have made it possible to integrate the devices into one. From the focus groups, 17% had a radio integrated into their mobile phones. The general focus group participant embraced the possibility to listen to radio in mobile phones. Nevertheless, they were suspicious regarding battery life and sufficient coverage. If these two factors would improve it would become popular among them.

Several new mobile phones that are entering the market are now supporting MP3-files. Only 4% of the participants in the groups had one, but almost everyone was very positive. One boy said: “I would like to have a MP3-player in my mobile phone, then I wouldn’t have to carry around all my different devices.” A girl that didn’t like the idea expressed her concern: “If I loose my mobile phone or if it breaks I wouldn’t be able to do anything.”

The participants in the focus group were asked what they would think about the possibility to download music files instantly to their mobile phones. The most important factors brought up were that files had to be cheap; otherwise they would not try it out. Many mentioned that music in the mobile phones would not compensate the music collection in the computer or their CDs. But one advantage was that you would eliminate the “middle” step; to transfer the music files from the computer to the device. To download music videos to the mobile phone was not as appreciated as downloading of music files. One girl said: “I would rather look at the cars passing by when I’m waiting for the bus than looking at a music video on my mobile phone.” But many of them mentioned that if you just could look at them just once for a

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144 the Inquirer. Vodafone 3G/GPRS card is a pricey little number
145 Marcus Lannerbro, Ericsson, 2004-07-08
146 Marcus Lannerbro, Ericsson, 2004-07-08
147 Focus Group Sessions
148 Focus Group Sessions
149 Focus Group Sessions
smaller amount of money it would be a better idea than to store the video for a greater amount of money.
Summary

The Consumer Perspective

In a purchase process the consumers' individuality has an impact. There are five factors that affect the decision-process: (1) demographics, psychographics, values and personality; (2) consumers resources; (3) motivations; (4) knowledge; and (5) attitudes. The participants in the focus groups embraced the option to personalize their mobile phone with ringtones and background pictures.

Music consumption has altered for the consumer; the regular stereo has been exchanged with computers and different portable devices. Almost half of the participants in the focus groups had more than one portable device. The most favorable one was the MP3-player due to size issues and storage convenience. Instant download to mobile phones is seen as a good service if the cost becomes reasonable. However, the general opinion is that it would not compensate the music collection in the computer.

The Market Perspective

The stationary music consumption has changed from traditional stereo consumption into computer consumption, to some extent. Hence more actors are focusing on leveraging services compatible for this consumption behaviour. Streamed Internet radio is not yet a big revenue stream for companies since they do not charge the consumers for listening and the income from advertisement is modest. Companies have not yet put to many efforts in developing any payment methods for this kind of content although it has the potential to bring income in the future.

Many actors have realized that music on the go has turned into digital files from the traditional CD consumption. As a matter of that, the market of portable music devises has exploded. Some actors’ benefit from their music services when selling portable devices. Apple’s strategy is not to sell audio players itself, but in a combination with songs through their complete music service called iTunes. Apple’s hope is to create incentives for the iPod and hence profit from both revenue streams.

Music in mobile phones is no longer a scarce phenomenon since many manufacturers enable the prerequisites. Several new mobile phones entering the market are now supporting MP3-files for instance.
The Technical Perspective

With the consumer in focus, technology has been developed to suit the different lifestyles and consumption pattern that has been identified. The technology can be split into different categories: stationary music, traditional portable devices and the mobile phone.

ReignCom’s iRiver and Apple’s iPod are both widely known portable digital players on the market that has been very popular ever since the products were launched. The technical differences of these players are also what characterize two different types of players. iRivers are small flash-memory based players with limited storage capacity, but the advantage is the small physical size of the product. iPods on the other hand, have a computer hard drive implemented which enables great storage capacity. However, the drawback is the weight and physical size.

As the mobile handsets are becoming increasingly advanced, it is now possible to implement music player functions which enables playback of traditional MP3 files. When the technical prerequisites are good enough for the mobile phones to replace the traditional portable players, people with both devices will only have to bring one along without comprising the convenience of having all of the functionalities available.
MODELS OF PAYMENT

As digital music files used to be known as free ware for consumers, it is crucial to apply decent models of payment to change the consideration. As a matter of that, interesting models of payment are brought to discussion. Some of them emerged from the focus group sessions.
The Need of Alternative Payment Models

The music industry is starting to provide legal alternatives for music downloads on the Internet. What is crucial for this business is the price level, considering the target segment is used to download music for free from free file sharing services like KaZaa or Direct Connect. Consumers will thus compare the price of a legal song with zero. If the price for a song were set to 15 SEK, consumers would think that they need 1,500 SEK in order to replace the collection of 100 songs in their computer downloaded from file sharing services. This is a highly relevant mental effect that creates reluctance upon trying out the legal alternatives, and thus need to be taken into consideration. Interesting models of payment has therefore been brought to discussion; some of them emerged from focus group sessions.

Another important issue that creates a mental reluctance among consumers is the fee charged by mobile operators for network traffic. In order to make downloading services toward mobile phones attractive for consumers, something needs to be done about the prevailing traffic charges. Today, consumers would need to pay for the downloading service as well as traffic cost in order to download a song. This issue will also be discussed in this chapter.

Storage Rental Model

Coming up with a good payment model is not easy considering that people achieve music content for free from illegal file sharing services. Participants from the focus groups stated that they would like to have some kind of rental model similar to the one the movie industry is using. Another participant from the focus groups said: “Music is sometimes like fashion clothes, you love it for a while but get worn out of it very soon.” By the use of a rental model the comparison with free files will become less obvious. People will no longer make the critical comparison of 99 cent against zero within a rental model. As the discussion went on the participants mentioned that it would be feasible to apply a storage-rental model. You get charged for having a specific amount of tracks available simultaneously. If the consumer becomes tired of a song, it is possible to obtain a new one for free. The requirement is to first remove a song before choosing a replacement. It is thus only the space you rent, not really an amount of songs. For this model to work, an upper limit to the amount of times consumers may achieve new songs should be applied. The benefit of this model is that it provides access to a large amount of songs, although you can not have it at the same time. Johan and Alex at Jambarine also believe in a rental model for digital music as they stated: “Rental music is going to be popular in the future. Within rental models the

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150 Focus Group Sessions
151 Focus Group Sessions
152 Focus Group Sessions
consumers get the variety of music tracks while the record labels earn their money.\textsuperscript{153} A setback within this model is that youth also wanted to have the music files on their portable music players and it will probably not be legal to make copies of a rental file. Hence this model is more useful within mobile downloading at the present. If the songs are instantly downloaded onto the mobile phone which is MP3 supported, the incitement to copy it further would possibly decrease.

Payment systems of this nature will probably be provided by DSPs or complete music services although this issue is of great interest for record labels as well. This model is fully realistic from a technological perspective since DRM protection is already developed and in use. However, Johan and Alex at Jambarine stated that the DRM protections have to be developed further if downloading towards mobile phones should increase.\textsuperscript{154} Conversely, David Hudert said that Inprodicon do not want to decide in what format the consumer would be able to utilize their songs in. Instead, they want to sell a license to a chosen song. When doing so, the consumer can decide whether they want to transfer it from the computer to a portable device or not.\textsuperscript{155} If this vision is to become reality, this payment model is fully applicable to desktop downloading as well.

**Subscription**

For the music industry to provide profits and at the same time compete with the illegal file sharing services, there has to be a good alternative. Subscription is a payment model for desktop downloads at the present, but may be available for mobile downloads in the future. For a monthly subscription, the actors achieve a fixed income from the consumer and will be able to establish a relationship with them. As subscribers, consumers will be offered access to download a certain amount of songs every month. If the subscribers do not fill the quota by downloading fewer songs than offered in that particular month, the remaining quota will be forwarded to the next month. By doing this, the account can be buffered and the consumers will have an incitement to stay in the subscription.

An important issue in a loyalty program like this is to make the consumer feel exclusive. The subscription has to provide something extra. Many of the participants in the focus groups mentioned that more beneficial offers must be made, otherwise they would show no interest in becoming a subscriber. Information about the artists, music video or a song for free after the 10th purchase are examples of beneficial offers.

Another interesting subscription model is the bookstore concept, meaning that for every month, members get a book sent home if they do not cancel it manually. This concept can

\textsuperscript{153} Johan and Alex, Jambarine, 2004-08-16
\textsuperscript{154} Johan and Alex, Jambarine, 2004-08-16
\textsuperscript{155} David Hudert, Inprodicon 2004-07-22
be applied to music subscriptions. The members would then get a few selected songs from a hit list directly to their account and have to pay for it, unless the process is being canceled manually. In this payment model, consumers do not have to pay a monthly fee and they will get discounts on the music files. The discounts are the benefit for the consumers in this model and the enticement why they want to become members.

In an article called ‘The Internet and the Reshaping of the Music CD Market’ the authors state that retailers in the online CD market business have different price strategies for mainstream and niche products. They mean that the retailers “thereby are catering to distinct customer segments.”156 This is also a model that can be applied to music subscriptions of digital music.

**Single Downloads**

There will always be a market for single music downloads. Consumers that do not want to become members or subscribers may still want to be able to download music files. The separate music files will probably coexist with other payment solutions as a good alternative. If consumers run out of quota in one of the subscription described above, additional songs would still be available for separate downloads.

**Payment through the Telephone**

There is an important issue with any kind of purchase made by consumers through the Internet. The process in which money switches pockets is today somewhat of a hassle, compared to what consumers are used to. Credit card numbers needs to be entered before the purchase is confirmed. In illegal file sharing services, which people are used to, the only steps required are to search for the content and download it, which is one step less compared to legal services where the payment process is necessary. Another issue to this problem is that many consumers do not show confidence in the technology behind the transactions, fearing that hackers might obtain the credit card number with intentions to abuse the account.157 Clearly, the payment process is a step that needs to be enhanced in terms of security restrictions and simplification of the process.

An interesting method that has been adopted by the popular service Blocket is payment made through the telephone.158 The only thing the consumer has to do is to make a telephone call whenever ordering a purchase and enter the code generated by the website. The payment is confirmed by the telephone and the transaction is made on the phone bill, which will be paid by the next invoice. Consumers feel like they only made a call, and the threat of providing other people direct access to the bank account by exposing their credit card numbers is a thing of the past.

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156 Gosain Sanjay, Lee Zoonky; p 140.
157 Focus Group Sessions
158 Blocket Website
card numbers is no longer an issue. This method of payment can be easily adopted by services of legal content, providing a secure and easy alternative of payment.

Subscription for WAP Traffic

The payment model used by the operators to charge for WAP traffic in the mobile network is today mostly based on a price for a certain amount of data, around 15-20SEK for 1Megabyte. Consumers who choose to purchase a song, image or ringtone will thus have to pay for the traffic needed to transfer it to the mobile handset. With these kind of prices, consumers will be reluctant to try the service. This is a setback for the whole market, including the operators. However, new payment models have been developed and have already been implemented on some markets. In an interview with Pia Swirsky from TeliaSonera, she said that they have been offering consumers some kind of traffic subscription for a while.  

In this model, customers are signed up for a larger amount of data, but at a lower price level. This model creates a win-win situation for both the operators and the customers. Operators will have the customers tied up for a certain amount of data, ensuring a stable income. Customers on the other hand, can utilize WAP to achieve a large amount of data for less money. As a result, subscribers in Finland are generally more open to new mobile services.

As mobile multimedia services are becoming increasingly popular, Swedish mobile operators have realized that it is important to provide low tariffs in order to stimulate the market and thus create an open attitude towards new services among consumers. They have started to gradually implement this model to the market and the result is yet to be seen.

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159 Pia Svirsky, Telia, 2004-07-20
160 Pia Svirsky, Telia, 2004-07-20
Summary

The Consumer Perspective

Different payment models must satisfy different types of consumers. Storage rental is suitable for those who become tired of music fast and wants to replace it with new songs. The problem is that rented songs cannot be transferred; this might hinder the consumer from this payment model. In a subscription model the consumer pays a monthly fee and can download a specific amount of songs. This will fit consumers, who purchase large amount of files, want to have the music files forever and know that they want to transfer it to different devices. The possibility to download single music files should always exist since there are consumers who do not want to become members or subscribers. Payment by the phone is assumed as safe for the consumer, since they do not have to expose their credit card numbers. With a subscription for WAP, the consumer will be able to download larger amount of content for less money.

The Market Perspective

The payment models are of utter importance regardless if the downloading service is targeting desktop or mobile phone users. Actors have some diversification in their current models although there is a lot to be done. At present, companies have few alternatives for different kind of music consumers. No actor applies subscriptions or rental models, for instance.

Jambarine believes in a rental model for digital music. Within a rental model the consumers get the variety of music tracks while the record labels earn their money. This model is more useful within mobile downloading at the present, due to copy restrictions.

An interesting method that has been adopted by the popular service Blocket is payment made through the telephone. The only thing the consumer has to do is to make a telephone call whenever ordering a purchase and enter the code generated by the website.

The Technical Perspective

It is important to consider the technology necessary to support the different payment models. Taking the storage rental model as an example, it is important that downloaded music tracks are not further distributed, which demands firm control of the DRM protection.
EVALUATION OF THE HYPOTHESES

In this chapter, the five hypotheses are being evaluated. Each of the five hypotheses will be either rejected or accepted, based on results derived from the chapters *Entertainment Central, Music Services, Collaborations, Personalization and Models of Payment*. Again, the hypotheses that are to be evaluated concerns:

- Entertainment Central
- Music Services
- Collaborations
- Personalization
- Models of Payment
Three Aspects

To be able to analyze the results in perspective of the hypotheses, one must first understand the role of the different aspects; consumer, technology and market. The consumers’ desire for music entertainment creates an attracting force between the market and the technology. As a result, consumers will take actions to bring themselves closer to the content. They may go to a record store to buy a CD, connect to the internet and download the song, or, if they already have what they want, simply start playing the songs. Along this path, the consumption of music content, there are a couple of things with great potential impacts. To the extend of the example above, connecting to the internet to download songs requires that there is a service available in the market. These kinds of services are typically iTunes, Napster and even file sharing services like KaZaa. To be able to play the songs, the consumer needs a computer or another type of music player in order to start consuming. In other words, technology and market are external factors of impact in the process of music consumption. This concept is illustrated in the figure below.

Figure 12. Factors with a big impact on the digital music industry

In the evaluation of the hypotheses, all three aspects are taken into consideration. However, there are times when some of the aspects do not contribute with required conditions that are critical for the statements in the hypothesis to come true. The aspects that are not essential are thus left being out in the particular hypothesis.
Entertainment Central

The mobile handset and portable digital music player are devices in focus during the analysis of the current market. One of the hypotheses was that these devices will converge into one single product that covers the consumers’ need derived from each of them. However, there are a few conditions requisite for this to happen. In this particular hypothesis, the conditions cover all three aspects.

Requirements

Technology

Technology provides handy tools which simplifies or enhances the consumer experience of music consumption. As one understands the task of this factor, the conditions of whether a technical product will prevail or not appears to be rather obvious. New devices will be evaluated by consumers, where the features will be compared to other existing products on the market. In this case, whether a convergence of the mobile phone and portable music player will happen depends on the features that are important from the consumers’ point of view, compared to existing products represented as alternatives on the market. In other words, consumers require:

- Mobile phones with features good enough to replace other alternatives on the market

Market

Services offered to the consumer represent the market. The core value is attractive services that satisfy the need of music entertainment among consumers. From the commercial point of view, new downloading services are emerging as well as expanded product portfolio of the record labels in terms of ringtones etc. Legal alternatives are constantly fighting against a decrease of market share caused by illegal downloads, which also is a part of the market. One interesting aspect of this factor is that the market is also the provider of what the consumers want – the music content. If done correctly, actors on the market can make a product or service more appealing to the consumers. This great impact on the process of consumption affects the attractiveness of the entertainment central by:

- Services or content aimed for mobile entities
- Efforts to enhance consumer experience of mobility
Consumer

The consumer factor is central in this concept. After all, it is the consumer who decides which technology to adopt or which service from the market that is worth appreciation. Aside from external factors, the consumer itself needs to be taken into consideration in order to understand the dynamic of the market. The habitual behavioral of the individual has been the reason to success and failure of many products. Without the habit of music consumption through the desktop computer or user interactivity with mobile portals, the mobile phone might never be able to emerge with a portable music player into one single product. From this aspect, it is thus important to understand that:

- A behavioral pattern needs to be deployed among consumers

Analysis

The evolving mobile market is attractive to the current actors for various reasons. Mobile manufacturers are exploring the limits of the mobile handsets and thus constantly expanding the functionalities of the mobile phones. By implementing new functionalities, the manufacturers hope to increase the leverage value of the mobile handset. As a result, new business opportunities that had not been possible until now have emerged. Together with the evolution of mobile network technology, modern mobile handsets and 3G network create a market with possibilities of the same features as desktop computers.

Entertainment portals offering mobile content such as ringtones, images, games and images towards mobile phones are widely established. Furthermore, actors focusing on full-length music towards mobile entities have increased. The network operator T-Mobile in Austria is offering the service “Music Jukebox” to its customers, where they can download tracks directly to the mobile phone. Chaoticom is another operator with similar services. They have signed agreements with various partners to offer subscribers the opportunity to browse, preview and download full-length of original music files to the mobile handset. These kinds of steps make it evident that the actors are showing interest in this market. Although actors like 3 feel that the record companies are being too restrictive about releasing the digital rights of music content, the market is undeniably moving toward mobility. By offering these kinds of services, the mobile phone becomes more interesting from the consumer’s point of view. It becomes a device with more functions than mere telephony services.

As products and services are evolving tremendously fast, the consumer experience becomes a risk. Different formats of the mobile phones in terms of physical appearance as well as software support make it hard for the content providers to offer services that are
compatible with all mobile phones. New products and services are developed rapidly while the consumers get confused by various interfaces constructed by different providers. In order to decide which format to use when producing the material, content providers have established relations with mobile manufacturers. This will enhance the consumer experience as future formats from the content providers will be supported by the new mobile phones.

Ever since the MP3 revolution in the late nineties, desktop music consumption has been boosted by free file sharing networks utilized by many consumers to distribute pirated music content. This has come to mean a new consuming pattern among people. As the file sharing networks has made almost any song easily accessible through the home computer, consumers are now used to convenient consumption by downloading and playing any song they want at the moment. Furthermore, there has been an ongoing trend among operators to implement an entertainment portal along with their WAP services. As these kinds of services have become more popular, consumers are getting used to interaction with mobile handsets. A behavioral pattern is thus being deployed; effectively lowering the barriers for music downloads towards mobile phones for the consumer.

Nevertheless, new mobile phones with music player features that are going to substitute the traditional portable music players have to meet the expectations of the consumers. The basic requirements are those of the prevailing music players; decent storage, battery, easy to use as well as additional functions such as FM radio. When it comes to storage, only a few of the newer models are capable of an additional memory card to extend the memory. Most of the current mobile phones on the market today that can play music content have a very limited amount of storage. The popular FM radio function has been implemented on a few models for some time, but far from all mobile phones have this feature. One problem that occurs when listening to radio or music content is the power consumptions. These features require a large amount of power, which drains most of the batteries too fast to make it convenient for music consumption. Another problem to be taken into consideration is the user interface which is very important for the consumers, especially when storage becomes abundant and decreases in importance. Better management options on the phone and desktop software for organizing the songs in the mobile phone need to be developed, as it does not exist today.
Conclusion: The Entertainment Central Will Emerge

Requirements that are fulfilled

- Services or products aimed for mobile entities
- Efforts to enhance consumer experience of mobility
- A behavioral pattern need to be deployed among consumers

Requirements that are unfulfilled

- Mobile phones with features good enough to replace other alternatives on the market

Although the market is not yet flush with mobile handsets good enough to substitute the small portable music players, these devices are constantly evolving at an incredible speed. In the near future, mobile handsets with potential to compete the portable players are therefore expected by the market. A clear indication of this is that the big actors are showing interest in the mobile music business by launching services towards mobile phones. It is thus concluded that a convergence of the mobile phone and portable music player will happen in the near future, resulting in the emergence of the entertainment central.
Music Services

The hypothesis regarding illegal downloading concerns all three perspectives. When the first free digital music files became available online, it took some time for the consumer to adapt to the new way of consuming music. After a while, technical barriers were overcome and enhanced file sharing systems were developed. As consumers became aware of this kind of service, the success was a fact. If this way of downloading should diminish, it might have to work the other way around. Consumers gain knowledge regarding the crime within free downloading as, companies start to improve their legal alternatives and technical protections against piracy. Whether this will be the case is still to come. Nevertheless, this issue concerns a market, a technical and a consumer perspective.

Requirements

Market

Legal alternatives have started to enter the market and also gained popularity among consumers to some extent. Legal alternatives have not gained market shares from illegal services, even though actors like iTunes constantly increases its turnovers. Whether those big actors manage to become worldwide is an essential issue for the future in order to provide sufficient amount of content. Furthermore, more attractive legal alternatives have to develop along with greater obstacles within illegal downloading. It is also essential to fulfill the consumers’ demand of different payment models in order to keep them within the legal alternatives. If the earlier stated hypothesis will be accepted, the following demands have to be fulfilled from a market perspective:

- iTunes and other big actors have to gain recognition among consumers and express legal alternatives in a beneficial way.
- Potential worldwide providers like iTunes, Napster and OD2 have to become worldwide otherwise they will not provide enough available content.
- Consumers that have already adopted illegal alternatives will have to face greater obstacles in the downloading process.
- Easy and attractive legal alternatives need to develop in order to attract new consumers as well as establish a greater incitement for illegal consumers to adopt legal alternatives.
- The payment models have to become more convenient
Technical

As more music consumers start to download digital music from legal services, some technical obstacles will arise for the consumer. The music industry put a lot of efforts in protecting the digital content from further distribution. This may be necessary in order to prevent file sharing issues and generate sales. But there are other obstacles derived from the portable music players that annoy consumers of legal files. The following technical demand is thus necessary to accept if the hypothesis regarding a depreciation of illegal downloads are to be accepted:

- The purchased files have to be supported by all digital players in order to gain attractiveness.

Consumer

Free file sharing of music has been popular ever since the first version of Napster entered the market. As the popularity arose new followers like KaZaa and Direct Connect entered the market and ever since the music consumer have been used to achieve music files without paying anything. This habit is essential to take into account when a new service develops. From a consumer perspective the following demand has to be changed in order to support the hypothesis regarding a diminished illegal downloading.

- The consumer behavior has to change

Analysis

iTunes has managed to create a well-recognized brand on the market. Consumers often refer to iTunes when it comes to legal downloading services. This is partly due to the popularity of the co-selling iPod. The idea with a co-selling music player is a genius idea in order to boost the marketing of a music service. "Connect" and their supported music players is a similar effort although it has not yet reached the popularity of iTunes-iPod. DSPs and their partner retailers have not yet gained satisfied consumer recognition. The retailers are not marketing their services in a proper manner and they need to realize that their virtual digital music shop is like any other physical shop, with a need of publicity.

Many of the big music services have the intention to become worldwide even though this has not yet happened. iTunes has gone quite far as they recently went from an exclusive US-UK music provider to a US-Europe provider. As they approach new markets more local record labels will get a chance to make agreements with them and hence the amount of available
content will arise. Napster and OD2 have the same intention and it is a question of time until they provide Europe with music material. This emerging trend among music services looks very convincing.

Currently there are few obstacles with free file sharing for the experienced user. Some lawsuits have been executed in the US., but in the Europe, the illegal downloading has not yet been facing any extensive resistance. DRM protected files have become common, but many believe that hackers will always be able to crack those protected files. New enhanced files sharing services like BitTorrent have revealed and the experienced user has achieved more free alternatives.

Convenient legal music services have already entered the market since the consumer does not claim the prevailing legal services for being non-user-friendly. The youths from the focus groups who had been using legal services judged them as easy to understand and quite convenient.

There are some different models of payment on the prevailing market. But the consumers are not satisfied with the existing models and hence many participants from the focus groups gave examples of new models of their desires. A rental model similar to the one the movie industry is using was brought up. A storage rental model was another desirable model. Consumers need different payment models that are tailored for different buying habits.

Today we have a wide range of digital music formats available on the market. There are also a great number of digital music devices. Some devices accept almost any files while others only accept formats of a special kind. This is not a popular issue among consumers and a drawback for some digital music devices. The consumer wants to buy a digital music player of their own choice without having to consider if it supports their digital music files or not. The most popular format seemed to be the MP3 format according to the focus groups, and portable devices with support of MP3 format are thus very popular. Currently there is no DRM-protection available for the MP3 format, which is a disadvantage for the legal downloading industry.

Many music consumers download music from various free file sharing systems without reflecting whether it is right or wrong. Per Sundin at Sony Music stated that the crime within downloading music for free is similar to the crime related to steal candy from a shop. This is general perception from a record label point of view but unfortunately not from the consumers’ point of view. The consumers are used to get music files for free and as a matter of that, they do not judge it as a crime. Some participants from the focus groups mentioned that they feel bad about not paying anything when they download music from their favorite music artists. Especially when the artists are newcomers and have not earned any money on their music yet. The latter behavior has to apply for more than just the favorite artists for each consumer if the illegal downloading should be affected negative.
Conclusion: Illegal Downloading Will Not Decrease

Requirements that are fulfilled

- iTunes and other big actors have to gain recognition among consumers and express legal alternatives in a beneficial way.
- Potential worldwide providers like iTunes, Napster and OD2 have to become worldwide otherwise they will not provide enough available content.
- Easy and attractive legal alternatives need to develop in order to attract new consumers as well as establish a greater incitement for illegal consumers to adopt legal alternatives.

Requirements that are Unfulfilled

- Consumers that have already adopted illegal alternatives will have to face greater obstacles in the downloading process.
- The payment models have to become more convenient.
- The purchased files have to be supported by all digital players in order to gain attractiveness.
- The consumer behavior has to change.

The Hypothesis regarding a depreciation of illegal downloading has to be rejected due to the analysis. One might say that the stated requirements will not have an equal impact on the market as some are more or less critical to the hypothesis. Nevertheless, we see that three of the demands were fulfilled while four were non-fulfilled which determines the conclusion.
Collaborations

One hypothesis was that more unexpected collaborations within mobile music will materialize. Whether this will be the case depends on various issues. Those issues are only derived from a consumer and a market perspective because of several reasons. The technical prerequisites of collaborations varies depending on the actors, but are seldom a problem as proper technology are developed when the need is recognized. From the market perspective, collaborations might create mutual gain for the actors involved by increasing revenues. Furthermore, the consumer demand is always an essential issue as it decides whether the new service will be successful or not. Except for the price and brand, user experience is an important factor that decides whether consumers will adopt the new service or not.\textsuperscript{161}

Requirements

Market

Actors that are big enough to set pressure on the market by taking profitable charges are making it hard for smaller actors to survive. This could create an incentive for collaboration among the smaller companies, or they might choose to drop their margins competing with each other. However, competition on the market is not only based on the price, but also on the offering itself. It is thus important to constantly offer better products and services. As a step in this process, actors need to be creative when elaborating new and interesting products and services.\textsuperscript{162} Thinking out of the box and establishing innovative collaborations to create a unique selling point toward consumers will thus provide an advantage. If the hypothesis regarding unexpected collaborations within mobile music, the following factors and insights have to develop:

- Unbalanced power among actors on the mobile market.
- Actors have to realize that mutual gain comes from intense collaboration efforts.
- Actors have to think out of the box and establish creative collaborations to enrich the offerings toward consumers.

\textsuperscript{161} Focus Group Sessions
\textsuperscript{162} Normann and Ramirez, pp 42-43
Consumer

One important aspect from the market perspective is that collaborations will create increased revenues for the actors involved. However, increased revenues depends on the success of the product or service, which in turn is depends on whether consumers chooses to adopt the product or reject it. The development of new products and services are sometimes technically driven. As an example, Premium SMS was created because it was technically possible rather than an identified need on the market.\(^\text{163}\) It is thus necessary to stress the importance of the consumers’ perspective when developing new products and services. We believe the following consumer demand is important to apply in order to support the hypothesis regarding unexpected collaborations within mobile music:

- Identification of the need to enhance consumer experience among actors.

Analysis

The power among actors on the market is unbalanced without doubt. The lack of regulations on the operators makes it possible for the current profitable charges. Except for high registration and subscription fee, there are additional charges for each transaction. This creates a high entrance barrier for small content providers to enter the market.

Many actors seem to have realized the importance of collaborations. Netsize is one of the actors struggling for equalization by acting an aggregator of consumers for the operator. This way, the entry barrier for smaller companies is being lowered. The OMTP group is an initiative to unite the different actors on the market. World leading operators have shown interest in this organization. If the work of this actor succeeds, consumers will experience a more consistent interface across mobile terminals and the different actors will hopefully benefit in mutual gain through increased revenues. However, this actor is only in its emerging stages.

Although innovative collaborations could create value and profit, it could also become a risk that companies might not be able to afford. DAB is a technology mentioned that could be utilized for innovative marketing strategies, but due to the size of the market and legal restrictions, the technology still hasn’t had its breakthrough on the Swedish market. Nevertheless, there are situations where the barrier of forming unexpected collaborations is lower. Netsize and OMTP are examples of such collaborations that are being carried out.

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\(^{163}\) Mayako Fagerfjäll, Netsize/Morgan, 2004-08-16
The need to enhance consumer experience is identified and hence the OMTP group has been formed to promote industrial standards. From the consumer perspective, the initiative of the OMTP group is appreciated. Consumers are continuously complaining about poor user-friendliness in new products and services.\textsuperscript{164} Whither the efforts of the OMTP will be enough to make a change in this issue is yet to be seen, but at least the actors of the OMTP group have identified the problem.

**Conclusion: More Unpredicted Collaborations within Mobile Music Will Develop**

**Requirements that are fulfilled**

- Unbalanced power among actors on the mobile market.
- Actors have to realize that mutual gain comes from intense collaboration efforts.
- Actors have to think out of the box and establish creative collaborations to enrich the offerings toward consumers.
- Identification of the need to enhance consumer experience among actors.

**Requirements that are Unfulfilled**

- None

All requirements are fulfilled. As stated in the analysis, the power of the operators are making pressure on the market, forcing actors to find creative ways of survival. The companies are already forming alliances and starting to collaborate in different levels to increase sales and profit. And finally, the market has identified the importance of consumer experience in new products and services, and is working on improving this issue. Since all the requirements are fulfilled, we can accept the hypothesis.

\textsuperscript{164} Focus Group Sessions
Personalization

Technology is a great tool to help consumers express different styles, personalities and even moods. The desire to feel special affects what consumers buy and becomes a materialistic expression. Companies need to have this in mind when new products are implemented in people’s lives. For further personalization of products to occur, there are a few factors that need to be fulfilled in all three perspectives; market, technology and consumer.

Requirements

Market

The market is changing constantly which is pleased by the consumers. Without knowing about the consumers’ desires and needs, it is hard to see what the next step for the company should be. Often the consumers do not know if they are missing something and it is in the markets best interest to find out. Otherwise, a lot of existing and potential consumers might be lost. When the consumer’s desires are discovered the companies have to be efficient in the work of seizing the business opportunity. Implementation of new products has to provide the need of recognition, so that consumers realize that the new products are worth spending money on. This can be achieved through powerful marketing.

The market must also see that children of today are growing up in a world of technology. They can handle computers and mobile phones in much earlier days than previous generations could. The market will be affected in a close future when these children are growing up. They will all be consumers in products which the elders used to take part of. As a result the customer base will grow and alter. It is thus important that:

- Companies are good at implementing and marketing new products
- Companies are aware of undeclared desires of the consumers
- The market takes care of the future customer base.

Technology

New technology must provide options that enable the consumer to express their individuality. It is important that the new emerging consumer options are not too complicated. Otherwise, consumers might be frightened and feel unqualified to use the product. The technology should make life easier for the consumer and not the opposite. Therefore, it is important that:
• Technical developments have to evoke new options for customization
• The technology that emerges should not be experienced as too complex for the consumer.

Consumer

It can be difficult for the product inventors to understand in what way consumers’ personalization is desired to be expressed. For the market to take knowledge in people’s desire for individuality the consumers have to help. New products always make people suspicious. As long as there is not any lack of curiosity the suspicions might not affect the outcome of the products popularity. If the consumers can be open-minded, there is a great chance that the customized products will have great leverage value in people’s lives. So it is important that:

• Consumer have to show interest in expressing their individuality
• Consumers have to be open-minded for emerging customized products

Analysis

Although it is difficult to discover all the undeclared desires that the consumers may have the companies have made tremendous efforts. The complete music services that are discussed in chapter “Music Services” are good examples of actors that have taken this under consideration. For instance the consumers can mix personal songs and let others share it. Music samples can be sent to family and friends and parents can provide their children with accounts with credit limits. Portable devices were once just seen as a device that carries your music around. Now it is also seen as a fashion item thanks to many companies. For instance Adamond AK has an MP3-player that can be obtained with a diamond impregnated.

When it comes to implementing and marketing new products it is essential to do it in the right way. Ringtones were at first something that came with mobile phones. One could choose between a few monophonic tunes. It ended up becoming a huge market, which is a result of massive marketing campaigns in magazines, television and radio. New improvements and implementations such as polyphonic, true and funtones were developed. There are many more examples of marketing and implementing skills of the companies.

The youth that are used to handle new technologies such as Internet, digital music files and mobile phones are growing up and becoming a new customer base for the companies. Although the development of this phenomenon is rather new there are many actors that do not keep this segment in mind. They demand everything in a faster, smarter and easier way.
than the elder segments. They are already not satisfied with what is offered on the market today. Many of the youth in the focus groups said that, for instance, WAP is too slow and at the same time too difficult to handle. Another example worth mentioning is the payment solutions for downloading from legal file sharing networks. The youths felt that it was too complicated to go through all the payment steps when all they wanted was a song. As a result, they turned to the file sharing networks.

The mobile phone is a good example of a development that has created a high leverage value for the consumer. Nowadays one can download music, listen to the radio and take pictures with the mobile phone. Technical developments such as 3G definitely bring more options for customization. Consumers can read emails, read news and make video calls with the mobile phone, all in a high speed. These functions provide the opportunity for consumers to personalize their lives as many different options are integrated into one single device.

Regarding mobile phones the new functions has often been seen as too complex for many consumers. OMTP is an organization that wants to standardize interfaces in mobile phones to make it easier for consumers. The organization has already made agreements with many of the major operators around Europe. This is a way to avoid problems with new technology and simplify consumers´ lives.

In the focus group sessions, the youths agreed that they appreciated products like ringtones and images in the mobile phones. The reason was because it made the phone more personal. For youths it is exceptionally important to stand out of a crowd. And their desires to be seen as individuals with own interests and opinions are very important. If the actors on the market are not aware of this, it is probably a lack in their consumer research and not in the consumers´ lack of showing it.

It is a problem among elders when it comes to be open-minded to new products. Many can not find the needed recognition and see the new products more as a problem. It is up to the market to show the need for the consumer but also for the consumer to be open-minded. However, the youths are very open-minded and almost all the participants were interested in high-tech products that could personalize their lives.

**Conclusion: Further Personalization of Products and Services**

**Requirements that are fulfilled**

- Companies are aware of undeclared desires of the consumers
- Companies are good at implementing and marketing new products
- Technical developments have to evoke new options for customization
- The technology that emerges should not be experienced as too complex for the consumer.
- Consumers have to show interest in expressing their individuality

Requirements that are unfulfilled

- The market takes care of the emerging customer base
- Consumers have to be open-minded for emerging customized products

It is easily seen that the world is striving for individuality. Mass-market products are no longer a certain definition. People need to express themselves and feel special. Due to the fact above the market have noticed this trend and made their best efforts to alter the products. It is still a long way ahead to satisfy all the different types of consumer needs but the companies are on the right track. Therefore, it is concluded that further personalization of products is a definite trend in the future.
Models of Payment

Whether consumers decide to adopt or reject a service depends on different factors. Quality is essential in order to make the service attractive to consumers, but the price issue is also important. One of the hypotheses argued that consumers have individual need of frequent access to the services, and that different models of payment would thus coexist to better meet the consumer demand. In order for this to happen, there are requirements that need to be fulfilled, both from the market perspective as well as from the consumer perspective.

Requirements

Market

Companies with different products and services are often focusing on the offering, hoping to refine their unique selling point and thus enhance the leverage value. However, one must not forget that the offering is not only the product, but also the price. A price can be more or less attractive to the consumers depending on how the payment is done. Different people have different consumption patterns. When it comes to digital music content, every consumer needs a model of payment that is beneficial for their individual frequency of purchases. It is thus important that the following demand is fulfilled:

- Companies have to realize that consumers prefer different kinds of payment models depending on the preference of purchase.

Consumer

File sharing networks have made the MP3 revolution possible, and the masses have adopted the convenience of downloading music for free. Now that the industry is capitalizing digital music content, many consumers are therefore rejecting the legal alternatives. Price level and model of payments are thus important issues, and the industry is trying to refine the offerings to make them attractive to consumers. However, if the consumers are persistent with music piracy, the music industry probably would not be able to profit from different models of payment. For different models of payment to co-exist, it is important that:

- The consumers have to show interests in different models of payments
Analysis

Sweden is a very small market and digital music services are thus only in its infancy. This might be the reason why most Swedish actors still do not realize that consumers prefer different models of payments. The only actor that seems to offer other payment models than that for single downloads in Sweden is the network operator 3. However, in the US. and the UK., actors like Napster are trying to make its service more attractive to consumers by launching subscription discount to students. Once the consumers show more interest in these kinds of payment models, more actors might implement them into their business models.

Most of the biggest downloading services are provided by global actors, but many of the services were recently established and have therefore not yet been launched in Sweden. Although without statistical information, consumers seem to show interest in different models of payment. As discussed earlier, most participants in the focus group sessions are negative towards paying for downloads. These are all adolescents that are used to download music for free from file sharing networks and therefore tend to compare the price of zero against 15 SEK per download, which Inprodicon is currently charging. Naturally, this is an unfair comparison. Nonetheless, it creates a mental barrier that hinders consumers to try legal alternatives. In one of the focus group session, all the participants agreed that it is very hard to make consumers try the legal alternatives if the only available payment model is designed for single downloads. They would much rather have subscription-based models.

Conclusion: Different Models of Payment Will Coexist

Requirements that are fulfilled

- Companies have to realize that consumers prefer different kinds of payment models depending on the point of purchase preference.
- The consumers have to show interests in different models of payments

Requirements that are unfulfilled

- None

The market of legal music downloads is only in its emerging stage and the future is hence very uncertain. It is concluded that the different models of payment will coexist on the market as all the requirements have been fulfilled. Nevertheless, it is hard to tell if different models
of payment will be offered by the same actor. From what can be observed now, different actors are interested in offering different kinds of payment models.
The research performed for this thesis showed the gap between the consumers’ needs and the market. Persona is an instrument used to identify the needs of the market. This chapter will present three personas brought out from the focus groups. The needs of the personas shed light upon possible future adaptations. Three market problems will be discussed and evaluated while suggested future adaptations will be discussed.

The chapter constitutes three parts:
How the Personas Were Made
Personas
Identified Problems on the Market
How the Personas Were Made

The personas were made out of the answers obtained from the participants in the focus groups. Prior to the focus groups, appropriate questions were prepared. The questions focused on bringing in the participants’ opinions about different products, services and actors. Interviews with actors on the market provided valuable insights utilized during the creation of questions. The answers on those customized questions were further exploited when creating the personas.

When summarizing the participants’ opinions, some characteristics surfaced. The characteristics are a collection of similar opinions from different participants that can be applied to one persona. Personas are thus a description of distinguished thoughts, rather than a summary of the majorities’ opinions.

The Structure of the Personas

The personas completed in the focus groups are presented in this section. They are described by four personification patterns.

- The family situation, the interests of the characteristics of the persona
- Description of their music consumption in general
- Description of their mobile music consumption
- Summary of the personas’ characteristics are listed
The Technical Geek

Fredrik, 17

Persona

Fredrik is 17 years old and is studying his second year at high school. His degree is technological science. He lives with his mom and dad in a suburb of Stockholm and does not have any siblings. They have a big house with a garden that Fredrik often has to take care of. His room is filled with high-tech devices since he loves to try out new technology just for fun. His favorite interests are music, computer games and American movies. He downloads free music and movie files to his computer and does not think that it is a wrong thing to do. Almost all of his music and movie consumption is made via the computer. He is not afraid of virus attacks; he almost sees it as a challenge to remove them. Fredrik is always aware of the latest technological inventions since he reads numerous industry magazines.

Music consumption

Fredrik’s music consumption is very high. He downloads music files from illegal file sharing services several times a week. Sometimes he downloads music that he’s never heard before just to see if it’s good or not. The reason why he doesn’t see illegal downloading as something wrong is because he believes that “free is tasty.” He does not care whether they lower the price for legal downloads or not, he would still not pay. He sees it as a challenge if, in the future, it gets harder to download illegal files because of DRM-protection. The only way he will pay is if he wants to support his favorite artists. But in that case, he would pay for the CD and not the digital files.

Mobile music consumption

Fredrik downloaded ringtones when it was new and free. He would never pay for a ringtone now because he thinks it is a childish product and an expensive one too. Wallpapers for mobile phones are also something that he has tried once or twice, but currently considers them expensive. To have an MP3 enabled mobile phone is something he would appreciate, but cannot afford at the moment.

Characteristics

- Digital music should always be for free.
- Would try to overcome obstacles such as DRM protection just for fun.
- Ringtones and background pictures are of intermediate interest.
- A big fan of new technology and willing to try out new innovative music products.
The Fan

Marie, 20

Persona

Marie has just graduated from high school in the field of social sciences. She has not really decided what to do next, but meanwhile she's working at a local video store. She lives with her dad and elder sister in an apartment in Stockholm. Her room is packed since she keeps everything she purchases. There is a staggering number of CDs in her room. It is her special collection that has grown every year. Her greatest passion in life is her favorite band. She collects everything connected to them. Other interests include reading books, seeing her closest friends and surfing the Internet. She does not really care much about the latest technology. The most important thing is that her computer works and that she can log on to the Internet.

Music consumption

Marie consumes a lot of music. She buys new CDs when she can afford them. For her, it is a sign of status to have as many CDs as possible. She would never download music files illegally from the Internet as she believes it is ethically wrong and harms the artist and the record labels. She would gladly download music files and pay for them, but still thinks that physical CDs offer more value. She feels there must be a big improvement in digital services. Otherwise, she would probably not try them. If it is easily done and it feels like a record store, she would be willing to visit the websites. She does not own an MP3-player because she experienced problems during the transfer process. She’d rather continue with her CD-walkman and does not care if it is more cumbersome that the MP3 alternatives.

Mobile music consumption

She is not familiar with ringtones or wallpaper designed for mobile phones. But she thinks it is a nice idea to have a picture of her favorite band in her phone. Polyphonic ringtones are annoying to her since they do not sound like the original song. Truetones is something new to her and would gladly try it if it sounds like the original song.

Characteristics

- Loves CDs.
- Would never download from illegal file sharing services.
- Would consider buying digital music files if the services are good.
- Truetones are better than polyphonic ones since the later does not sound like the original.
The Mainstreamer

Filippa, 16

Persona

Filippa has just begun high school and she is studying social sciences. She is a traditional 16 year-old girl who loves spending time with her friends. Her family lives in a house in the suburbs of Stockholm and she has one elder brother and one younger sister. Other interests besides spending time with her friends is listening to music, partying and shopping. She does not have any specific type of music style or favorite band as she enjoys almost all kinds of music.

Music consumption

Filippa downloads a lot of music from illegal file sharing services. She feels that it can be tricky sometimes to know exactly how to do it. And she gets very annoyed by virus attacks or destroyed songs. All of Filippa’s music consumption is through her computer. The only time she listens to her stereo is when the radio is on. She has never heard of services where you have to pay for digital music files. But she thinks it would be interesting to have a nice website where you can download digital music content for a small amount of money. Nevertheless, there has to be a law restriction prohibiting free downloads, otherwise she would not pay for her music. She never buys CDs but loves to make her own CDs from the music files she has downloaded.

Mobile music consumption

She likes ringtones but thinks that it is too expensive. Filippa has a couple of old ringtones in her mobile phone. The only wallpaper she has in her mobile phone is a picture of her and her best friend that she received via a MMS. She does not like ringbacktones; she thinks it sounds annoying and considers them completely unnecessary. It does not fill any purpose and it is irritating that you have to pay for something that you will never hear yourself.

Characteristics

- Never heard of services where you pay for digital music content.
- Once it is illegal in Sweden to download free music files she would utilize legal services.
- Never buys CDs but loves to customize her own ones from downloaded files.
Identified Problems on the Market

When analyzing the different personas some unsatisfied needs of the consumers are discovered. Three problems regarding the market appear. Each of the problems are listed below and discussed shortly in order to create a better understanding of the consumers’ desires.

1. The mobile services are too expensive

The general opinion is that the mobile services, for instance ringtones and truetones, are too expensive. Consumers do not think that the money spent is worth the product itself. This problem was also identified by the interviewed actors on the market. They consider the prices for mobile services as too expensive and the main reason for this is the operators’ way of charging. If the business of mobile services is to expand, more attractive prices are crucial.

2. Unsatisfying legal downloading services

The downloading services are, according to the consumers, unsatisfactory. The payment models are difficult and there are too many steps involved at the point of purchase. Some of the consumers believe that tracks alone are not incitement enough for online purchase and additional information regarding the artist would greatly enhance the offer. The consumer demands a similar shopping experience similar to the purchase of a CD album from a traditional record store. It is thus essential that legal downloading services enhance the consumer experience.

3. Unawareness of legal downloading sites

Many music lovers and potential customers are not aware of the existing legal downloading services. Somewhere in the race of developing the business for digital music, the actors forgot to attract the consumers. When regulations for illegal downloads apply, consumers have to be aware of legal alternatives on the market. The legal downloading services need to advertise and establish brand recognition.
SUGGESTED ACTIONS

During the research, there are identified problems that are critical and essential to unravel. It is suggested for the digital music industry to devise actions to meet the consumers’ desires. With this chapter, we end this thesis by advising suggested course of actions for record labels from our subjective point of view. The different suggested actions are:

- To redefine the value chain.
- Apply a mutual marketing campaign.
- Take advantage of alternative marketing and distribution channels.
- Perform preventive actions to equalize the power of the operators.
Redefining the Value Chain

When evaluating the value chain for distribution of digital content it reveal some ineffective issues that are to unravel. These suggestions are addressed to music labels, DSPs and Retailers. Nevertheless this redefinition can be valuable to consider for complete music services as their way of distribution are similar although they keep the critical steps inbound.

Record Labels

Literally record labels are the ones who hold the legal right to the artists’ material. In order to boost sales many record labels have launched side services along the way, like complete music services for instance. We think new services are good for the market, but do not believe that record labels are the ones to develop them. Instead record labels should try to utilize new services and ways of distributions by engage in collaborations with expertise actors in the area.

To stimulate the music industry in general we believe that record labels should take on an even more artist focused role. As a consequence Sony Music should primarily focus on building a name for their artists instead of launching new services. Building a name include promotion, advertisements and commercials in all potential media channels. Event advertising is another interesting area that needs to be reinforced. Regarding this area co-advertising with partners in the value chain can be performed. It is usual to see advertisements where artists from a record label promote a mobile phone manufacturer with streamed music videos that is supported by the phone, for instance. We believe in more intense advertise collaborations although they are to be carried out by record labels. Sony Music can advertise for a downloading service, an aggregator, a new distribution channel or any kind of actor by the help of their famous artists.

DSPs

The primary role for a DSP in this value chain will be to provide more enhanced technical systems for the retailer. Currently the DSPs are providing their partner retailers with a database of DRM-protected music files. But they do not provide any CRM (Customer Relationship Management) system in order to improve the end consumers’ experiences at the point of purchase.

DSPs will have to provide advanced CRM systems that enable displaying and tracking of the consumers buying habits. The systems will allow each consumer to build up their own
customized portfolio at the retailers' websites. Within the portfolio they will be able to see how many songs they have bought, new releases from their favorite artists, prevailing discounts on their favorite songs and much more. A purchase simulator that recommends payment alternative depending on the amount of songs the consumer wants to buy is also desirable.

Information gathering from each portfolio should then be applied for push marketing and it is the DSPs role to provide systems compatible for this. The systems will gather personal consumer information and then provide each retailer with preferences of their consumers.

Retailers

Retailers have to be aware of their core competencies and focus on that. An impression is that the retailers have not found their specific role yet. It is more like if they were thrown in to their business and now they do not know how to continue. The retailers are the face towards the customer. Thus it is of great importance to understand what the consumers’ needs are and how to match the offerings.

In the focus groups many of the participants stated that they would not have any problems to buy digital music files if the offer appeals to them. With a good website the retailer would be able to provide something additional but regular music files to its consumers. The retailers must understand that the consumers see the website as a shop and that it has to fulfill their needs in order to gain attractiveness.

We believe that the retailers must focus on push-marketing. This can be done with the tools provided by the DSPs. It will be of great value when the retailers can hold information concerning the customer’s buying habits. When this is done, push-marketing customized for the specific consumer is easily applied. For instance when a member logs on, the system recognize the customer and sends a message, like: “Hi Mr. X”, you recently bought Britney Spears single Toxic and now we have her latest track for downloading. “Sounds interesting, huh?” This would give the customer a feeling of exclusivity and hence it might trigger sales. Furthermore statistics over the most downloaded music files by each customer segment can easily be held. Information like this is also of great value when evaluating buying patterns.
Mutual Marketing Campaign

There is one critical problem that has been identified in the research conducted on the market. The consumers have no knowledge of retailers that enable digital downloading of music files. Of all the participants in the focus groups, no one who knew the name of any retailer in Sweden. Some of them knew about iTunes however. The problem lies in the marketing or in the non-existing marketing of the retailers. They have not been able to reach out to the consumers with their products. Brand recognition is an important factor that retailers have to establish among consumers. Nevertheless it is also in Sony Music’s interest to perform this as the sales are affected negatively without proper marketing. Moreover, the marketing campaigns toward consumer have to be of outstanding in terms of high quality offerings in order for the retailers establish their brands.

A suggested action is that the big record labels to make a joint effort and conduct a marketing campaign for a common retailer. The best way to gain attention is by showing the faces of the artists from the different record labels. It is in the artist’s own interest that music is being sold and hence it would be suitable to let the artist attract the customers themselves. A comparison can be made with the market campaign Anastacia did with Sony Ericsson, where she is being portrayed on the display of the mobile phone. However each big record label could announce two artists that would be the front figures of the marketing campaign. The advertisement would be a great boost of the selected artist and the retailers’ trademark. The campaign can be carried out in different ways but the consumers have to be enlightened of where to download these specific artists’ songs. When they visit the site they will become aware of other downloadable content as well. A marketing campaign of this kind would stimulate the legal downloads and increase sales.

The retailer would benefit of a mutual market campaign as their name is being connected with great artists and the name of their website will be spread rapidly. Regarding desktop downloads it is yet not clear who will become the most suitable retailer. Thus there is a great possibility that iTunes will become a market leader in Sweden since they have become very popular in UK and US. For mobile downloads it would be beneficial for both consumers and the record labels if the market leader of desktop downloads also enable mobile downloads. The consumers will in that case have brand awareness and the record labels will not be forced to sign deals with different retailers. Furthermore it is quite possible that iTunes will enter the market for mobile downloads in a close future. They are the largest actor on the market concerning desktop downloads and hence the mobile downloading market would be a natural advancement for iTunes. In addition they have important financial support by Apple, who may provide the necessity capital for future developments.
An Alternative Marketing and Distribution Channel

As all of the personas derived from our major investigation asked for a more convenient way of achieving music, some conceivable actions to encounter this demand are devised. These actions are to be considered in a long term perspective as the services are either not developed or not for commercial intention yet. The contemplated services are interactive TV and DAB (Digital Audio Broadcasting) as they hold a wide range of interesting opportunities that can be used in order to increase revenues for major record labels.

Marketing is one of the most essential issues for record labels as the artists need to be promoted in order to gain recognition among consumers. Until today radio, TV and Internet has been the major marketing channels. As opposed to radio, the latter two also provides non-oral interactivity with its consumers in terms of video and images. However, there is a difference between the Internet and TV consuming. One has to actively search for information on the Internet. Pop-ups and banners are common teasers that come without permission, but this kind of commercial are often neglected and considered annoying by the average consumer. The trend is that TV becomes more interactive with the consumers as video on demand and sales of merchandises through TV increases. It requires extensive effort from the consumer to go through the process of purchase on the Internet compared to just use the phone in front of the TV by responding to the commercials. All it takes to respond on a TV commercial is to send a SMS or to dial a number. Purchase on the Internet, on the other hand, would require more steps by entering credit card numbers and so forth. Because of this, it can be concluded that the TV will not only be a good marketing channel for digital content. It probably will become a good distribution channel of digital content as well.

DAB is a potential sales and marketing channel with the same attributes as TV, suitable for mobile music consumption. Nevertheless this opportunity depends on external actors from the record labels point of view, as DAB-receivers needs to implement in the mobile phones. These receives are dropping in price and the area of application is constantly expanding. Mobile DAB receivers are being produced as well as being integrated into car radios. When mobile phones have an integrated DAB-receiver, record labels will have the opportunity to broadcast streaming material throughout the display of the mobile phones. Record labels could claim a digital radio channel as a pure marketing channel for the artists. Another option is to purchase a spot on another actor's frequency during a special event. It will then be possible to broadcast live-concerts in every supported mobile phone without being committed to run an own digital channel. Nevertheless DAB will not only create marketing opportunities but also sales opportunities. As the broadcast method support streaming of extra material, record labels can attach a link to where the currently played track can be downloaded from. It will then be possible to press the link, get connected to the 3G network and download the selected track instantly to the mobile phone. The consumers do not even
have to realize that they are switching from the broadcasted DAB into the P2P 3G network. This is to be seen as a strategic push marketing and sales method as the consumer are fed by an appropriate offer and are just a click away from the point of purchase. Compared to the earlier mentioned pop-ups on the Internet this will be seen as a much more relevant and appreciated offer due to the related song that are currently being played.
Preventive Measures for Mobile Business

The profitable traffic charge of the mobile network operators is an identified problem. Except for revenue share that is applied for Premium SMS, the charge for WAP traffic is expensive for customers. Products such as truetones and full-length tracks to the mobile phone are expensive due to the large amount of data that need to be transferred. Therefore, something needs to be done in order to stimulate the market as services that provide truetones and full-length tracks are emerging. This issue is being discussed in this chapter.

The Power of the Operators and the Struggle for Equalization

One of the interesting questions from Sony Music before conducting the investigation was: “how come the network operators are charging so much?” A simple answer to this question is: “because they can!” Insights gained from extensive market analysis shows that the power of the mobile network operators on the Swedish market is too strong. It is very hard for an external actor to make agreements with the operators that would put them in a profitable situation equal to the operators themselves, simply because Sweden is such a small market from a global point of view. The lack of big actors on the market who can put pressure on the network operators has thus created a situation similar to the one of monopoly. The natural development rate of the mobile business is thus being delayed, depending on whether the network operators are convinced that new emerging business areas are worth paying attention to. The market for mobile ringtones is an example of this because of its slow expansion in the beginning.

At first, the operators charged even more for services used to transfer ringtones, according to Mayako Fagerfjäll at Netsize. Except for devastating charges, content providers need to sign agreements with all of the existing network operators in order to make the services available to all consumers on the market. The reason is the inhomogeneous consumers with subscriptions among all network operators. Because of this, the entrance barrier for content providers to enter the mobile business with services towards consumer is heightened even further. One step that has been taken against the power of the operators was by aggregating all the smaller content providers to make the business big enough for profit. Content providers sign agreements with an actor and the actor sign agreements with all the network operators. This has been carried out by Netsize, effectively lowering the entrance barrier for small actors.

Another reason for the network operators to be in this position is because there are not any regulations for this kind of business. An interview with PTS (The National Post and Telecom Agency) revealed that basically, the only business within the mobile area that is strictly regulated is voice traffic. Businesses in other market areas are subject to the vague
regulation defined as: “No services are to be charged above a level that is adjusted to the conditions of the market.” The network operators often defend themselves by saying that as long as there are customers willing to pay, the level is adjusted to the conditions of the market. The best way to make the operators lower the prices is to convince them that it is in their own best interest Myako continues. It is thus important that external actors exert themselves to this kind of work. The record industry could do it by a joint effort through RIAA, or a single record label could establish contact and assist the work of a successful actor such as Morgan, which is a trade group within the mobile business. By doing so, the record industry or the single record label would be in better position to monitor the development of the mobile business as well as influence what serves the interest of ones business strategy.
FULFILLMENT OF THE INITIAL PURPOSE

In this chapter it is clarified whether the initial purpose within the thesis is fulfilled or not.
As earlier mentioned the main purpose within the thesis was to evaluate how big record labels can profit from the prevailing situation they are experiencing and how future issues can affect their way of doing business.

In order to accomplish this, the following concerns were to be addressed throughout the working process:

- What are the consumers desires regarding digital music consumption? What is popular at the present and what do they want to consume in the future?
- How do the actors correspond to the consumer demand in this industry and in what way do they have to adjust according to future demands?
- How well do the technical prerequisites support the consumer demand and what is to be developed in order to support future desires?

The consumers’ desires regarding digital music and consumption patterns were perceived thorough the focus group sessions. The time was well disposed to achieve a great understanding of the consumers’ needs and suggestions. The derivation of the personas furthermore clarifies desires of the consumers.

Throughout the chapters: Entertainment Central, Music Services, Collaborations, Personalization and Models of Payment it is clarified whether the actors support the consumers’ demands regarding digital music or not. In the evaluation part, gaps between the consumers and the actors are further elucidated. In the same manner weakness in technical developments required for the consumers’ demands are enlightened and clarified.

By responding to the concerns it has been possible to derive some actions. These actions describes how big record labels can profit from the prevailing situation they are experience and how future issues can impact their business, as they fulfill the purpose of the thesis.
REFERENCE LIST
Literature

Blackwell, D Roger; Miniard, W Paul; Engel, F James. (2001) Consumer Behavior, USA: South-Western


Journals


Sanjay Gosain, Zoonky Lee (2001), Routledge, part of the Taylor & Francis Group, Pages 140 – 145 Volume 11, Number 2 / February 1, 2001: “The Internet and the Reshaping of the Music CD Market”


WWW


APPENDIX 1
Appointed Responsibilities

Abstract – Johan, Knut, Michelle
Sammanfattning – Johan, Knut, Michelle
Preface – Johan, Knut, Michelle
Reading Directives – Johan, Knut, Michelle
Introduction – Johan, Knut, Michelle
Method – Johan, Knut, Michelle
Terminology & Actors – Johan, Knut, Michelle
Hypotheses – Johan, Knut
Entertainment Central – Michelle
Music Services – Johan
Personalization – Michelle
Models of Payment – Knut
Evaluation of Hypotheses – Johan, Knut, Michelle
Future Adaptations – Michelle
Suggested Actions – Johan, Knut
Fulfillment of the Initial Purpose – Johan