Disruption of the Digital Media Distribution

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Abstract. Advancing Internet technologies and the new interactive digital media are affecting the entertainment industry's distributional models. The traditional distributional channels are being restructured and re-shaped especially in its delivery as well as marketing of such digital products and services. This paper provides a conceptual framework to analyze the impacts of the online market arising from the new digital media platform in the entertainment industry. It discusses some of the disruptions and identifies opportunities for the entertainment players to re-think their business models in order to generate revenues to sustain its growth.

Keywords: Interactive digital media, new media distribution, distributional disruption.

1 Introduction

The advancing Internet technologies have provided increasing interactivity in the delivering of web-based digital products and services such as online music, movies and games in the entertainment industry. In other words, as the Internet platform becomes more open and interactive with Web2.0 technologies, especially in the context of peer-to-peer or social networking systems, consumers can now easily obtain their online digital products or services at very competitive prices [1, 2], and for some even free [3].

Since 2000 the music industry has experienced contracted revenues [4, 5] and although some have blamed or attributed the reduced revenues to the illegal online downloads [6], a more rational approach is required to understand the phenomena. Not surprisingly, the movie or film industry, in terms of video rentals [4], too has also been affected as it is so much easier to download or watch the movie titles online. It is therefore important that traditional distributors understand the new circumstances [7, 8] so as to restructure the way they operate in order to generate more sustainable incomes. Indeed, the online entertainment industry faces new challenges and approaches to redefining their business models which in turn will impact the way the goods are produced, distributed, and marketed [9, 10]. Prior to the Internet, most of these entertainment players operate much on a silos-basis [17]. Their distribution channels were independent as they took the financial risk and at the same time created vertical structures for production and distribution. The organizational structures of the entertainment chain have been hierarchical with relatively rigid distribution channels

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[8, 16, 17]. The role of each player on the value chain was clearly defined. It was characterized by a protectionist agenda, and the structure was oligopolistic [18]. Although, there were some interactions in some products, but they kept their independence in the distribution. In general, the music, film, and games contained in physical entities, such as tapes, DVD's, film, CD's and cartridges were protected either by copyright [9, 14] or some technical features [37]. Production and distribution of physical entities have a cost, and since it uses physical objects, there are limits to how much of it can be produced or reproduced, and of course, in this context, economies of scale make sense.

Media distribution has been studied from different perspectives. It has been analyzed as supply chain [8] and thus, the effects of online distribution in the reduction of marginal cost have been identified [1] as well as its value added strategies to achieve more efficient distribution [2]. Further, the conditions that benefit or hamper the distribution of content, both in the traditional and online markets, have also been identified [41]. Since copyright has been used as a control mechanism [9, 14] by the media industry, the authors are motivated to analyze its implications on distribution. Thus, the objective of this paper is to provide an analysis of how the online market space disrupts and affects the traditional distributional channels. The paper also discusses the opportunities that players may have to create or strategize in order to generate sustainable revenue streams.

2 A Conceptual Framework

This paper proposes a conceptual framework that looks at the new approaches to distributing interactive digital media (IDM) based on two dimensions: the ownership of intellectual property and market channels as shown in Figure 1. These two dimensions are chosen as they tend to portray the characteristics of such entertainment products or services. For instance, most entertainment products hinge heavily on protecting the copyrights of the content creators or producers, hence, we think the first dimension, intellectual property, is important in the analysis. Further, with Web2.0 technologies, and as markets move online with networking systems, the way the digital products and services are being delivered will take a new form, hence, we think the second dimension, distributional channel is equally important to understand how the markets will be shaped.

The first dimension defines the ownership of the content creator in terms of its intellectual property (IP) and it covers all types of artistic and literary creation of information and knowledge such as trade secrets, patents, trademarks, design rights, and copyrights. IP law provides the copyright holders of the creative production complete entitlement to reproduce their work. In other words, it secures a monopoly over their work and provides them with the entitlement to reproduce and market copies of their work for a period of time or to entitle others on their behalf [11].

In the context of online markets, copyrights are essential to protect illegal downloads of music, movies, and games. In figure 1, we portray the arrow to show the IP dimension that begins with full control of one's copyright content to a situation where the content can be contributed by many people in the public domain (that is from bottom to top – depicting 'one-to-many' or from 'private-to-public' domain).

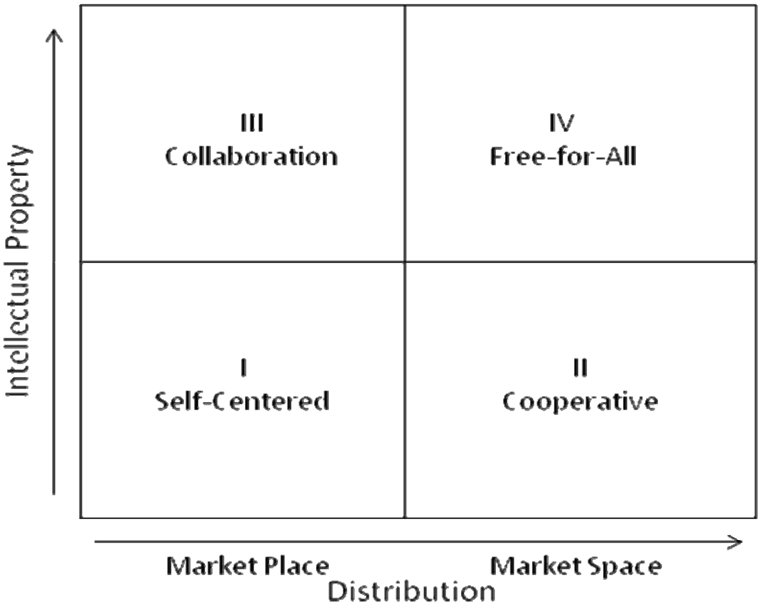

Fig. 1. A Conceptual Framework of IDM Market Channels

Public domain is described as a situation where the content can be created or contributed by various people and thus it would be difficult for anyone party to control or own the creations or productions [12].

The second dimension depicts the intermediaries, the distributional channels and they can take various forms of descriptions such as aggregators, syndicators, or just simple distributors. Aggregators are specific distributors in which content from different providers or producers is distributed by the same intermediary [13]. Sometimes aggregators are also syndicators. Syndication is a type of distribution in which limited rights are given for the media content which is sold to various distributors – this happens especially in the movie industry where its rights prescribe the number of runs for the movie. It provides exclusivity in a specific market.

In the traditional market, the distribution of content tends to be in the recorded form encapsulated in physical entities, such as CDs, DVDs, and shrink-wrapped video games. It can also be distributed using different platforms like IPTV which includes Video-on-demand (VoD) and broadcast [13]. As the Internet can eliminate cumbersome physical process of returning a rented CD or DVD [14], it can provide, theoretically, access to abundant content [3]. The x-axis in figure 1 shows the distributional channels beginning with the physical 'market place' and moving to the online 'market space' to the right. With online market space, traditional distributors who have been distributing the physical entities will also distribute digital content. In this context, the traditional distribution structure will be disrupted [8, 15].

We will analyse each of the quadrant in Figure 1 in terms of its characteristics and how the two dimensions, IP and the distributional channels have been restructured or disrupted by the new interactive digital media.

2.1 Quadrant I: The Market Place under Intellectual Copyright

Quadrant 1 typifies the traditional market place where the distributions of physical objects are legally protected by copyright regulations or laws. The distributors are in control of the value chain as they assume financial and marketing risks and the industry is characterized by a protectionist agenda with an oligopolistic structure [16, 17, 18]. Sometimes, the distributors synergize the channels to the markets by integrating backwards with vertical production, resulting in a hierarchical chain that is relatively rigid [8, 16, 17]. There are three types of distributors in the movie and video industry – broadcast (network and cable), syndicators, video distributors (DVD) - where the delivery includes cable and local stations broadcast or video rental and retail outlets. Besides the distributors in the value chain, there are also the advertisers who can deliver the content free [19]. In terms of generating revenue, providers use different distribution windows to strategise its revenue; for example, theatrical pay-per-view, re-runs, and DVD rentals among others.

In the music sector, the music distribution channel comprises a set of sequential activities, serially interdependent, with linear value creation and high vertical integration [8]. The distributors would obtain the rights from the content creators, and then subcontract a manufacturer to produce the physical entity (CD) which they would then sell the music titles in the CDs to the whole sellers who would then distribute them to retailers in the shops [20].

We call this quadrant 'self-centered' since each entertainment sector is concerned solely with its own needs and interests. Given its oligopolistic structure, they are relatively independent of outside influence.

2.2 Quadrant II: The Market Space under Intellectual Copyright

Quadrant II is also characterized by the traditional control of the intellectual copyrights of the creators or producers. However, the distributional channels are disrupted by the more pervasive online market which we called it the 'market space'. In the distributions of digital entities, the copyright content tend to come under threat by peer-to-peer online sharing infrastructure and platform. With the new interactive media, and especially with Web2.0, the distributional channels seem to take a different form as technology makes it possible for consumers to produce or re-produce copies. Web-based or online distribution is a norm on the Internet [21]. Global sharing is therefore simple especially for those having the common language and also having with similar interests. For instance, it is possible for some music creators to get access to their audiences without the intermediation of music labels. Radiohead, a British music band, sold their album, "In Rainbows", on its website and fans could pay as much as they like [22]. However, it is not possible for every band to market directly to their audience since few bands have the brand recognition. In fact, the Internet while facilitating new types of distributions has eliminated some intermediaries especially in viral distribution which occurs when a content provider permits any one to display his content without any restriction from the author - the case of YouTube videos. For instance, anyone can embed YouTube videos in his/her website, however, the author does not have any control over the destination [23].

New ways to discover content are also possible with web tools such as blogs, social networks (e.g. Facebook) as well as engines that track user behavior, and use that information to suggest products or services [24]. For example, in the "Wisdom of Crowds", it allows users to express their opinion by voting and is based on the concept that a diverse group with independence of thought and decentralization of knowledge makes better decisions [25, 26] including disseminating summaries or headlines using web feeds software (RSS).

We call this quadrant 'co-operative' since the activities needed to deliver content require the participation of multiple actors from content to service providers such as search engines and firms that provide payment services. With the flexibility, players in the 'market space' face multiplicity of roles in the dynamic relationships, for example, content providers have to generate co-values, find ways to share revenues, as well as getting use to the new conditions where restrictions (like resources, space, and time) are not as pronounced as in the physical world [21, 27].

2.3 Quadrant III: The Market Place in the Public Domain

Quadrant III is typified by the distribution of media content in the public domain. The term 'public domain' applies to creative works not assigned to IP regulations and is often contributed by various participants much similar to 'shareware' in the information technology. In other words, the content is not specifically controlled or owned by anyone so it is considered as public property. In the creative commons concept, creative works enter into public domain by four possible paths: the copyright that protects the work expires; the copyright holder fails to renew the copyright; the copyright holder decides to place the work in public domain; and finally, the copyright law does not protect the work [28, 30].

However, the term 'public domain' needs some clarifications as various countries define the span and scope of public domain differently, hence having different jurisdictions [29]. There has been little content produced commercially in the public domain. One exception is the movie "It's a Wonderful Life" from Frank Capra. This movie was in public domain from 1974 to 1990 since the copyright owner did not file a renewal application. During the period, television stations were able to broadcast the movie without paying any royalty rights, hence reducing their costs [31].

We call this quadrant 'collaborative' as creators or producers of digital content need to collaborate to take advantage of the possibilities that offers the public domain.

2.4 Quadrant IV: The Market Space under Creative Commons

Quadrant IV is typified by the distribution of content under Creative Commons (CC) licenses and public domain. One of the burdensome characteristics of today's copyright law is the need for creators to clear rights (obtain permission to use a work), and this process can be expensive [32]. Another factor that complicates the creative process has been the copyright term extension. According to some experts, the industry has over extended the law. This is because each time a modification is made, a new copyright has to be filed [30]. Indeed, the entertainment industry uses copyright law to validate their rights over IP, a process that has become expensive such that independent creators have difficulty trying to bring about innovations. The expansion of intellectual property rights can inhibit the innovation process [33].

Indeed, with the concept of creative commons, creators can remix their creations or productions with previous works without having much concern about copyright. Creative Commons' licensees provide the capacity to share content that could be copyrighted, but reducing barriers such as the high legal costs and procedures. In a way, creative commons can work alongside IP regulation [35]. Currently, it is difficult to know what position the media industry will take in the future in relation to the alternatives that Creative Commons' licenses offer. However, the entertainment industry has maintained a protectionist agenda that look after the old ways of distribution [18]. It is interesting to see whether the entertainment industry will be able to embrace the present technology in order to generate sustainable revenues [36].

We call this quadrant 'free-for-all' since the creators and producers are all willing parties who may be interested in sharing their content and distribute them to the consumers at perhaps, little or no costs.

3 Viable IDM Market Channels

In order for the entertainment industry to ensure the viability and sustainable of their distributional channels in the advancing digital platforms, it is therefore important that the creators, producers, and distributors understand the forces in the markets. Looking at the conceptual framework, we believe that quadrant 1 – 'self-centered' - provides the traditional approach that may be uncompetitive in the future yet it is unlikely that quadrant IV – 'free-for-all' - is attractive as a business model because of its unpredictability and lack of structure with regards to its contents as well as markets. However, can quadrant II – 'co-operative' or quadrant III – 'collaborative' - be attractive in building new business models?

3.1 Moving from 'Self-centered' to 'Co-operative' Distribution

It seems that various copyright holders in the industry are moving from Quadrant I to Quadrant II, that is, from the 'self-centered' to the 'co-operative' area. In this context, as content undergoes tremendous transformations from being encased in a physical entity to an online digital form, the traditional distributional channel will be disrupted. Therefore, the monopolistic situation with good revenue will be affected [3] as the enforcement of digital rights will be difficult, with easy to share online content [36].

Traditionally the music and video industries keep control of the distribution via three mechanisms: copyright enforcement, licensing physical products through distribution windows, and anti-piracy tools [37, 38, 29]. For instance, the lucrative video sector that used distribution windows to address different non-competing market will be affected. The distributors who used to have control over the distribution process by defining time, location, and number of runs, and targeting mass audiences [39, 40, 41] will find some discord with its revenue as they no longer are able to package or bundle unpopular items with the popular ones to reduce unintended loses [17]. Take for example, many of us would have experienced that in a music CD, the content providers tend to include one or two good songs packaging the rest with unpopular songs. This is also the case with some unsuccessful films that were also bundled for syndication purposes such that successful movies were bundled with unsuccessful ones and broadcasted on pay-tv or public TV to reduce costs.

In terms of the ease of use to share online content, the pace of technology makes it difficult to find acceptable definition of "fair use" in the Internet environment. When content is contained in a physical object, fair use is associated with the number of times, number of views, number of pages and so on. Indeed, the media industry has tried to lobby for legislation that forces hardware manufacturers and software developers to implement measures that limit the possibility to re-create or produce copies [14, 34]. This is, however, not easy especially with advancing technologies. Indeed, the system may become obsolete before the legislations are approved [34, 11]. The Recording Industry Association of America has stopped taking legal steps against consumers who were sharing music on the Internet. The new strategy is to work with Internet Service Providers (ISP), who will then monitor the users such that if a user is sharing music, the user will be notified. When the behavior persists, the bandwidth provided to the user will be reduced. However, if the user refuses to comply, the ISP may then discontinue the bandwidth access [35].

The music and film industries have also used anti-piracy tools to reduce the dissemination of illegal content, but these measures have not been successful. Unfortunately, anti-piracy tools can be broken almost as rapidly as they are generated, and this information spreads quickly in the Internet. Independently of how fast the anti-piracy tools are implemented, there is always the possibility to record with a video camera or recorder directly from the player [14, 37, 9, 42]. Some of the anti-piracy tools create annoyances for users with usage constraints [10]. As video players become commoditized, distributors have fewer alternatives other than content differentiation. However, absolute exclusivity will be difficult to implement given the instantaneous sharing on the Internet [40]. Indeed, the industry needs to find ways to optimize its distribution, and to look for strategies for re-purposing the content in the interactive market place as using copyright, anti-piracy tools, proprietary hardware and software to build a walled garden around content may not be sustainable.

3.2 Impact of Players Moving from 'Self-centered' to 'Co-operative'

The recording music industry has a market size worth US$36.9 billion in 2000 [43]. However, in 2007, there was a reduction of 26 per cent to US$27 billion [4]. The bulk of the income seemed to come from the sale of CD's and DVD's, that is, the songs in the tangible objects. Essentially, the physical units sold had reduced, and digital products sold had been increasing [5]. Besides, the International Federation of the phonographic Industry (IFPI) reported that 15 per cent of the revenue for 2007 came from digital products [6]. Overall, it was reported that the global music and video market had a contraction of more than 2 per cent from 2003 to 2007 [4].

As a consequence of the contraction of the physical market, the retail music and video rental stores were closing down. An estimated 25 per cent of music and video specialists closed its doors in UK from 1999 to 2004 [44]; in Canada, the Music World having 72 stores across the country filed for bankruptcy in 2007 [45]; in US, about 800 music stores closed in 2006, including 89 from Tower Record [46]. The recent casualty is Virgin Megastores which would be closing down in the coming months [47]. Blockbuster, a worldwide movie retailer and video rental, had the following financial results in the reds: -29.2 per cent in 2002, -16.6 per cent in 2003, -21.1 per cent in 2004, -10.3 per cent in 2005, and 1.0 per cent in 2006 [4].

3.3 Opportunities Moving from 'Self-centered' to 'Co-operative' Distribution

Indeed, the music industry has been forced to find new ways to address the demands of their users. Last.fm, a social music network, introduced a free service that allows its fans to listen to songs on-demand. This service is a partnership between CBS and the four major music labels with more than 150,000 independent labels and artists. Users can stream music or pay to download to an MP3 copy of the song through Amazon.com. The streaming service is funded by advertising revenue [48]. It is interesting to note that musicians are becoming less dependent on the distributors to reach their audiences. Artists are under pressure to get publicity, and record labels have to find new ways to generate revenue. Indeed, the Internet has provided opportunities for fans to organize and invest on the musicians' work. Scars on 45, a British band, won 15,000 pounds to record an album. One of the members uploaded the group's music on a site called Slicethepie that provides opportunity to artists to record their albums by requesting fans to invest on their favorite musicians [49].

The broadcasting sector is also experiencing substantial changes. For cable operators and satellite TV suppliers, there is intense pressure to keep their digital services attractive. This is because broadcast via Internet Protocol TV (IPTV) has the potential to transform the broadcasting sector. For instance, the telecoms are tapping on the opportunity to offer bundled services, which is cheaper and simpler for consumers such as offering voice, data, and video content - a triple play that provides a survival strategy [50]. In addition, VoD services play a key role in the competition between traditional pay-TV and IPTV providers. Such factors - the interactive capabilities, the enhanced watching experience, and better content - are user requirements especially in the personalized markets [51]. The latest delivery platforms require novel methods for tracking and evaluating audience interest.

Although moving to quadrant IV is really not an option to generate good revenue nor is it a sustainable business model for distributors, however, it is interesting to note that there may be several advantages for creators. For instance, the reduction in the legal cost of clearing copyrights and the transaction barriers may enable creators to be more innovative [32].

4 Conclusion

This paper presented a preliminary conceptual framework based on two dimensions, the intellectual properties of the creators or producers and the distribution channels in the physical market place or virtual market space, to analyze the evolving business models of the entertainment industry. It appears that as content can be progressively contributed by various parties of interest in the industry, the issue of copyrights and intellectual properties can enter into a grey area whereby it is almost difficult to control even by regulations and laws. The space of the creative commons or public domain is one such aspect. Of course, such products or services would also impose a structural change with regards to its delivery or distributional mechanism.

Unfortunately, both the music and movie industries have been affected with the new media platform. This is because as the compression algorithms get better and users are able to get higher broadband speed, sharing music and movies on the Internet is a common practice. It is unfortunate that both sectors have been slow in recognizing the opportunities that the market space could offer. The measures used to protect the industry such as lawsuits against music fans have instead created a public relationships fiasco rather than working to its benefit.

Indeed, with the new media platform, distributors of digital content and services should tap on the opportunity to collaborate to generate value and strategies with the creators or producers. Of course, finding new ways to excite the consumers with relevant content and tools, for example, the possibility of defining metrics that can measure user's level of interest on specific content or products would be an interesting proposition. The distributors must focus on the needs of the users in the market space so as to reach out to them in a novel and interactive way.

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References

1. Bakos, Y., Brynjolfsson, E.: Bundling & competition on Internet. Mkg Sc. 19, 63–82 (2000)
2. Lam, C.K.M., Tan, B.C.Y.: The Internet is changing the music ind. CACM 44, 62–68 (2001)
3. Anderson, C.: The Long Tail. Wired Magazine 10, 12, 171–177 (2004)
4. Datamonitor: Global Music & Video. Report, Datamonitor (2008)
5. RIIA.Year-End Shipment Statistics (2007), http://76.74.24.142/81128FFD-028F-282E-1CE5-FDBF16A46388.pdf
6. IFPI: Digital Music Report - Revolution Innovation Responsibility. Report, IFPI (2008)
7. Rabinovich, E., Bailey, J.P., Carter, C.R.: A Transaction-Efficiency Analysis of an Internet Retailing Supply Chain in the Music CD Industry. Decision Sciences 34, 131–172 (2003)
8. Graham, G., Burnes, B., Lewis, G.J., Langer, J.: The transformation of the music industry supply chain. Intl Jrl of Operations & Production Mgt 24, 1087–1103 (2004)
9. Kaplan, D.: Broadcast flags & war agst digital TV piracy. Fed. Com. Law 57, 325–344 (2005)
10. Newkirk, C.D., Forker, T.: Does YouTube's Bright Past Mean a Cloudy Future? Intellectual Property & Technology Law Journal 19, 1–6 (2007)
11. Sparrow, A.P.: Music Distribution and the Internet. Gower Publishing, England (2006)
12. May, C., Sell, S.K.: Intellectual Property Rights - A Critical History. In: Marlin-Bennett, R. (ed.) iPolitics: Global Challenges in the Information Age. Lynne Rienner, Boulder (2006)
13. Hjelm, J.: Why IPTV? - Interactivity, Technologies and Services. Wiley, U.K (2008)
14. Waterman, D., Ji, S.W., Rochet, L.R.: Enforcement and Control of Piracy, Copying, and Sharing in the Movie Industry. Review of Industrial Organization 30, 255–289 (2007)
15. Picard, R.G.: Changing bus models of online content serv. Intl. Jrl. Media Mgt., 60–68 (2000)
16. Kerr, A.: The Business and Culture of Digital Games. Sage California (2006)
17. Vogel, H.L.: Entertainment Industry Economics, 7th ed. Cambridge Uni Press, NY (2007)
18. Currah, A.: Hollywood versus the Internet. Jrl of Economic Geography 6, 439–468 (2006)
19. Owen, B., Wildman, S.: Video Economics. Harvard Uni Press, Cambridge (1992)
20. Edwards, P.: Music Industry. Personal Communication (2008)
21. Werbach, K.: Syndication. Harvard Business Review 78, 85–93 (2000)

22. Siew, A.: Thank you, Radiohead. The Straits Times 36 (November 27, 2007)
23. TICSC.: The Internet Content Syndication. White Paper (2008), http://www.internetcontentsyndication.org/downloads/whitepapers/content_creation.pdf (accessed on November 7, 2008)
24. Segaran, T.: Programming Collective Intelligence, 1st edn. O'Reilly Media, CA (2007)
25. Maney, K.: Techies hot on concept of 'wisdom of crowds, but it has some pitfalls, USA Today, 4 (September 13, 2006)
26. Surowiecki, J.: The wisdom of crowds, Doubleday, NY (2004)
27. Normann, R., Ramírez, R.: Designing Interactive Strategy. John Wiley & Sons, NY (2001)
28. Standford, L.: Copyright and Fair Use (2007), http://fairuse.stanford.edu/Copyright_and_Fair_Use_Overview/chapter8/8-a.html
29. Saasten, J.v.: Domestic and International Syndication. In: Eastman, S.T., Ferguson, D. (eds.) Media programming: strategies and practices. Thomson, Belmont (2009)
30. Samuels, E.: The public domain revisited. Law Review 36, 389–200 (2002)
31. Bates, J.: Company Town Yule with Less 'Wonderful Life'? Tune In. LA Times (1993)
32. Lessig, L.: The Failures of Fair Use and the Future of Free Culture. In: Basilico, S. (ed.) Cut: Film as Found Object in Contemporary Video, Milwaukee Art Museum (2004)
33. Boyle, J.: Shamans, Software, and Spleens: Law and the Construction of the Information Society. Harvard University Press, Cambridge (1996)
34. Benkler, Y.: The Wealth of Networks. Yale University Press, New Haven (2006)
35. McBride, S.E., Smith, E.: Music Industry to Abandon Mass Suits, WSJ (December 19, 2008)
36. Seidenberg, S.: Copyright in the age of You Tube. American Bar. Ass. Jrl. 95, 46–51 (2009)
37. Lyon, M.H.: Tech protection measures for digital audio & video. SCCHT Law Jrl. 23, 643–665 (2007)
38. Moore, S.M.: The Biz. Silman-James Press, Los Angeles (2002)
39. Blume, S.E.: The Revenue Streams: An Overview. In: Squire, J.E. (ed.) The Movie Business Book, A Fireside Book, Simon & Schuster, New York (2004)
40. Tulsiani, B., Mitskaviets, I., Card, D.: The Internet TV Value Chain. Jupiter Research (2007)
41. Wildman, S.S.: Interactive Channels & the Challenge of Content Budgeting. International Journal on Media Management 10, 91–101 (2008)
42. Carter, E.L., Lunt, S.: Podcasting & Copyright. SCCHT Law Jrl. 22, 187–217 (2006)
43. IFPI Recording Industry Report, Intl Federation of the Phonographic Industry (2001)
44. Research, V.: Music & Video Retailers. Report, Veredic Research (2005)
45. Kirsch, V.: Music World Files for Bankruptcy. Guelph Mercury 10 (November 13, 2007)
46. Smith, E.: News in Depth: For the music world, the tune gets sadder. WSJ (March 22, 2007)
47. Nakashima, R.: All virgin megastores in US to close by June. Business Times (March 5, 2009)
48. Adegoke, Y.: Last.fm, music labels launch free music on-demand. Reuters, Janaury 24 (2008)
49. Ilett, D.: The stock market for songwriters websites are giving bands the chance to record albums. The Daily Telegraph 19 (January 26, 2008)
50. Eastwood, G.: The Future of TV. Business Insights Ltd. (2007)
51. Eastwood, G.: The Future of Convergence. Report, Business Insights Ltd. (2006)