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**THE RISE OF MP3: EXPLORATORY STUDY AND
RESEARCH AGENDA**

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ABSTRACT

The Internet/World Wide Web (Web) is an important way for the sharing and selling of products and services, including music, in crescent virtual communities. The MP3 standard is the world's most popular file format and allows many on-line individuals to access to music which they would otherwise be denied. Although electronic commerce (e-commerce) has received considerable research attention, the literature reveals that the relationship between the music industry and the consumers through the Internet has not yet been sufficiently studied. This research contributes to a better understanding of the use of MP3 files as legal products and also as digital piracy. This paper considers the nowadays and the future use of MP3 and attempts to provide a research agenda.

KEYWORDS

E-Communities, E-Commerce, Music Distribution, MP3, Music, Consumer Behaviour, Internet Piracy

1. INTRODUCTION

Although the consequences of marketing to the Internet are not clear yet (Peterson et al, 1997), there is a consensus concerning the attractive and different environment for marketing activities which Internet represents (e.g. Ruiz & Soriano, 2002). More than 420 million people had Internet access in 27 countries in 2003 (Nielsen, 2003). Several studies have indicated that since 2000, the proportion of Internet users who shopped on-line increased globally by 50%. Forecasts of electronic shopping sales have ranged from \$5 billion to \$300 billion annually (Shim et al, 2002).

The most shopped products in the Internet are books, films (dvd) and music (cd). Music industry reveals big incomes from Internet shopping. Although in the past bandwidth restrictions have obstructed a massive distribution of music in digital form over the Internet, those times are now gone away. The improvement of digital technologies over the last decade, have been threatening the music industry. And as the «old» restrictions disappeared, consumers become more able to search, download and play high-quality music in accessible digital form directly from the Net. This is undoubtedly accelerating the development of the Internet as an infotainment hub, whereby it is becoming the main conduit for both information and entertainment (e.g., Lam & Tan, 2001).

The record labels which made and sold CDs in the 1980s could not keep up with all the money flowing in. Once you signed up an artist and cut the master disk, the marginal cost of production was negligible. In the 1990s an acceleration of new independent record labels not only crowded the marketplace with niche products but also attracted artists with better terms because their break-even point was lower. Over the past few years, new and irreverent upstarts in the Internet began to rewrite the industry rules with an entirely new business model (Harari, 1999).

Music is one of the most important media trade in open networks, and the Internet users are more and more attracted to popular P2P¹ technologies to exchange music files (Serrão & Marques, 2004). Piracy has become an integral part of digital online culture. It has made the MP3 the world's most popular music file format and allows many individuals to have a broad online access to music which they would otherwise be denied (e.g., Lam & Moscicki, 2004). Hackers are interested in attack computers for many purposes but now they also want to get MP3 files (Schultz, 2002), and the hackers are not the only Internet users who search the Net to obtain MP3 files... its emerging an Internet subculture of audio piracy (Cooper & Harrison, 2001).

¹ peer-to-peer

But isn't it a very thin line, which we sometimes hardly can distinguish, between piracy and the free use of Internet (and the consequent easy access to free MP3)?

This paper presents an exploratory study that considers the different web sites to obtain MP3 files from the Internet.

2. THEORETICAL FRAMEWORK

2.1 Internet shopping

The Digital Economy emergence, sustained in a new concept of enterprise organization, has in the Web and in the Internet its foundation and main operational sustainability (Domingues & Cordeiro Gomes, 2003). Some literature indicates that the collapse of some empires based on the Digital Economy may be the end of economical models sustained in the virtual organizations and the consequent return to the classical models and the old economy (e.g., Porter, 2001). But the Internet is still growing at a high speed and firms are investing millions into online presences to gain competitive advantage (Gervey & Lin, 2000). Almost every company has its own web site these days. The problem is that they often end there: many companies create a web site just to be present on the Web (De Wulf et al, 2002). And more... nearly 90% of web sites are developed without asking customers what they want (Korgoankar & Wolin, 1999). All companies want to be visible in the Internet and so it is not surprising that even the direct selling organizations which mainly rely on personal relationship to obtain sales are including the Internet as part of their marketing strategy, either to communicate with the salespersons or to promote the products and the business to the consumer (Alturas, 2003). Quelch and Klein (1996) analyzing the posture of the on-line companies, ended that the form how the Internet is explored by the companies depends a lot of its activity history. They suggest the existence of two different operation models: the first developed by multinational companies, that use the Internet initially as one more communication and information vehicle, and that only in a more advanced phase explore their potentialities in terms of commercial transactions; and the second adopted by start-ups (companies that appear addressed to the use of the Internet potentialities). These follow a posture based since the beginning in on-line transactions.

In general, consumers pay valuable attention to the opinion of others like family, friends, colleagues, shop assistants and consumers associations while making purchase decisions. With the arrival of the Internet as a new way to communicate and interact it is interesting to find out how consumer's behaviour is affected by those with whom the consumer closely associates (e.g., De Valck et al, 2002).

The personalisation of the Web site is also an important variable. Personalisation measures the extent to which an e-commerce site takes into account his personal needs and desires and is viewed as an important aspect of the e-commerce environment (Eighmey & McCord, 1998). As the user is being more and more familiar with a website he tends to be more loyal to it because when he is familiar with the shopping environment he may find it extremely legible and adopt an epistemic strategy of relying on prior knowledge of the shopping environment to locate desired products (Ruiz & Soriano, 2002). We also must take into account that the consumer usually decides first about purchasing the brand and later if the purchase will be done through the web site (Peterson et al, 1997). If the consumer perceives that the web site is simple and user friendly than he may chose to buy on the web site (Srinivasan et al, 2002). The more the consumer accepts to shop on the web, the more expert and satisfied he tends to be because there is a significant positive correlation between Internet shopping acceptance and satisfaction (Alturas, 2004).

The Internet – and the MP3 standard in particular – is changing the music industry (e.g., Lam & Tan, 2001), and the threat posed by MP3 has provided all record labels with motivation to engage in learning and capability development in order to mitigate potential damage from this disruptive technology. In response, the stablishment of a web site is the record labels first step. The capabilities and features of these web sites can play a large part in captivating the customer retention and loyalty and given that e-distribution of digital content has a vast potential to increase efficiencies in distribution there is also inevitable price pressure in result (Easley et al, 2003). In 2001 a survey was conducted to determine how the availability of digital music files has changed the music consumption habits of collegial students. Findings revealed that nearly two-thirds

of the subjects owned MP3 files at the time of the survey and that although having restricted incomes and easy access to free MP3s they expressed a willingness to pay for legal downloads from commercial sites (Gallaway & Kinnear, 2001).

2.2 The MP3 standard

From project to the new "spiritual medium", the MP3 format generated around itself a new industry and an emerging paradigm change. The beginnings of the technology remounts to 1992 but it is the massification of the Internet, in the middle of the 90's, that gives rise to its visibility. However, it was not before the final of the past century that MP3 leaves the computer magazines - to turn to a global scale subject. Nowadays, the popularity of this format is fully accomplished. MP3 (or even other better compression method) it will substitute the music CD in a way such as cruel as the CD substituted the vinyl. We think it is just a matter of time. «How soon is now?», as Morrissey (The Smiths) would sing.

In 1992 the Moving Picture Experts Group approved the MPEG-1 norm, as the flag for the storage and digital access of images in movement with audio. MPEG Audio Layer III (or MP3) is the correspondent for the storage of audio clips with similar quality to the one of a musical CD.

In the next year (1993), at a time that Internet was used by over 20 million people, the first MP3 was created in an academical server of California. The responsible authors of the Internet Music Underground Archive aimed to turn a repository of independent artists' music, and planned to distribute all of these work freely at an international level.

During the next years we assisted to the creation of the MP3 Audio Consortium, and a "mailing list" was founded. It was created to discuss the specificities and potentialities of that digital format. The declaration of intentions refers that "none of us has a patent interest in copying music in an illegal way; we are squeezed simply by the special characteristics of the new half."

It has appeared in scene the first software able to reproduce MP3, the AMP MP3 Playback, created by Tomislav Uzelac, of Advanced Multimedia Projects. One of the today's most popular reproducers of MP3 is Winamp, which was programmed by Justin Frankel and Dmitry Boldyrev. It began by being a simple "freeware" (of free distribution) but early it turned to be a "shareware" (subject to an optional payment in case of being frequently used) to finance the bandwidth used for about 30 thousand downloads every day.

MPEG algorithms compress the data to form small bits which can be easily transmitted and then decompressed accurately and quickly to allow high-fidelity reconstruction. MPEG standards aim for a compression ratio of about 52:1, requiring the reduction of, for example, 7.7 MB to less than 150 KB. Approved in 1998 and 1999 respectively, MPEG-4 and MP4 are intended for very narrow bandwidths, speech and video synthesis, fractal geometry, computer visualization and artificial intelligence to accurately reconstruct images for minimal data (Lais, 2002).

Recently two new metadata standards appeared: MPEG-21 and PDF/A. Other standards of interest to the publisher and library communities are NISO Z39.87, which uses metadata to describe images; MPEG-21, an extension of earlier versions of the MPEG standard that uses XML to describe content elements; and PDF/A (PDF/Achievable), a version of Adobe's widely used PDF that should remain stable over time and therefore can be used for digital preservation purposes (Hawkins, 2004).

The ability to share files via Peer to Peer (P2P) systems has given the public means of acquisition that challenge the monopoly of major recording and distribution companies (Lam & Moscicki, 2004). Most of P2P search applications are dedicated to file sharing services. In these applications the contents usually consist of multimedia data (e.g. MP3 audio, MPEG video) and search is done using meta-information about them (e.g. song title, author, movie title) (Attardi et al, 2004). P2P refers to a technology that enables two or more peers to collaborate spontaneously in a network of equals (peers) by using appropriate information and communication systems without the necessity of central coordination (Schoder & Fischbach, 2003).

3. RESEARCH

3.1 Research question and methodological considerations

We derive our basic research question: Can we find in the Internet a large choice of web sites which permit music consumers to download all the MP3 files that they want?

The exploratory research we propose was built after the literature research, and we decided not to derive any hypotheses because, first of all, this is a preliminary step in a broader empirical research. Although hypotheses have the advantage of forcing researchers to think systematically about what they want to study, they exhibit a potential disadvantage because they may divert a researcher's attention too far away from other interesting facets of the collected data (Bryman & Cramer, 2001, p. 4). At the time we will present this paper, we will continue to this research, carrying on other studies which aim to apprehend many other questions such as the frequency they download and listen to MP3.

In order to find the major sites where music consumers can share and download MP3 files we use some well known search engines in the World Wide Web: google (<http://www.google.com>), altavista (<http://www.altavista.com/>), and yahoo (<http://www.yahoo.com/>).

3.2 Findings

3.2.1 Paid music download

As we watch the incredible expansion on the exchange of free digital music files amongst thousands (or millions) of Internet users, the music industry, though its initial hesitation, hugged the protected digital download once and for all. Some musical groups have done the same «by their own hands», with the promise of high quality MP3 (e.g., In The Nursery²). Despite the volume of businesses of this new reality is still residual, there is already «some voices» who predict that the veteran CD won't wait a lot to give, finally, showing us its last signs of life. In the last two years it was attended the proliferation of paid services, with the Apple iTunes, to lead a market that – in the words of the specialists - is in frank expansion. Therefore let us know the main platforms which we can use to accede to the music that, until recent times, we could only find in some selected music stores.

Napster

Napster is already a veteran in these adventures... and it threw his offer recently. It made it in the only way that - after endless judicial soap operas - it would be possible making it: through an attractive platform of paid download digital, arm-in-arm with the music industry that, since the last five or six years, it dared to challenge. Assuming the paternity of the peer-to-peer technology exactly in what concerns the music share is served as the most popular software of among the offers that were imposed without consent of the legality. The Napster-to-go option allows a type of meal "buffet": for 15 dollars a month the download is limitless. Old devoted to the MP3 format, Napster uses the technology of Windows now Measured (WMA), being some files protected by normal DRM (Digital Rights Management or Administration of Rights of Author), that inhibits the copy and the abusive share. The available catalog ascends to more than a million units; the price for each file (e.g., each music) is 1 dollar and the price for a whole album varies between 10 and 14 dollars. There are still subscription models for more habitual customers.

Site: www.napster.com

² www.inthenursery.com

Music Match

Music Match began to be known as the first "everything-num-only" of the MP3 world. In fact, its software could perform almost everything: it extracted audio from a CD, it could codify it in compression formats such as MP3 and reproduce it, it allowed to organize music collections and it still give the option to record CD audio just starting from the MP3 source. Today it continues to allow this whole panoply of possibilities but it also became a store online, working now with the WMA format. As the great majority of these platforms, it also foresees the protection DRM, restricting the files sharing to a limited number of computers and portable readers, the same happening with the "burning" (recording) of files for CD. His catalogue patrols the 800 thousand units; the prices for song vary between 1 and 2 dollars and for the albums between 7,50 and 12,79. There are also "signatures" for a messier consumption whose value varies between 3 and 8 dollars.

Site: www.musicmatch.com

eMusic

Here we can find a larger offer in independent record companies, MP3 without authorial restrictions. It's a site where, besides the music, we can read what is written on it. Forty songs for 10 dollars are, let us say, the "psychological" offer of this service which stays faithful to the classic MP3. The records are accompanied of endorsed critics responsibility of a «team that it counts», for instance, with professionals from Times. The restrictions, as we saw, are very few and the prices vary according to the signature model: 10 dollars for 40 songs a month; 15 dollars for 65; 20 dollars for 80. Enriched by the contribution of the "indies", the catalog reaches the 500 thousand files at this time - and the tendency is (of course) for fast increase.

Site: www.emusic.com

WalMart

For who is annoyed with the instant price variations between services and the different problems at the authorial protection of the files level, WalMart may seem to be a good commitment solution. With a repertoire still relatively reduced (about 500 thousand files), this service has, however, clear procedures: the prices are not elastic (0,88 dollars for song, and an interval of 8,80 and 9,44 dollars for albums) and DRM is invariable according to the artist (it allows transferring for three computers, limitless for portable readers and 10 recordings for CD). WMA seems to be the privileged format.

Site: www.musicdownloads.walmart.com

Sony Connect

The walkman and the Discman creators entered recently in the world of the digital download and they made it, probably, for increasing the sales of their first models of portable reproduction of music unloaded in the Internet. Not strangely, all of the files that integrate the online store of this Japanese company are distributed with a "landlady" Sony protection, the Atrac 3 format. In the site they can meet exclusive contents, the easiness to CD recording and several free songs promotions. Unhappily - and just as it happens with the iTunes in relation to the iPod - the songs unloaded in this service can only be reproduced in Sony portable readers. Based on the catalog of Sony/BMG, this service counts with more than 700 thousand files at a unitary price of 1 dollar. The album costs 10 dollars.

Site: www.connect.com

Bleep

Property of given prestige to Warp Records (dedicated to the electronic experimental music), the Bleep service offers an exclusive selection of artists' songs as Square-pusher, Aphex Twin or Prefuse 73. It is written "exclusive" because, in reality, the works of these artists aren't available in any other digital store. The price of each file is higher than in most of the other services (1,35 dollars) but an album is sold by current 10 dollars. The files - in MP3 format - don't have any protection and so can be shared, sent for portable readers or integrated in audio Cd with any limitation.

Site: www.bleep.com

iTunes

The paid service of larger success, fruit of his umbilical connection to the "trendy" iPod (it arms certain even in the old art of seduction); it is a tacit example of how to operate in this sector. Apple was not the first company to invest in the digital download but, as music readers' manufacturer, it thought for the right form of business to foment his online store and their iPods simultaneously. The music unloaded in iTunes is only susceptible to be heard in the iPod, the music heard in the iPod cannot be transferred for a personal computer. The privileged format is (the Apple) AAC and the files can count with specific DRM protections (if some times find a MP4 file and not to get to reproduce it will know than it is treated). The catalogue of iTunes is of the most tempting - they were made agreements with all the multinationals and a great number of independent - and the prices vary between 10 and 15 dollars for album, being fixed in 1 dollar for song.

Site: www.apple.com/itunes

Streamwaves

Described like "Google of the digital download", the Streamwaves service cannot be the most attractive of the market but it is one of the fastest and efficient in the researches. Here the emphasis is given to the "streaming" (mere reproduction) and not to the download (possible, in WMA, just for the subscribers). The licenses DRM vary consonant the provenience of the music but it makes possible limitless transfer among computers. The catalog is not of the more equipped - only 450 thousand songs - and there are three subscription models (monthly, quarterly, annual), with a monthly price that can vary between 8 and 10 dollars. The unit costs 1 dollar.

Site: www.streamwaves.com

RealRhapsody

One of the oldest companies in this virtual music world, RealRhapsody (inventor of the Real Audio and the Real Movie formats) holds a paid service of digital download that has just firm an agreement with Apple, in the way that the files unloaded through RealRhapsody are susceptible to be transferred for an iPod. The limitations DRM are, for that, obvious. With a music base that patrols about 700 thousand files, RealRhapsody works with a "codec" RAX (proprietary), making subscription models possible and practicing inviting prices so much for song (between 0,50 and 1 dollar) as for album (from 5 to 10 dollars).

Site: www.musicstore.real.com

MSN Music

With a late arrival to the digital audio, Microsoft began by wanting to impose his competitive format to MP3 through a practice that has been coming to be, of rest, condemned by several quadrants: when incorporating WMA as format "for defect" of his Windows Media Player. The same happened when it integrated Internet Explorer as browser-pattern of the operative system Windows, taking the dominance of the market motivated by the induced inevitability of having to use the browser of Microsoft - daring that, be increased, it was worth it a heavy fine. MSN Music - that associate appears to be the next version of popular MSN Messenger - begins in force: more than 650 thousand files compose the "bouquet" of the service of digital music of Bill Gates, with previsible WMA to command operations. The site counts with the precious connection to the AU Music Guide data base, the one that allows to buy with the increased value of knowing, to the right, what is been to buy. For abbreviation, the users of this service can choose from a tempting menu/catalogue of more than a million music options. The limitations DRM is a fact: MSN Music unloaded songs can be transferred for a maximum of five computers equipped with operative system Windows, recorded for CD up to seven times and transferred with no limits for portable equipments. The price for song is 1 dollar; each album costs between 8 to 10 dollars.

Site: www.music.msn.com

All Of mp3

Site well built, with a complete catalogue of international titles (more than 300 thousand available themes), intuitive navigation, help section of quite detailed and pleasant graphic aspect. If it unloads the program "Allofmp3 Explorer", it can accede in a fast way to all of the possibilities: exploration of the catalogue, purchase of songs, credit addition to the bill, etc. the possibility to hear the complete music, before buying, is another positive aspect (in these conditions, the resonant quality is reduced). It has many formats to the choice (MP3, WMA, Ogg Vorbis, AAC and Mpc) without imposing restrictions. The price depends on the size of the files, but, on average, it pays himself about of € 0,70 for an album (in MP3 to 128 Kbps). The prices are presented in US dollars.

Site: www.allofmp3.com

mp3 Search

To proceed to Allofmp3, it is the site that possesses the catalogue of more interesting international music. The songs are in MP3 (in general, 192 Kbps), compatible with all of the portable readers and of PC, without use restrictions. It is a site easy of using and with a mechanism of search of difficult songs. It doesn't allow integral download of CD (only music by music). It is impossible to research for musical type. The presentation of the results is confused and the help section is quite weak. The price is of € 0,08 for music, what means that an album with 15 songs cost € 1,20. The prices are presented in US dollars.

Site: www.mp3search.ru

Sapo

This is the only site available in Portuguese. It has the exclusive of paying (€ 0,01 for song) for music transmissions (streaming). It faded the song that bought accidentally, it can recover her. The navigation is slow. Per times, the price of an album is higher than the isolated purchase of the songs. The music, in the format WMA, is accepted for several readers of PC, besides Windows Media Player. But, in relation to the portable ones, although the format WMA is compatible with most of the apparels, many don't get to reproduce WMA with DRM. The restrictions are not the same for all songs, what hinders the use. In general, it can reproduce the songs in 2 or 3 computers and to do among 3 to 10 recordings in Cd. The synchronizations for the portable apparels are limitless. The price is of € 0,99 or € 1,29 for music and € 11,99 for album.

Site: <http://musica.sapo.pt>

Wippit

It announces more than 200 publishers, without indicating the number of songs. It is more vacationed for independent publishers with less commercial recognition. Besides the graphic aspect to be little attractive and the use is not intuitive. The results of the researches are presented in a confused way and it doesn't allow to hear an excerpt of the music. To discover if a certain album it interests we will have to buy it first in MP3 and WMA files with restrictions. The most serious defect is the lack of information about the limitations of the songs in format WMA. Only after buying the music it is that we know that, in general, it can use it in a single computer, to accomplish three synchronizations for portable apparels and three recordings for Cd. The price is starting from € 0,39 for music, but the most frequent price is € 0,69. The payment of € 6,99 a month it gives limitless access to the catalogue.

Site: www.wippit.com

3.2.2 Free music download

Here we are, as so many other times in our history in the well-known game of the cat and the mouse. When a judicial order contained, definitively, the first apparel of Napster, the explosion of the "peer-to-peer" stopped being a forecast. They were profiled immediately alternatives to the "imprisoned father" and entirely free services like Audiogalaxy could reign during some time. Also by the pressure of the industry, this left legacy in the actual eDonkey, BitTorrent, LimeWire... and many other. It also left a lot of work for the tribunals. They've become the illegal options... at the short distance of a simple click that only a few can still resist.

eDonkey

eDonkey is an application that allows you to share and download files with millions of other people across the globe. It is fast and easy to use with the most sophisticated file sharing technology available. It is a completely decentralized P2P network. It allows you to trade any type of file, mp3s, video, images, software, etc. It runs on Windows, Mac OS X, and Linux.

Site: www.edonkey.com

Shareaza

Innovative face any other P2P, this software allows the connection to several share nets, from the eDonkey to BitTorrent, acting simultaneously how to brow-be of contents audio (and video) and as an interface for other applications. With an extremely attractive appearance and functionality, Shareaza is affirmed as a "cool" alternative for the neophytes, comparing to the complication of other programs. The resources consumption of the operative system - important factor for a P2P customer's stability - is relatively scarce and gives the possibility to configure the aspect of the program to the user's preferences. Better still: it doesn't bring with itself any "spyware" (introduced software that lodges permanently in the operative system to collect information on habits of the programs use) or "adware" (advertising software that it results of the agreement of certain programs with his sponsor).

Site: www.shareaza.com

Soulseek

It began as a community for the most iron like followers of the electronic music but, nowadays, it is an indispensable platform for many alternative currents lovers (ranging from rock to hip-hop). It simultaneously works as a research motor of MP3 contents and a "chat", through subordinate conversation rooms to musical styles, countries or any other subject. Also free from any evil software, Soulseek is drawn for those who like the mere download of the music which they hear in the radio to go in addition. The option to research the pastes of a remote user can result in an authentic open door to hundreds of complete albums - and some of them haven't still arrived to the stores. The emphasis is in the share, in the communication among the users (that can sketch "lists of requests" and to inventory the music that they like, in way to find compatible "souls"). The rudimentary aspect of the software can move away the most impatient since the virtues of Soulseek have the privilege of not evidencing immediately.

Site: www.slsknet.org

BitTorrent

It is already free of judicial actions and it provoked raids besides supplying companies of Internet for the fact of his operation to pass also for the listing of contents in seemingly inoffensive pages HTML (those that, commonly, we found in the Internet). BitTorrent is, in fact, a peculiar P2P: It hides in the computers as if it didn't exist but it jumps to the view when, through "links" in specialized pages, it is executed and it begins, immediately, the wanted download. The users are connected amongst themselves in way to receive, progressively, portions of the wanted file. The more "sources" (that is, physical existence in the disks of the users) it has a file, faster it will be downloaded. BitTorrent is, therefore, happened best as the interest in certain file increases. The "sources" are designated as "torrents" and any research motor will return interesting results when the expression is researched. Namely, sites where listings of contents can be acceded without difficulty. Since then, the discreet software BitTorrent will make his work. There are also program-customers that, for road of interfaces more developed, automate tasks and facilitate the relationship between the user and the download.

Site: www.bitconjurer.org/BitTorrent/

Kazaa Lite

A truly resistant from past times, Kazaa Lite is a simplified version of the popular software P2P of Sherman Networks, one of the first ones to ally the design to the efficiency. Kazaa Lite is, for that, a type of piracy on the piracy because it removes to the original code everything that is susceptible to constitute - "spyware", "adware" and additional software. Plus: while Kazaa works in a system of credits, which privileges the users that make available more contents for share, Kazaa Lite turns any of his user in a privileged user. He can, therefore, count with limitless researches, download multi-source and a superior performance, thanks to some addictive ones convenient. Also drawn to research any other contents that are no music, Kazaa Lite is the ideal solution when one wants to find, immediately, the single that has just left a known artist. And, already now, the clip.

Site: www.filessharingplace.com/downloads/kazaa_lite_k++.php

Emulate

Emulate him, a variation of the eDonkey, is, probably, the more popular P2P software in Europe. Allowing the connection to different servants for different interests, emulate is an excellent tool for the download of complete albums, usually kept in a single ZIP file or RAR, what does with no necessity to go through the song by song unloading. Emulate is also infinitely configured: it has filters for anyone who needs to control the international traffic (that in almost all of the national operators are monthly limited) and an interesting option of consulting the comments of other users concerning to a file in matter (films, album, software), so that a gigantic download doesn't come to reveal a fraud.

Site: www.emule-project.net

LimeWire

Destined to the habitually neglectful (in these things of P2P) users of computers Macintosh, LimeWire works in parallel with one of the nets that created Shareaza - Gnutella. Similar to the first incarnation of Napster, LimeWire is affirmed as a competent alternative so much for download in general as for some rare preciousness.

Site: www.limewire.com

4. A POSSIBLE DISCUSSION

This research paper represents a first step towards the study of the importance of the MP3, the way it has been spreaded amongst Internet users and the responses from the music industry to this so-called problem. We are in the early stage of the research and we have focused our study on a particular group of web sites used by the music consumers. This choice inevitably limits the possibility to generalize any results beyond the target group. Although I've found 14 web sites where we can get paid music download and 7 web sites where we can get free music download.

Our findings indicate that there is a large range of choices paid and free to download MP3 files, and the music industry seems to have no means to end with all of those web sites which provide free MP3 files to the music consumers. Are we all becoming «pirates» or this is a natural way to use the incredible variety of resources that we can find in this huge e-community(ies)?

These empirical evidences could be relevant for e-commerce music firms who seek better marketing strategies including the Internet, and also to understand and predict post consumption behaviours and to the music industry that are still not dealing with Internet piracy. To sum up, we need to expand the scope of this research in order to test the reliability and external validity of the present results.

In future studies, in our empirical research, we aim to find some answers to many of the questions involving these virtual communities, such as what are the net consumers musical motivations and the frequency they download - for some price or for free - and listen to MP3.

We are living on the edge of incredible discoveries. In fact, an emerging (almost) new power is rising. As billions of bits come and go... we try to find our own way and to keep our balance. We really just seem to be in the dawn of the greatest revolution in the world of digital music (and multimedia in general). Are we ready for the next step?

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