Increasing need for controlling and securing digital content

Today’s wired and wireless world has yielded an increasing amount of digital content that demands protection from theft and prying eyes. This escalating need is driven by two trends.

The first is the mass piracy and theft of intellectual property and proprietary information. Although the content industry argues that piracy cost them several billions US dollars a year, there is no empirical evidence to support their claim. There is even contrary research from industry analysts, such as Forrester, Media Matrix, and authors like Liebowitz (2002), Cave (2002), or Hui (2002) that argues the exact cost of piracy is statistically unsupported and is unlikely to be as high as the content providers claim. What is known so far, that technology advances, such as CD-
Rewritable and peer-to-peer networking (ed. Oram 2001); lack of strong legal norms and enforcements; and lack of attractive business models for consumers are the key reasons why individuals are copying, storing, and sharing billions of intellectual property files on the open, unsecure network such as the Internet. This mass piracy of billions of copyrighted content should be prevented.

The second trend driving technologies for securing digital content is the increase in the amount of ‘sensitive information’ available in digital form that must be securely stored, shared, or distributed within and between organizations. In addition to security needs, there is an increasing need for privacy protection for personal content, such as financial statements, medical records, and contracts. The growing number of organizations, companies, and individuals connected to intranets, extranets and the Internet, and the increasing legal acceptance of e-business transactions by major industries, are all driving this trend.

These two trends are creating a shared belief that digital content demands the same guarantees and trust in delivery (Weintraub 2000) as physical content does – especially when the ease and cost of reproduction and distribution of digital content has fallen almost to zero (Shapiro & Varian 1999). All of this is making managing, controlling, securing, and tracking digital content a core business and individual requirement, to which the digital management of rights is emerging as an essential component.

**Definition of Digital Rights Management**

‘Digital Rights Management’ is not a new concept and has had many names over the past several years. For example, a few large companies and public entities began research into ‘Electronic Copyright Management’ in the early 1990s (Pitkänen & Välimäki 2000) such as CITED funded by the European Community. This was leading to ‘first generation DRMS’. The last few years, people first started to use the term ‘Electronic Rights Management’ and later ‘Digital Rights Management’ (DRM).

Despite its existence for several years, there is no unique or standard definition for DRM. The Association of American Publishers (2000) defines it as ‘the technologies, tools and processes that protect intellectual property during digital content commerce:’ Gordon (2001) defines it as ‘a system of information technology (IT) components and services that strive to distribute and control digital products’ and Einhorn (2001) argues ‘digital rights management entails the operation of a control system that can monitor, regulate, and price each subsequent use of a computer file that contains media content, such as video, audio, photos, or print.’ There is an overlap in most of these definitions, which all highlight different DRM components, such as access or usage control, and the underlying technologies, such as encryption or watermarking.

The context in which DRMS is applied is important to its definition. Managing rights in the digital environment means managing rights throughout the entire value chain and the life cycle of a digital content (Rosenblatt, Trippe & Mooney 2002). Figure 1 provides an example of the key functions of a DRMS throughout the value chain of the publishing industry.

**Components of Digital Rights Management Systems**

The role of DRMS is to protect and manage digital information or intellectual property ownership as content travels through the value chain from the content creators to consumers, and even from consumer to consumer (C2C). While an in-depth analysis of DRMS
Table 1: Key components of DRMS

<table>
<thead>
<tr>
<th>Component</th>
<th>Short description</th>
</tr>
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<tbody>
<tr>
<td>Access and usage control</td>
<td>■ Controls whom as access to the content and how this content is used.\n■ Technologies used are encryption (e.g., symmetric, asymmetric), passwords, and copy protection systems.</td>
</tr>
<tr>
<td>Protection of authenticity and integrity</td>
<td>■ Protects the authenticity and integrity of an object. Integrity: securing that the object has not be changed or altered. Authenticity: securing that the object i it claims to be.\n■ Different types of objects exist such as digital content, rights owner, user.\n■ Technologies used are watermarks and digital signature.</td>
</tr>
<tr>
<td>Identification by metadata</td>
<td>■ They allow the identification of an object in order to automate the distribution of digital content; metadata are necessary.\n■ Different identification mechanisms are used. Metadata can be a part of the digital content or be added to the digital content.\n■ Metadata may include information such as information about the digital content, rights owner or user.</td>
</tr>
<tr>
<td>Specific hardware and software for end-devices</td>
<td>■ DRMS need also to protect end-devices or part of end-devices which are in the sphere of influence of users (e.g., PC, PDA, DVD player). They need to be resistant against attacks.\n■ For hardware this could be: smartcards or dongles.\n■ For software this might be the Windows Media Player or Real One Player.</td>
</tr>
<tr>
<td>Copy detection system</td>
<td>■ Search engines which search the network for illegal copies of digital content, integrity of digital content, or user registration.\n■ Technology used are search engines looking for watermarking or digital fingerprint.</td>
</tr>
<tr>
<td>Billing systems</td>
<td>■ Billing systems should be able to handle different pricing models such as pay per use, monthly subscription.\n■ Different types of billing systems exists. From monthly billing, credit card systems (Secure Electronic Transaction Systems), electronic payment systems, or micropayment systems.</td>
</tr>
<tr>
<td>Integrated e-commerce systems</td>
<td>■ DRM systems must as well include systems, which supported contract negotiation, accounting information and all other sort of business information being exchanged.\n■ Different standards exist such as Electronic Data Interchange (EDI) or extensible Markup Language (XML) -based systems.</td>
</tr>
</tbody>
</table>

Source: GiantSteps/Media Technology Strategies

Figure 2: Three main rights in a rights model

Source: GiantSteps/Media Technology Strategies
components and the underlying technologies goes beyond the scope of this article, a short overview of these is needed to highlight the advantages, drawbacks, the scope, and the use of DRMS. Table 1 distinguishes seven key components of DRMS.

It is important to recognize that there is no unique DRMS technology or standard. A DRMS will change to include different components according to the type of content (e.g., audio, video, text), the desired level of protection and technology vendor used. This variability and lack of a common standard has ensured that virtually every deployed DRMS is proprietary and unique. This can be best illustrated with an example of protecting a text document. A ‘weak DRMS’ would include a simple password protection for access control and some metadata for the identification of the text document. The ‘stronger DRMS’ would include encryption, password and watermarks for access and usage control, digital signature for protection of authenticity and integrity of the text document, metadata for the identification of the content creator and the content itself, and may also require a specific end-device, such as an e-book, to view the content. In addition, if consumers have to pay for the content, some billing systems and integrated e-commerce systems may exist to support the legal, business, and financial transactions.

At the core of any DRMS is the rights model. It describes the type of rights (e.g., what can the consumer do) and the attributes / constraints associated with these rights (e.g., how many times, or how long these rights can be applied).

Figure 2 illustrates the three main rights in a right model: render rights, transport rights, and derivative work rights.

Render rights include the right to print, view, and play. Transport rights include the rights to copy, move or loan the digital content from one place or device to another. Derivative work rights include the right to extract, edit, augments, or embed the digital content. It deals with all kind of manipulations of digital content.

Another important part of the rights model are the rights attributes. They change relative to each of the three main rights. For example, an attribute of a render right might be the type of devices on which the content can be viewed (e.g., a computer screen but not movie screen) or how many times a song may be listened on a computer.

The combination of the type of rights and the attributes of these rights enable new ways to control access to and the usage of digital content. This in turn enables new business opportunities, such as superdistribution. For example, in June 2002 IBM worked with Spero Communications and other companies to launch a free promotional CD of the rock band Oasis. Nearly two million newspaper readers in the United Kingdom received the CD. It contained music and video tracks from the band’s forthcoming album and was distributed a week before the album’s release. The CD allowed consumers to pre-listen three of the album new tracks on their personal computer, and a DRMS restricted play access to the one week period before the album’s launch (Shatkin 2002).

Potential for Digital Rights Management Systems

The debate over intellectual property, digital content, and DRMS concerns almost everyone, from authors and publishers, to consumers, to libraries and educational institutes, governments, technology vendors, and standard bodies. Five main groups of stakeholders can be defined:

- Content creators of digital content such as artists or authors.
- Distributors of digital content such as publishers, retailers, or licensed content providers.
- Technology providers enabling the distribution of digital content, such as telecommunication companies, ISP’s or DRM providers (e.g., IBM, Microsoft, InterTrust, Content Guard, Real Networks, or Adobe).
- Hardware & Software manufacturers producing end-devices or part of it for consuming digital content (e.g., Computers, FDA, CD-player, or mobile phone manufactures).
- Users of digital content such as businesses, schools, libraries, employees, or individual consumers.

Each of the stakeholders has a variety of objectives, interests and concerns that are aligned at times, and at other times opposed to other stakeholders (National Research Council 2000). For example, making hardware devices that restrict the use of content is in the interest of content creators and distributors but not necessarily in the interest of hardware manufactures and users.

The debate about the potential and usefulness of DRMS can be viewed from two opposing perspectives. On one side, Weintraub (2001), McGarvey (2001), and Wessels (2000) and others argue that building DRMS is a challenge that will take several years, but that DRMS is the best solution so far for combating piracy of intellectual property and adding value to digital content. Five key arguments support this view:

- First, DRMS give content creators the necessary technology required to protect their intellectual property rights and copyrighted content.
- Second, DRMS enables new business models for distributors. Among other things, publishers can provide their content to third parties that add value and repackaging the content. In addition, DRMS have the promise of reducing the complexity of the ‘rights management’ faced by publishers in the digital environment.
- Third, users pay only for the effective use of the content (e.g., pay-per-view, pay-per-listen).
Fourth, non-copyrighted or licensed content, such as confidential and personal information, can also benefit from the security and privacy mechanisms of DRMS.

Fifth, continual improvements in technology and usability are making DRMS a more viable solution. Second generation DRMS offered vast improvements in the areas of usability, flexibility, an security, and next generation DRMS will solve some of the current problems with user rights management and interoperability.

On the other side, with a contrasting perspective, are Mulholland (2001), Pfeiffer (2001), and Samuelson (2000) and others who argue, that although piracy should be combated, DRMS is not the solution. They also support their view with five key arguments:

First, DRMS does not take into account user need’s for right management and it will have a tremendous impact on the privacy of individuals.

Second, the development of copyright law and DRMS will prevent the fair use of digital content and individuals will lose the right to have a private copy.

Third, it will restrict innovation, research, free speech, and public access to digital information. Especially in the digital environment, where access to digital content is only possible by copying. Complete control of copying would mean control of access as well (e.g., before displaying a certain content on the screen, a copy is made in the memory).

Fourth, DRMS are conceptually simple but extremely difficult to implement (e.g., the structure of the Internet is not conducive to DRMS requirements and needs).

Fifth, in some cases, pirate copies are of benefit and could, as in the software industry, serve as marketing tool that drives legitimate licensing and purchases. In addition, there is no empirical evidence that mass piracy costs the content industry billion of US dollars.

It is not clear how and to what extent DRMS will be used in the future. Taking into account the current need for such systems, the diversity of components and technologies, the different stakeholders, and the advantages and drawbacks of DRMS, the spectrum and scope of DRM usage is wide.

**Two Scenarios for the emergence of Digital Rights Management Systems**

Two extreme scenario are discussed. On one end, the ‘weak DRMS’ scenario and on the other end the ‘strong DRMS’ scenario.

In the ‘weak DRMS’ scenario, technology is applied to controlling and securing non-copyrighted, proprietary digital content within or between organizations. It will protect sensitive information by providing access to only authorized individuals and enable audit trails by tracking the usage of information (e.g. printing, viewing, or copying). DRMS solutions would also pro-

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**Table 2: Requirements for DRMS scenarios**

<table>
<thead>
<tr>
<th>Factor</th>
<th>‘Weak DRMS’ scenario</th>
<th>‘Strong DRMS’ scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal &amp; Regulatory</td>
<td>■ No global laws for protection of DRMS.</td>
<td>■ Common laws and harmonization of laws globally.</td>
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<tr>
<td></td>
<td>■ Poor harmonization and enforcement of existing laws on a global scale.</td>
<td>■ Common and consistent enforcement of laws on a global scale.</td>
</tr>
<tr>
<td></td>
<td>■ Long legislative processes that delay implementation of regulation and controls.</td>
<td>■ Short duration from law propositions till implementation.</td>
</tr>
<tr>
<td>Technology</td>
<td>■ Many competing and proprietary technologies with different characteristics.</td>
<td>■ Common and strong technological standards.</td>
</tr>
<tr>
<td></td>
<td>■ Limited interoperability between technologies and solutions.</td>
<td>■ Easy interoperability.</td>
</tr>
<tr>
<td></td>
<td>■ Limited DRM functionality within solutions.</td>
<td>■ Robust and flexible application of DRMS (e.g., use in peer-to-peer networks).</td>
</tr>
<tr>
<td></td>
<td>■ Slow adoption of DRMS by hardware and software manufacturers.</td>
<td>■ Fast adoption of DRMS by hardware and software manufacturers.</td>
</tr>
<tr>
<td></td>
<td>■© 2002 – JMM – The International Journal on Media Management – Vol. 4 – No. 3</td>
<td>■ Easy integration of DRMS into all devices such as PC’s, PDA, printers or mobile phones.</td>
</tr>
<tr>
<td>Business</td>
<td>■ Many stakeholders with different objectives and concerns.</td>
<td>■ Alignment of stakeholders objectives and concerns.</td>
</tr>
<tr>
<td></td>
<td>■ DRMS mainly used to protect confidential and personal information.</td>
<td>■ Protection of intellectual property by DRMS enables realization of revenues.</td>
</tr>
<tr>
<td></td>
<td>■ Difficult to implement DRMS into business processes.</td>
<td>■ Easy to implement DRMS into business processes.</td>
</tr>
<tr>
<td>(e.g. cultural,</td>
<td>■ Not all government enforce DRMS equally and have limited ability to do so.</td>
<td>■ Equal enforcement of DRMS laws across governments and geographic regions.</td>
</tr>
</tbody>
</table>

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vide security and privacy for confidential personal information like medical records. Thus, the primary usage for DRMS would be in B2B commerce situations. In this scenario some specific DRMS would emerge in the media and entertainment industry for copyrighted content (B2C). However, the focus would not be to prevent piracy but to add value to digital content, thereby enabling new business models such as superdistribution (Shatkin 2002).

In the ‘strong DRMS’ scenario, DRMS becomes more and more a fundamental part of the global information infrastructure. Integrated DRMS would control and track all digital information, which is stored, sent, received, shared, or traded in intranets, extranets, and the Internet. No individual or program would have access to ‘raw’ bit streams (National Research Council 2000) and all playing, viewing, and printing of unauthenticated content would be prevented by DRMS. Strong enforcement laws would allow governments to hack peer-to-peer networks and initiate denial-of-service attacks when they have a suspicion that copyrighted content is traded illegally (e.g., PPPPA). Moreover, it is a federal crime to share copies of copyrighted products with anyone, even friends or family members (McCullagh 2002a). Organizations as well as individuals would be prosecuted for using unauthenticated content and governments would encourage or even actively participate in setting up technology standards (e.g., CBDTA).

There are four factors that will greatly impact whether a strong or weak DRMS scenario emerges. These factors are: legal & regulatory, technology, business, and the social environment. A detailed discussion of these factors would go beyond the scope of this article. However, table 2 illustrates along the four factors, the requirement for each of the two emergence scenarios discussed above.

Maintaining the Status Quo of ‘Weak DRM’

The lack of legal and regulatory alignment between governments on a global scale, and current state of DRM technology, the lack of agreement and common interest between stakeholders and consumer backlash all preclude the emergence of ‘strong DRM’ in the short-term for the next five to ten years.

- First, despite recent advances in copyright or copyright related laws, such as the No Electronic Theft Act (NET) and the Digital Millennium Copyright Act (DMCA) in the United States, or the EU Directives on Copyright, which make it a criminal offense to by-pass or tamper with a DRMS, the laws remain oblique and focus on fixed geographical areas while the Internet is a global network enabling digital theft outside the jurisdiction of these laws.
- Second, although the upcoming bills in the United States, like the Consumer Broadband and Digital Television Act (CBDTA) or the Peer-to-Peer Piracy Prevention Act (PPPPA), would significantly strengthen the power and control of content providers, but they will take a long time to pass and may not look like as today.
- Third, harmonization of laws will take a long time and coherent and standard law enforcement will be difficult on a global scale.
- Fourth, DRMS such as CD copy protection are not mature technologies with common standards across hardware manufactures and thus suffer from inoperability issues.
- Firth, the content industry that advocates and pushes DRMS faces emerging opposition, not only from individuals and non-profit organizations such as Electronic Frontier Foundation (EFF), but also from the hardware and telecommunication industry (McCullagh 2002b) and politicians (e.g., Digital Media Consumer Rights Act). Therefore, differing objectives exist between stakeholders that place the content industry on one hand and the hardware/telecommunication industry on the other hand.
- Sixth, significant rejection by mass market. So far consumers have avoided at most of the protection mechanisms — especially when protection mechanisms from legally purchased content provide less flexibility than illegally acquired content (e.g., legally purchased CD is not playable on a computer).
- Seventh, the debate about DRMS is drifting more and more into the political scene, where decisions and propositions may take several years before implementation. In addition, not all government enforce DRMS equally.

Table 3 illustrates, along the four key factors, arguments for each of the two scenarios.

Conclusion

The demand for DRMS will continue to grow, as content providers and organizations realize the value and need for protecting their intellectual property or to increase the security and privacy of confidential or personal information. However, DRMS are complicated and are comprised of many components and underlying technologies. Moreover, the numerous stakeholders involved often have opposing objectives, interests and concerns that force the consideration of legal and regulatory, technological, business, and the social environment factors in determining how a DRMS infrastructure may emerge.

At this time: some laws and regulations required to enforce and protect DRMS are still on the drafting board; DRM technology is still emerging and a common, interoperable standard is many years away; the various stakeholder (e.g., hardware manufacturers, telecommunication companies or content pro-
Table 3: Arguments for DRMS scenarios

<table>
<thead>
<tr>
<th>Factor</th>
<th>‘Weak DRMS’ scenario</th>
<th>‘Strong DRMS’ scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal &amp; Regulatory</td>
<td>■ Laws and intellectual property practice differ widely across countries and are likely to remain different despite efforts of harmonization (Commission of European Communities 2002).&lt;br&gt; ■ Existing levies systems in some countries are barriers to DRMS uptake.&lt;br&gt; ■ There is a long way to go with the upcoming proposed bills such as the CBDTA or the PPPPA and they may not look as today.</td>
<td>■ Bills like CBDTA or the PPPPA strengthening the power of content providers would allow governments to hack peer-to-peer networks and initiate denial-of-service attacks when they have a suspicion that copyrighted content is traded illegally.&lt;br&gt; ■ Shift of paradigm from copyright law to contract law (e.g., licensing) which enforce the power of content providers (Bechtold 2002).&lt;br&gt; ■ Trend towards strong IP law and enforcement (e.g., 28'000 websites shut down, remove more than 700 million unauthorized music files in 2001) (IFPI 2002).</td>
</tr>
<tr>
<td>Technology</td>
<td>■ Open networks such as the Internet are not designed for full-scale management of digital rights (Mulholland 2001).&lt;br&gt; ■ No technological standard will emerge, as multiple stakeholders are involved (e.g., failure of Secure Digital Music Initiative).</td>
<td>■ Trend towards more control and security.&lt;br&gt; ■ Some technology standard initiatives are under way (e.g., Digital Object Identifier or XrML).&lt;br&gt; ■ DRM will be put in all applications and the operating systems of Microsoft (e.g., Microsoft Palladium).</td>
</tr>
<tr>
<td>Business</td>
<td>■ DRMS provide no benefits for end-users.&lt;br&gt; ■ Strong DRMS are not needed, every business has losses. More important is the judicious selection of a business model, this may significantly reduce the need for technical or legal protection (Walter, Douglas &amp; Miron 2001).&lt;br&gt; ■ Copyright in the physical world has never sought to capture, register, and take commercial benefits from every use of every part of every creation work ever produced (Cope &amp; Freeman 2001).&lt;br&gt; ■ No need for strong DRMS. Many DRM providers such as Reciprocal, Vyou.com, Digital Goods have been shut down or sold. Content Guard and InterTrust have had major layoffs in 2002.</td>
<td>■ Digital content distribution and DRM are still in their infancy. There is one business model that has had 500 years to develop since Gutenberg press, and another one that is only four to five years old (Roush 2002).&lt;br&gt; ■ Weak DRMS will never be able to prevent piracy in the B2C business. Strong DRM increases the difficulties of distribution of illegal copies over the Internet.&lt;br&gt; ■ Only strong DRMS will include user rights management.&lt;br&gt; ■ As market matures, only the winners will survive. The reduction of the number of DRM providers is a ‘natural’ phenomenon of the consolidation of the market. As few players exist, this will result in fewer proprietary technologies, thus emerging standards.</td>
</tr>
<tr>
<td>Social Environment&lt;br&gt;(e.g. cultural, political)</td>
<td>■ What is wrong with strong DRM, it’s concerned with the illegal use of material and cares little about the lawful behaviour.&lt;br&gt; ■ Less privacy problems with weak DRMS than with strong DRMS.&lt;br&gt; ■ Disappearance of the right to a private copy (e.g., fair use).&lt;br&gt; ■ No need for more control, especially government control (e.g., CBDTA).&lt;br&gt; ■ Access is by copying. If control copying, this means control of access to information. Thus, increase of digital divine (National Research Council 2000).&lt;br&gt; ■ Threaten of public access, including promotion of expression innovation, and access to information.</td>
<td>■ Third generation DRMS will solved privacy issue (e.g., user rights management).&lt;br&gt; ■ DRM still in its infancy. Legislation and technological advances will solve the issues of access to information.</td>
</tr>
</tbody>
</table>

Providers) have often opposing objectives, interests and concerns and there seems no incentive for consumer to adopt voluntary DRMS. All of these factors, and the long timeframes for their correction, suggest that in the short term, a ‘weak DRMS’ scenario is more likely. However, new bills and strong law enforcements, international cooperation between organizations and government, technological advances, attractive value propositions for all stakeholders involved, and the education of people who are perceiving piracy not as a feat but as illegal are the major factors for a trend towards ‘stronger DRMS’ in the long term.
References


Introduction

In this article Mobile Music is defined as commercially available digital music that is distributed over mobile networks. Music has become the ideal case study for the Internet with its unique availability in digital form on billions of CDs. Online distribution became an underground phenomenon from the inception of content downloads over the Internet (Pettauer 2000). Preconditions for Mobile Music are increasingly positive, as all participants in the mobile value chain seem to have interests in successful business models based on digital rights management (DRM).

How Mobile Music can drive successful end consumer business models:
- Consumers are accustomed to Mobile Music (using walkman/portable CD/MP3 players). Additionally, listening is a key functionality of phones.
- Music consumers and wireless pioneers are congruent (under 25 years).
- Little input functionality for linear content is required (play, pause, fast-forward, etc.).
- Formats and rendering devices are already available.
- Content preparation efforts are limited to the extent that audio content is digitally available as compared to books and graphics, and therefore little conversion is required for music or audio books.

Though much literature can be found prognosticating a significant change in the competitive environment of the music industry, little research exists on the combination of revenue models and property rights in the field of Mobile Music (Zerdick et al. 1999, p. 53). The starting point for this analysis is the assumption that the basic principle of the electronic market as an efficient allocation mechanism works. However, uncertainties on both the supply and demand sides of the electronic market lead to insufficiencies. Two significant consequences regarding the business models resulting from the virtualisation of music include: revenues are likely to be affected by the different cost structures associated with Mobile Music, and Mobile Music market business models are likely to be impacted by copyright protection issues similar to those which exist for the Internet. Therefore the following research questions are being examined:
- What possible business models are available to entrepreneurs to overcome both supply side and demand side market uncertainties in order to expand Mobile Music market distribution?
- Which of the identified business models offer the greatest likelihood of long term Mobile Music market viability?

In order to attempt to answer the research questions posed, the second section of the paper provides a definition of digital rights management, discusses

Abstract

This paper examines and categorises potential business model scenarios for music based on wireless technologies, henceforth referred to as Mobile Music. The virtualisation of Mobile Music leads to market uncertainties where offering parties on the supply side may not be able to sufficiently privatise it. On the demand side, due to changing cost structures for digital goods, consumers may not be willing to pay directly for such goods. As a result, revenues have to be collected indirectly by public or private entities. Business models for Mobile Music can therefore be categorised into four scenarios. In the first scenario, a model is proposed where Mobile Music is used to promote the traditional offline business. The second scenario proposes a model where consumers are willing to pay for additional services to access Mobile Music. The third scenario significantly differs from the above mentioned two, as music providers are expected to be able to protect their content by using digital rights management technology for subscription systems. In the final scenario, peer-to-peer technologies are used to show how Superdistribution allows consumers to share and recommend copy-protected songs.

The paper concludes with an analysis about the potential players in Mobile Music.

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holds a key role in both Digital World Services' formation and in the company's growing importance as a pioneer in the field of digital rights management (DRM) services. He is a doctoral student at the Technical University Munich, Germany.
Digital Rights Management

Digital rights management (DRM) is the concept for managing access rights to digital content. DRM is an emerging and rapidly changing market as it becomes part of the Internet infrastructure. Vendors are integrating DRM capabilities into hardware devices and software products designed for content creation, storage, distribution and rendering.

DRM can be defined as a bundle of software, services and technologies that confine the use of digital content to authorized consumers, and manages consequences of that use throughout the entire life cycle of the digital content.

In 2000, the emerging worldwide market for DRM software resulted in revenues of approximately $96 million. On the Internet, market leaders include companies like Adobe, IBM, Macrovision and Microsoft. InterTrust, while neither a current revenue or installation leader, has the broadest patent base giving it the potential to become a dominant patent licensor. Within the next four years market research firm IDC predicts that this market will grow to approximately $3.57 billion in revenue, with an annual growth rate (CAGR) of over 100 percent across a variety of vertical and horizontal markets.

There is an important distinction to be made between DRM technologies and DRM distribution platforms for mobile content:

- **DRM Technology** deals mainly with the encryption of digital content, usually specialized for specific environments like the PC platform or specific content types. In the mobile environment, Microsoft, SDC or Lockstream are examples of DRM technologies.
- **A DRM Distribution Platform** is designed to manage the overall process related to the distribution of both the digital content and the associated rights, and therefore might include one or various DRM technologies. OverDrive or Bertelsmann’s Digital World Services are providers of such a platform.

With growing bandwidth and increasing handset capabilities, rich content becomes accessible from mobile end devices just like on today’s Internet via the PC. In contrast to the Internet, especially for mobile content, all parties involved have a major interest in a flourishing mobile content business.

Involved in the value chain of mobile content are mobile content owners, aggregators, carriers, handset manufacturers and consumers with shared interests in successful mobile content.

**Content owners**

Re-purposing existing content for the new mobile sales channel can be a very profitable business due to little upfront investments required for content creation. Just as on the Internet, competing with piracy and illegal copies turned out to be a major challenge for those involved in the digital content business. Mobile content owners can only earn back their investments in mobile content if their copyrights and content are protected. Content owners are unlikely to allow premium content to be distributed without effective DRM, especially in Europe and in the U.S.

**Aggregators**

Aggregators draw traffic with attractive content and their own brand value. Aggregators may take any form in the wireless world: carriers, portals, device portals and Internet-based portals (e.g., Yahoo!). Revenues are generated mostly from commerce transactions and advertising. Aggregators face the same challenge as content owners: to control the distribution of mobile content without the risk of overwhelming piracy.

**Carriers**

Carriers (and mobile network operators) want to capitalize on their heavy investments by using their networks for services beyond providing bandwidth for voice. The re-use of billing capabilities and bandwidth for mobile content is expected to drive profitability in the future. By providing unique, differentiated content, carriers can increase average revenue per user and significantly lower their churn rate.

Carriers understand that a mobile DRM implementation requires intense integration work and thus is a strategic decision. Therefore, the choice for a specific DRM platform can have far-reaching consequences for future content business models. Even though the first implementation might be needed for music only, carriers have to be ready to support multiple content formats and therefore should be prepared for supporting multiple DRM technologies.

**Handset manufacturers**

In a market close to global maturation, handsets can be differentiated by providing more functionality which the
consumer would be willing to pay for (instead of the provider subsidizing it). At the same time, handset manufacturers, just as carriers, have to increase their brand loyalty by providing attractive services and applications to consumers. In order to compete with rising “no-name” manufacturers, established brands have started to provide content through their clubs and portals.

Consumers

The consumption of mobile content has always been an attractive proposition to consumers and is deeply interwoven with today’s media consumption behaviour (books, newspapers, walkman are just a few examples). Increasingly, consumers are demanding content be transferable across multiple devices.

Demand-side: cost structure and revenue models

Information goods, like Mobile Music, are characterized as having high fixed costs or first-copy costs but very low incremental costs (Skiera 1999, p. 97). In the case of the music industry, producing the master-copy is very expensive while production of additional copies can be accomplished at very low marginal costs (Kelly 1998, p. 54). A study conducted in England, Germany, Italy and France by Doglio & Richeri (1996) found that in the music industry the first-copy cost amounts to an average of 21.1 percent and manufacturing costs amount to 8.5 percent. The highest per-unit cost is attributable to marketing and sales with 49.9 percent, and the remaining 20.5 percent is allocated to label costs and margin. Additional cost elements beyond manufacturing costs include: retail obsolesce, returns, physical distribution and transport. Costs for technology, bandwidth and customer service, etc. also have to be factored in.

The benefits of digital distribution of Mobile Music do not significantly change the per-unit cost at current volumes. It does however offer the possibility to distribute in much larger quantities than in the physical world.

Additionally, a number of different revenue models for Mobile Music are possible:

- **Airtime sharing** refers to the participation of content suppliers in connection revenues (per time unit or per data packet). To a great extent, the size of the connection revenues generated with attractive mobile content will determine the near-future success of mobile telecommunications firms. However, the extent of content suppliers’ participation in revenues will vary widely (between 0.50 percent and 10 percent).

- **Promotions and Sponsorships**: The mobile phone can deliver highly effective and targeted marketing messages. Mobile music can even include marketing or advertising messages, like a jingle or additional information (“The album is released on December 6th”), and can link directly to a purchase portal that allows the user to buy more.

- **Transaction-oriented revenues** will play a key role in the mobile environment enabling content providers and aggregators to recoup their investments. Commission rates will vary between 2 and 15 percent, depending on the content vertical (e.g. for entertainment offerings, 7-9 percent). At the same time, content can be forwarded to other consumers with specific restrictions attached (in DRM terms, this is referred to as ‘Superdistribution’).

- **Content aggregation and subscription** describe the sale of content to consumers based on a flat periodic fee for unlimited (or capped) consumption. Content can either be generated specifically for the purpose, or comprise a selection of previously existing content that is otherwise sold unbundled. Mobile content subscriptions can be sold with the provider contract at sign-up (e.g. 40 Euros for 2,000 minutes plus three free subscriptions).

Mobile music can be expected to have a significant impact on the music industry’s main revenue model based on distribution of CDs. In the literature, revenues are divided into two main categories: direct revenues, which result from the consumer, and indirect revenues, which come from associated products via public or private entities (Zerdick et al. 1999, p. 25f.). While in the literature a separation between different revenue streams seems possible, in the business environment, a wide spectrum of combinations can be found just like a newspaper might have revenue streams from advertising, subscription and Short Message Service (SMS).

Supply-side: public and private goods

The theory of public goods holds that goods have different characteristics whether or not there is rivalry or non-rivalry in using them. Public goods are non-excludable and non-rivalrous in consumption, while private goods are sold to those who can afford to pay the market price. In the music market, broadcasting as a public good is used to promote songs, while CDs function as a container for music sold as private goods (Tschmuck 2000).

Copyrights are a means of establishing boundaries between who is allowed to use a particular good and under which conditions, and who is not. Developments in technology seem to remove the grounds for these boundaries. Burke has shown how technological developments in the past gave rise to changes in copyright (Burke 1996, p. 51). At the same time, piracy has always accounted for a significant share of the music market. In 1999, according to IFPI, about 1.9b units of illegal copies were found with a value of 4.1b US dollars leading to a hypothetical market share of 36 percent (IFPI 2000, p.2). On the Internet, piracy has become an even larger mass phenomenon due to the availability of perfect digital copies. With non-excludable Mobile Music, end
consumers become free riders who are not willing to pay the market price for music as long as it can be accessed for free. (Heinrich 1994, p. 26).

The distribution of music is dominated by an oligopoly of five major labels. For these music labels, the economic value lies in their artist contracts and in exclusive distribution of their recordings, which enables promotional distribution channels like free TV or radio (Thurrow 1994, p. 81f.). Statistically, infrequent consumption of music albums as private goods accounts for about one hour a day, with revenues of 68 US dollars per music listener per year. On the other hand, public broadcast amounts to frequent, but superficial consumption of three hours a day. This results in 58 US dollars per music listener per year in advertising revenues for the broadcast stations per year from which music labels receive a much smaller percentage as compared to album sales. As a result, the music industry shows high interest in privatising music in order to generate higher revenues not only from traditional products, but also from the mobile market. Increasing piracy challenges the privatisation of Mobile Music, and as a result the music industry has started a number of legal, marketing, educational and technology initiatives.

Law suits from the Recording Industry Association of America (RIAA) against MP3.com, Scour, Napster and others in the U.S. demonstrate the music industry’s efforts to minimize copyright infringement. Just like on the Internet, users might access Mobile Music via wireless large area networks (WLAN) at hot spots like Universities or Airports – so-called “Offshore-Web-Hosting” – from companies like HavenCo. Com or Offshore.com.ai. De-centrally organized peer-to-peer-systems like Gnutella and FreeNet might continue to operate despite law suits driving consumers to “underground” systems (Schreier 2000, p. 9). The same might apply to multimedia messaging services (MMS) in the mobile environment.

From a technology point of view, standardization efforts such as the Secure Digital Music Initiative (SDMI) and the Open Mobile Alliance (OMA) were started in order to develop specifications that include DRM. Many doubt that the industry can successfully introduce security mechanisms that are unbreakable or that can at least raise a significant barrier against piracy without creating much higher costs (Albers, Clement & Skiera 1999, p. 83). Many examples in other media industries, like the current DVD-protection scheme, have failed to develop secure protection mechanisms. Additionally, on today’s Internet, only a single copy (even by re-digitising from analogue versions) made available is sufficient to be globally distributed in a short period of time leading to a total loss of control by the owner. On the other hand, with integrated billing systems on phones, security has to be higher as compared to PCs, where DRM might as well leverage the same secure infrastructure. Security, both for the content owners and consumers, has been a huge issue on the Internet. In the wireless environment, especially on handsets, hacks are much more difficult. As Consumers trust their cell phones (irrespective of their provider) as their billing partner for calls, billing for content will become more convenient through carriers or third parties with existing billing relationships. Also, privacy and data protection on the consumer side seem to be perceived as less of an issue compared to the Internet, where consumers fear that personal and payment data might be accessible to unauthorized parties. At the same time, security implemented on Subscriber Identity Module (SIM) cards or on chips seem more secure than software implementations on an application or even system level.

In conclusion, a world of Mobile Music with or without DRM seems possible. This is reflected in the following scenarios.

**Four business model scenarios**

The goal of using scenarios is to categorise various business models according to several case studies involving new distribution mechanisms like file sharing, digital rights management and Superdistribution using MMS. As described in the previous sections, the virtualisation of music has two significant consequences regarding business models: first, the cost structure for the delivery is structured differently and thereby revenues may be affected. Second, the protection of copyrights has become more difficult in today’s networks.

Four scenarios can be deduced by combining these two uncertainties into a matrix that represents both supply and demand. In this article, for each of the scenarios, one case study is described and possible revenue models are given.

**Assumptions**

These four business model scenarios are subject to the following assumptions: in the mid- to long-term, no business models will be viable which infringe on copyright laws. However, there might be systems without commer-

**Table 1: Scenario Matrix for Mobile Music**

<table>
<thead>
<tr>
<th></th>
<th>Public Good</th>
<th>Private Good</th>
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<tr>
<td><strong>Indirect Revenues</strong></td>
<td>Free Peer-to-Peer Distribution</td>
<td>Subscription Models</td>
</tr>
<tr>
<td><strong>Direct Revenues</strong></td>
<td>Music Service Providing</td>
<td>Superdistribution (MMS)</td>
</tr>
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</table>
cial interest that face no legal consequences for enabling illegal copies. Open-source-file sharing systems belong in this category.

- Revenue models are based on rational entrepreneurial decisions. Artistic, voluntary or otherwise motivated scenarios are excluded.

- Most importantly, these scenarios anticipate a slow migration towards mobile technologies, meaning that traditional media companies maintain distribution control over physical storage media like CDs and DVDs. Zerdick et al. state that electronic markets do not lead to an immediate substitution of the existing value chain. Nevertheless, it is leading to a constant erosion of traditional value chains and the orientation towards the demand side (Zerdick et al. 1999, p. 177).

First scenario: free peer-to-peer distribution

In less than two years Napster became the largest music library in the world with about 1b titles. Napster engaged in no economic incentive or marketing activities, and even more importantly no involvement from the music industry (Becker & Ziegler 2000, p. 14). At a very high level, file sharing systems or peer-to-peer-networks (P2P) aggregate and distribute information. With either central or de-central listings, files be can searched for, transferred and stored locally. The main challenge for content owners was Napster’s mass phenomena. Since its launch, Napster attracted almost 70 Million users who knowingly violate copyright laws.

The purpose of open-source-file-sharing systems is to freely distribute information beyond any control and commercial interest (e.g., Gnutella developed by Gene Kan and FreeNet designed by Ian Clarke are examples). Gnutella and FreeNet are designed to run de-centralized – just like beaming content between handsets – which makes it almost impossible to control or to shut down. As a result, not only music files, but other illegal content such as child pornography and terrorist instructions can be found – just like a “digital black market”. The main challenge of these systems is that they can only scale with resources such as content, bandwidth and storage from their users. Because this content can be viewed as public goods, these systems attract free riders – people unwilling to give any contribution in return. During a study of the Gnutella Network it was found that 70 percent of the users do not give any contribution to the system, and that half of the searches were answered by just one percent of the participants. Apart from a significant loss of system performance with longer search and download times, it increases the system’s vulnerability as the system may collapse with the shut down of this one percent of peers. On the other hand, there are concepts like seti@home with users voluntarily contributing resources in exchange for prestige and reputation. As a result, file-sharing systems seem to be able to overcome today’s challenges and will play an important role in the distribution of Mobile Music.

How can the music industry embrace such systems to generate revenues? Revenues can be generated indirectly from Mobile Music in return for the value of consumer’s attention (Seidel 1993, p. 87). This attention can be used to promote either the physical album or the artist in order to increase popularity and thereby earn higher merchandising and advertising revenue. As a result, with Mobile Music being a public good, the combination of online and offline business by integrating Mobile Music and traditional marketing and distribution seems a profitable business model. Despite legal battles from the RIAA arguing that illegal copies cannibalise album sales, market studies are inconclusive at this point. Jupiter identified Napster usage as one of the most important factors for increased music purchases (Sinnreich et al. 2000, p. 1). On the other hand, album sales were decreasing in record stores close to universities where file sharing supposedly reached high usage among students (VNU Entertainment Marketing Solutions 2000, p. 2f). In 1999, Creed offered their hit song on 100 web sites for free downloads and in the process stimulated their album sales. Coincidentally their album “Human Clay” reached the top of the billboard charts (Committee on Intellectual Property Rights and the Emerging Information Infrastructure 2000, p. 80f).

Nevertheless, substitution of the promoted traditional media like CDs and DVD-Audio might increase as soon as a comparable infrastructure for Mobile Music exists.

Second scenario: music service providing

Provided Mobile Music is a public good, collecting direct payments seems almost impossible unless the value lies primarily in the functionality and services rather than in the content itself (Deutsche Bank 2000, p. 14). In this scenario, instead of copy protection, service-oriented new business models are developed to eliminate the motive to copy. Besides content, these services and applications offer convenience, reliability and fast access to music almost anywhere, anytime; these services are referred to as the celestial jukebox. This sector is expected to grow from 2.5m today to 12.3m in 2003 in the U.S. (Black 2000). These revenues would come from charging the consumer directly for the usage of these services and application fees and not based on the consumed content (an example would be monthly usage fees for a media playback application). Ultimately, those companies – including the carrier – would have to combine content, community, application services, context and search functionality. Personalization plays a crucial role in attracting consumers and providing lock-in (Heinrich 1999, p.32). In the networked economy these versions and even individual products
and services are achievable due to smaller transaction and production/service costs (Piller 1998, p. 16). Using a feedback loop mechanism for Mobile Music, personal playlists can be generated, recommended, updated and shared among other users. Large description data bases like Moodlogic or Gigabeat can analyse relationships among titles and artists according to rhythm, instruments, contextual information and even mood.

Third scenario: subscription models

Protection technologies play an important role in determining whether a media product is a public or a private good. In scenarios three and four, Mobile Music is considered a private good as content owners are able to restrict access to the content, thereby introducing the possibility of excluding free riders and charging for their Mobile Music. For subscription models, watermarking can provide important contributions to the field of intellectual property protection within a more extensive security framework for identification and proof of ownership (Goldhammer & Zerdick 1999, p. 96). By embedding a watermark into the compressed audio signal during delivery, the customers are aware that a watermark may identify them (Tang 1998, p. 24). Hence, users can be made responsible if the signal is found outside the legal domain by a trigger technology, even in a decompressed and analogue representation. In contrast to encryption technologies, watermarks could be used with today’s infrastructure for CD-Audio as well as MP3-devices. Subscriptions bundle a large number of information goods for a fixed price. In a variety of circumstances a multi-product monopolist can extract substantially higher profits by offering one or more bundles of information goods than by offering the same goods separately (Bakos & Brynjolfsson 1999, p. 2f). At the same time, bundling can be used to introduce new artists and titles as a strategy to overcome the information paradox, which states that the value of information can’t be determined a priori of consumption.

In this scenario, for the first time in their history, the music industry has the opportunity to create a continuous relationship with the end consumer. This relationship offers a foundation on which Mobile Music can generate substantial revenues. Revenues can be considered indirect when charged independently from the usage (e.g. in combination with a carrier’s monthly plan). Nevertheless, the subscription model represents a mix between indirect and direct revenues. Forrester expects additional revenues from subscriptions of 3.3b US dollars (Schreier 2000, p. 12). A premium membership might offer a flat rate, eventually combined with services from the second scenario, while an advertising-based membership might limit access in quantity, time or actuality.

Fourth scenario: superdistribution

In 1990, a visionary architecture was developed for the distribution of digital goods. The Japanese Ryoichi Mori coined the term Superdistribution for this new concept of licensing information. The fundamental idea is to allow free distribution of digital content, while controlling access to usage and changes with the content owner defining the terms. According to his prototype, called Software Service System (SSS), which was implemented as a peer-to-peer-architecture, the following components must be available (Morin 1999, p. 21):

- a persistent cryptographic wrapper must stay in place when the digital property is used, copied, redistributed, etc.
- a digital rights management system with a trusted tool that tracks the deals and the usage associated with the access to the digital property
- payment information has to be exchanged securely among the parties

After securely encrypting the music with a key, the package can be digitally delivered to the consumer’s end device (Tang 1998, p. 23). There, the locally installed trusted tool (e.g. on a SIM card) gains access to the digital content with an unlock key which leaves the file locally encrypted and streams the digital content into the memory for “on the fly” decryption. The user, who has agreed to the terms and conditions of use, now has the license to access the content. The usage is recorded and the transaction is reported to a clearinghouse to initiate payments and backup system information. Using the Superdistribution concept, consumers can recommend and share files among each other via email, MMS, physical media and even file sharing networks. Still the copyright is being protected and the content owner maintains control and determines payment collection.

Under the third scenario bundling was mentioned as being attractive for content companies to extract higher profits. In the music industry this has always been the case with album sales where only one or two hits from an entire album initiate the purchase. Digital products possess optimal unbundling capabilities, which in turn can be re-bundled for custom-mixes. With multimedia messaging and Superdistribution, consumers might start “cherry picking” their hits thereby endangering the traditional revenue model of album sales. In this scenario, by using digital rights management and Superdistribution, major labels maintain control over the distribution of music and might even be able to more effectively enforce their copyrights.

Conclusion

In this paper, scenarios for mobile business models thatdepend on uncertainties on the supply and demand sides of the music industry were examined. It was argued that Mobile Music could be
a private good, through the use of digital rights management, or a public good, due to insufficiencies in absolute content protection. It was also argued that the willingness of consumers to pay for digital goods may determine the nature of direct or indirect revenue streams. As a result, consistent business models in four scenarios were developed, demonstrating that a spectrum of potential revenue streams exists for Mobile Music both as a public and private good. The main distinction between these scenarios depends on the supply side, where copyright for Mobile Music can be protected by digital rights management technologies.

Summarized findings and recommendations:

- **Transaction revenues** offer a preferable revenue option for Mobile Music as it is independent from bandwidth use, allowing for more flexible pricing schemes. Pricing that can be adjusted to consumer preferences, and not based on costs, has traditionally been higher for transactions (i.e. CDs) than based on advertising (i.e. Broadcast).
- **In controlled environments** like today’s carrier networks, the privatization of Mobile Music seems likely with the adoption of DRM, as all value chain participants have a long-term interest in higher transaction revenues. This opens different revenue streams like subscription plans and Superdistribution for copy-protected music from scenarios three and four.
- **In a less controlled environment** with network access via WLAN to today’s Internet, the adoption of DRM seems more difficult. Users still might be able to access pirated content – the “digital black market” – and thereby bypass the Mobile Music value chain. Revenues can only be generated as in scenario one and two, by promotions, sponsorships and the license of Mobile Music services mainly based on application fees.

In providing reliable access to illegal copies, piracy sites may still be accessible via WLAN. However, making payment mechanisms and customer service simultaneously available to thousands of people remains the more complex task. Which companies are able to position themselves in the role of music service providers?

- Companies with music brands emphasizing repeat visits such as those established by radio and television stations or music retailers; these companies have already proven their ability for selection and aggregation of music.
- Companies with strong existing customer relationships, through billing and access like the mobile carriers, might be able to benefit from their knowledge about their customers and provide better, personalized services based on consumer preferences and location.
- Companies with strong ties to end devices, like device-specific soft and hardware-developers as well as the manufacturers of consumer electronics themselves. These companies might be able to expand their revenues beyond hardware and offer services through the user interface that they control. A strong customer relationship via the end device will add service contracts to revenues from devices.

Under current copyright law, most companies might have to negotiate licenses directly with the music labels, their syndication partners or through royalty collecting entities in order to legally offer these services. This will enable the music industry to shift revenues from physical media to the mobile world.

It still may be too early to base further analysis on industry data like content revenues, so it becomes apparent that future research in this area is needed, especially in order to further analyse implications of the suggested scenarios from various perspectives, including market size and consumer benefits.

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Research questions

Free daily newspapers have been very successful since their introduction in the mid-nineties: almost 10 million copies are distributed every day. Early research focused on the introduction, reactions of established publishers and the rapidly changing markets. There has been some general research (Picard, 2001; Vogel, 2001; Wilkinson, 2001; Arnoud & Peyrègne, 2002, Bakker, 2002) while other studies were devoted to specific markets, like Sweden (Wadbring & Weibull, 2000), the Netherlands (Schaap, 2000; Van der Veer, 2000), Switzerland (Bachman, Brander & Lenz, 2001), and Germany (Vogel, 2001). Furthermore, there are research reports from the industry itself, mainly from free papers to prove their value to potential advertisers.

Now that free dailies have been around for seven years, research questions should shift to long-term developments. Many free newspapers for instance were introduced just to counter a new competitor or to prevent a new firm entering a market – typical short-term strategies. But what strategies can publishers apply in the long run? How will readers react in a market where a free daily is not a novelty but an established product? To answer these questions we will first describe the introduction of free newspapers (countries, markets, titles, publishers, market share). After that we will outline different business models that are used by publishers and come up with a theoretical framework to map short- and long-term readership developments. Then we will move to the options publishers have in markets where free papers are widely read and the strategies they can use to attract the new readership created by the free dailies.

As noted above, academic research on free newspapers is not widely available. Publications used here are, for instance, also reports by newspapers organizations, news from business publications, press releases by publishers, and research paid for and published by free newspapers themselves. Categories and methods used are often not very clear, and sometimes the outcome is very clearly meant for (potential) advertisers. There are some serious reliability and interpretation problems with some of these research reports. In some cases this is, however, the only available research. It is particularly problematic regarding long-term effects on readership. Also the possible business strategies of publishers of paid newspapers in markets where free newspapers are well established, are not very well documented. In these cases research and evidence will be sometimes anecdotal and unquantified. It will probably take some years before extensive academic research on this subject will be available. This study hopes to ask some basic questions and outline some possible research strategies for the near future.

Introduction:

the rise of free dailies

The first ‘modern’ free daily, Metro, was founded in Stockholm, Sweden in 1995 by the Modern Times Group (MTG), a subsidiary of the Swedish Kinnevik

Abstract

Free daily newspapers, first introduced in Sweden in 1995, have proved to be much more than a passing phenomenon. By 2002, 80 free daily newspapers were introduced in 26 countries, 60 of them still exist. In thirteen countries free papers are responsible for more than ten percent of the total daily weekday circulation. The total circulation of the 60 free papers is almost 10 million copies, every day more than 20 million people read these papers. The success of the free papers is the result of their efficient cost structure and their ability to reach a new and relatively young audience. When looking more closely at the firms that publish these free newspapers two different models emerge: first, the entrepreneur entering a new market, and second the local or national newspaper firm. In the second model, free papers are launched to prevent other firms entering the market or to counter new firms already in the market. In the long run these obstructive tactics may develop into more positive strategies. Most readers are former ‘non-readers’ or people who read paid and free newspapers. Existing firms are developing strategies to benefit from the growing readership of newspapers created by free papers.

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group. The group had interests in media and telecommunications but did not publish newspapers in Sweden. In 2000 MTG sold the majority of their shares in the new formed and now Luxembourg-based Metro International S.A. group. After the Stockholm Metro, editions in other countries followed. In 2002 the company publishes 23 editions in 15 countries and claims a readership of 10 million. Metro International is responsible for 50 percent of the total circulation of free daily newspapers. In 2002 new editions were published in France (Paris, Marseilles, Lyon) and Hong Kong. A Metro franchise has been launched in Seoul (South Korea) in May 2002. This edition is not owned by Metro International but it uses the same format and also the Metro World News service. The Canadian Metro’s are also not fully owned by Metro International, for legal reasons both titles are published in partnership with local firms (Torstar in Toronto and Transcontinental in Montreal). Not every Metro however is a Metro International title, other Metro’s are published in the UK, Moscow and Belgium by local publishers.

The Norwegian firm Schibsted publishes its version of the free daily (20 Minutes) in Switzerland (Bern, Basle, Zurich), Spain (Madrid, Barcelona), France (Paris), and until 2001 in Germany (Cologne). Metro International and Schibsted represent the entrepreneur-model of the free newspaper publisher. These firms enter a new market with a new product: capitalize and don’t cannibalize (Schibsted publishes newspapers, but not in markets where they launched free papers). This entrepreneur model can also be found in Iceland where the very successful Frettabladdid is published by an independent investor. Free newspaper entrepreneurs in Germany (Berlin, Hamburg, Munich), Buenos Aires and Singapore have not been very successful. Sound financial backing and the use of one fixed format probably explains the success of Metro International and Schibsted.

Almost all other free newspapers are or were published by local or national publishers like Springer (Germany), Kronenzeitung (Austria), the Regionale Uitgevers Groep (Belgium), News Corp/Murdoch (Melbourne), and De Telegraaf (The Netherlands). The only other ‘chain’ is Associated Newspapers (UK) with six editions and a total daily circulation of 840,000; almost half of it (375,000) is published in London (other editions are often published together with local newspaper firms).

So far, 80 free daily newspapers have been introduced in 26 countries (Table 1). The majority have been launched in the last three years. In some markets (Stockholm, Cologne, Buenos Aires, The Netherlands, Zurich, Basle, Bern, Toronto, Newcastle, Singapore, Rome, Milan, Melbourne, Paris, Marseilles) more than one free paper was published. Some papers were closed down or merged with their competitors. In 2002 almost 60 free dailies exist and there are more to come. Rupert Murdoch (The Times) was thinking about a second London free paper although this project has probably been shelved. Other free papers are planned in Brazil, New York and Berlin. In some cases (Cologne, Toronto, Zurich, Paris) it has led to a genuine newspaper war (Arnoud, 2002; Fitzgerald, 2001; McMullan & Wilkinson, 2000; Vogel, 2001; Wyss, 2000).

The papers have a circulation of between 50,000 (Montreal, Bilbao) and 406,000 (The Netherlands). The total estimated circulation is around 9,500,000 (Table 2). This means that something between 20 and 25 million people read a free newspaper every day because every copy is read by two or three people. Total reading time is between ten and twenty 20 minutes (Bachman, Brander & Lenz, 2001; Bereik- en lezersonderzoek Splûts & Metro, 2000; Sjöwall, 2001; Wilkinson, 2001).

### Table 1: Introduction of free newspapers 1995-2002

<table>
<thead>
<tr>
<th>Region</th>
<th>Country</th>
<th>Cities/Editions</th>
</tr>
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<tbody>
<tr>
<td>Europe</td>
<td>Sweden</td>
<td>(Stockholm* 1995, Göteborg 1998, Malmö 1999)</td>
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<tr>
<td></td>
<td>Czech Republic</td>
<td>(Prague 1997)</td>
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<td></td>
<td>Finland</td>
<td>(Helsinki* 1997)</td>
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<tr>
<td></td>
<td>Hungary</td>
<td>(Budapest/National 1998)</td>
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<tr>
<td></td>
<td>The Netherlands</td>
<td>(national* 1999)</td>
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<tr>
<td></td>
<td>Switzerland</td>
<td>(Zurich* 1999, Basel*, Bern* 2000)</td>
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<tr>
<td></td>
<td>Belgium</td>
<td>(2000)</td>
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<tr>
<td></td>
<td>Italy</td>
<td>(Rome* 2000, Milan* 2000, Turin, Naples, Florence*, Bologna* 2001)</td>
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<tr>
<td></td>
<td>Poland</td>
<td>(Warsaw 2000)</td>
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<td></td>
<td>Greece</td>
<td>(Athens 2000)</td>
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<td></td>
<td>Spain</td>
<td>(Bilbao, Barcelona*, Madrid* 2000)</td>
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<td></td>
<td>Iceland</td>
<td>(2001)</td>
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<td></td>
<td>Denmark</td>
<td>(Copenhagen 2001)</td>
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<td>Russia</td>
<td>(Moscow 2001)</td>
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<td></td>
<td>Austria</td>
<td>(Vienna 2001)</td>
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<td></td>
<td>France</td>
<td>(Paris*, Lyon*, Marseilles* 2002)</td>
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<td></td>
<td>Argentina</td>
<td>(Buenos Aires* 1999)</td>
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<td></td>
<td>Chile</td>
<td>(Santiago 2000)</td>
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<tr>
<td>South</td>
<td>Canada</td>
<td>(Toronto* 2000, Montreal* 2001)</td>
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<tr>
<td>America</td>
<td>Asia/Pacific</td>
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<td></td>
<td>Singapore*</td>
<td>(2000)</td>
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<tr>
<td></td>
<td>Australia</td>
<td>(Melbourne* 2001)</td>
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<tr>
<td></td>
<td>Hong Kong</td>
<td>(2002)</td>
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<td></td>
<td>Seoul</td>
<td>(2002)</td>
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</table>

* more than one free newspaper introduced.
In some countries free papers have a considerable market share, circulation numbers are available for 22 of the markets where free papers are published, in 13 of these markets, free papers have a share of ten percent or more of the total daily newspaper circulation (Table 3).

Business models

The free newspaper is aimed at the general public in metropolitan areas and is published on weekdays (the Stockholm and Hong Kong Metro’s also have a weekend edition). They have a comparatively cheap distribution system, mostly through the local public transport system, although some alternative ways of distribution exist; copies are also distributed in office buildings, shopping malls, hospitals, and university campuses while in Iceland and Zurich the free paper is delivered door-to-door in some areas. Free papers have a small editorial staff; a typical Metro edition employs only 40 people, 15 to 20 of them journalists (Metro Annual Report, 2000; Wadbring & Weibull, 2000; Arnoud & Peyrègne, 2002). Size does not seem to matter, the Canadian editions in Toronto (145,000) and Montreal (100,000) had a staff of 40 people, as does the new Hong Kong edition (300,000). Non-MTG free dailies seem to have more journalists, the London Metro (Associated Newspapers) has a staff of 90 people (Arnoud & Peyrègne, 2002). The Paris 20 Minutes has 26 full-time professional journalists. Competing national and metropolitan dailies employ at least ten times as many journalists. For news, the free dailies rely heavily on

<table>
<thead>
<tr>
<th>Country</th>
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<td>Víztíz</td>
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<td>RUG</td>
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<tr>
<td>Switzerland</td>
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<td>Telegraaf</td>
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<td>Caltagirone</td>
<td>715,000</td>
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<tr>
<td>Greece</td>
<td>Athens (Metronews)</td>
<td>Corriere della Sera</td>
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<td></td>
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<tr>
<td></td>
<td>Paris (20 Minutes)</td>
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<td>Canada</td>
<td>Toronto (Metro Today)</td>
<td>Metro International</td>
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<tr>
<td></td>
<td>Montreal (Montreal Métropolitain)</td>
<td>Quebecor</td>
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<td>Melbourne (MX)</td>
<td>News Ltd.</td>
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<td>Hong Kong</td>
<td>National (Metroplus Daily)</td>
<td>Metro International</td>
<td>300,000</td>
</tr>
<tr>
<td>Korea</td>
<td>Seoul (Metro)</td>
<td>Metro Int. franchise</td>
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</tr>
</tbody>
</table>

| total | 9,557,000 |
wire services and third party material (graphics, photographs, television-schedules, product-information and stock news). Since 2001 the Metro-chain has its own Metro World News service. To reduce costs further the use of a strict format for every Metro edition in the world is compulsory. Metro and Schibsted do not have their own printing plants; “Outsourcing is a keyword in the Metro business model” (Arnould & Peyrégne, 2002, p. 6). The biggest cost problem free newspapers have confronted in the last years is caused by their success: public transport firms are charging much more now for new competitors from entering the market.

There are different kinds of free newspapers publishers (Wilkinson, 2001; Picard, 2001; Arnould & Peyrégne, 2002; Bakker, 2002). First of all the entrepreneur, the new non-local or foreign firm entering the market. This is the Metro and 20 Minutes model of Metro International and Schibsted. These publishers use a specific model for their business: I. The invasion model, a very ‘lean and mean’ operation, costs are reduced as much as possible by employing very few journalists, using a lot of third party material, not owning printing presses and applying a very strict chain-format. This model can also be found in Iceland. A special case is the Moscow Metro which is published by the public transport company itself. Profits are the only reason for staying in business, both Metro and Schibsted have closed down free papers (Zurich, Cologne, Buenos Aires) when profits were not expected in the near future.

Other free dailies are published by firms that also publish local or national dailies in the same market where the free dailies are published. Different short-term models can be distinguished.

II. The defense model when the second paper is published because of the launching of another free paper. In the Netherlands, the biggest national newspaper De Telegraaf introduced a free paper (Spits) the same day as the Dutch Metro. In Cologne two local firms (Springer and Du Mont Schauberg) launched free papers when Schibsted published 20 Minuten. After one year 20 Minuten gave up whereupon the other two papers ceased publication. Quebecor published the free Montreal Metropolitain to protect the advertising interests of Le Journal de Montreal (Quebecor launches free paper... 2001). In Stockholm and Göteborg existing newspapers published a weekly free paper (Wadbring & Weibull, 2000).

III. The prevention model where publishers launch a free paper before another firm enters the market; INMA-director Wilkinson (2001, p. 4) refers to them as ‘spoiler-publications’. In the UK and Austria this has been the case. In Norway two free semi-weeklies were released to prevent new competitors from entering the market (Wadbring & Weibull, 2000), in Paris the weekly A Nous Paris had less success in keeping out free papers.

IV. A promotion model is operating when the free paper is mainly used as a promotion tool for a ‘regular’ newspaper, the German free IC-Press (Der Spiegel) and the New York Daily News Express are examples. The promotion model is a short-term marketing tool.

Prevention and defense are typically short-term models. After a competitor has left the market or has not entered the market, publishers must reconsider. Either stop publication or move to a different stage.

V. The expansion model, when local firms publish a free paper, no longer to prevent another publisher from entering the market but for profit themselves. Here the pre-

| Table 3: Circulation (* 1000) and market share of paid and free newspapers |
|---|---|---|---|---|
|     | Paid newspapers | Free newspapers | Total circulation | Market share of free papers |
| Iceland | 93 | 70 | 163 | 43% |
| Italy | 6.024 | 1.529 | 7.553 | 20% |
| Singapore | 1.096 | 250 | 1.346 | 19% |
| Spain | 4.300 | 964 | 5.214 | 18% |
| Switzerland | 2.666 | 596 | 3.262 | 18% |
| Hong Kong | 1.482 | 300 | 1.781 | 17% |
| Hungary | 1.625 | 302 | 1.927 | 16% |
| The Netherlands | 4.400 | 714 | 5.114 | 14% |
| Poland | 1.157 | 182 | 1.339 | 14% |
| Argentina | 1.500 | 230 | 1.730 | 13% |
| Greece | 681 | 101 | 782 | 13% |
| Belgium | 1.568 | 200 | 1.768 | 11% |
| France | 8.799 | 1.050 | 9.849 | 11% |
| Czech Republic | 1.704 | 174 | 1.878 | 9% |
| Sweden | 3.700 | 384 | 4.084 | 9% |
| Denmark | 1.481 | 140 | 1.621 | 9% |
| Canada | 5.167 | 335 | 5.502 | 6% |
| Austria | 2.503 | 150 | 2.653 | 6% |
| Finland | 2.304 | 105 | 2.409 | 4% |
| UK | 19.052 | 837 | 19.889 | 4% |
| Australia | 3.030 | 90 | 3.120 | 3% |
| U.S.A. | 55.945 | 335 | 56.280 | 1% |

Table 4: Closed down or merged free newspapers Europe

<table>
<thead>
<tr>
<th>Region</th>
<th>Countries</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
<td></td>
<td>The Netherlands (Nationale.Nws.nl)</td>
</tr>
<tr>
<td></td>
<td>Germany (Berlin, Hamburg, Munich: 15 Uhr Aktuell;</td>
</tr>
<tr>
<td></td>
<td>Cologne: 20 Minuten, Köln Extra, Kölnner Morgen)</td>
</tr>
<tr>
<td></td>
<td>UK (Newcastle: MorningNews MTG; Manchester: MetroNews MTG)</td>
</tr>
<tr>
<td></td>
<td>Switzerland (Zürich: Metro)</td>
</tr>
<tr>
<td>North and</td>
<td>Argentina (Buenos Aires: Metro, El Diario del Bolsillo)</td>
</tr>
<tr>
<td>South America</td>
<td>U.S.A. (New York: Daily News Express)</td>
</tr>
<tr>
<td></td>
<td>Canada (Toronto: FYI, Today)</td>
</tr>
<tr>
<td>Asia/Pacific</td>
<td>Singapore: Streets</td>
</tr>
<tr>
<td></td>
<td>Australia (Melbourne: Melbourne Express)</td>
</tr>
</tbody>
</table>

Readership

Failure or success of a free newspaper is closely related to the development of the newspaper market as a whole. How do readers react to free dailies? Is the market growing or do readers switch from a ‘regular’ newspaper to a free one? Important is the claim from free dailies that they attract a new and much younger public than ‘regular’ newspapers. We should bear in mind that in many markets (UK, the Netherlands, Switzerland, Germany, USA) readership is declining (see also Hendriks, 1998). Also, attracting a young audience is indeed a serious problem for traditional newspapers.

Here a substitution/cumulation model (Bakker, 2002) is used to map changes in readership. Readers of free dailies can be divided in three different categories. Readers who did read paid newspapers but now only read free papers (substitution), people who read both paid and free papers (cumulation); and people who did not read a paid newspaper in the past (new readers).

The most notable short-term effects of paid newspapers is when a new competitor takes away some of the existing readers (substitution). Cumulation is predictably high in markets where readership of paid newspapers is already high as in the Netherlands and Sweden (McMullan & Wilkinson, 2000). There is also little doubt that the new medium will attract new users. Half of the readers of the London Metro are formerly non-readers (Arnould & Peyrègne, 2002). In the long run, other movements are possible, the most important are: cumulation leading to substitution; or new readers moving over to paid newspapers.

The first possibility is very threatening for paid newspapers. The second one however is very promising. Roger Parkinson, president of the World Association of Newspapers (WAN) stated that “there is evidence that not only are these media attractive to young readers, but they may also be attracting young people to the paper product itself.” (Quotes from the conference, 2001, p. 2; see also McMullan & Wilkinson, 2000). In the UK the London Metro for instance successfully promotes The Evening Standard and the Daily Mail (Picard, 2001). The weekend single copy sales of newspapers should rise if the hypothesis of moving over or successful promotion is correct.

In the Netherlands publishers of paid newspapers have argued that the influence of free newspapers on total sales of newspapers has been negligible. Data from the four national daily morning papers (de Telegraaf, Algemeen Dagblad, de Volkskrant, Trouw) however indicate that subscriptions have gone down in the last year (which could be a long-term effect), but also that single copy sales have dropped more than ten percent in four years (the period of competition from free dailies). Publisher PCM (Algemeen Dagblad, de Volkskrant, Trouw) reported in 2001 a decline in single copy sales. This indicates that substitution is at least in the short run not that important. The drop in subscriptions in 2001 however could have been influenced by free papers. In Barcelona, daily sales of paid newspapers is reported to have dropped by five percent (Arnould & Peyrègne, 2002). Wadbring and Weibull (2000) indicate that in the Stockholm market subscription was also affected. Picard (2001) estimates
that at the most a two percent drop in paid circulation can be attributed to free dailies. Although cumulation (reading paid and free papers) and ‘new readers’ are more important than substitution, it is clear that there is some substitution, and long-term effects are not yet known. The claim that “Readership of free newspapers may (...) be considered independent of, and therefore not a competitor, to paid-for newspapers” (Free paper readers ..., 2000) is not exactly true.

There is little doubt that readers of free dailies are considerably younger than readers of paid newspapers. In 2001, Bachman, Brander and Lenz concluded after interviewing more than 800 readers in Zurich that young people between 16 and 30 were far more inclined to read free newspapers than older readers. Research from 20 Minuten showed that 29 percent of the age group ‘Kids’ (10-13 years) considered themselves as regular readers of 20 Minuten (D&S Institut für Markt und Kommunikationsforschung, 2001). The three free Zurich newspapers reached 36 percent (ZürichExpress), 40 percent (20 Minuten) and 22 percent (Metropol) of the age group 14 to 34 (Mach Basic, 2001).

In the Netherlands, 37 percent of the Spits readers are between 13 and 35 years old, for national paid papers this percentage is 24 percent (Bereik Spits, 2002). Metro International claims that 41 percent of their daily readers are under 30 (Sjowall, 2001) while the Australian free daily MX even claims that 72 percent of their readers are under the age of 35 (MX Reader Profile, 2001). In the UK, almost 80 percent of Associated’s Newspapers Metro readers are between 16 and 44 years old (Wilkinson, 2001).

**Strategies of paid newspapers**

A typical first reaction of existing newspaper publishers, when faced with a possible new competitor, has often been to take them to court. Publishers have sued free newspaper on almost every possible issue: unfair competition, cartels, the right to carry the ‘Metro’ title or using the term ‘newspaper’, the right of non-EU firms to own publishers, littering, unfair treatment by authorities and public transport systems. Most of the legal cases have been lost by traditional publishers (McMullan & Wilkinson, 2000). Picard (2001) calls these obstructional strategies, and notes that such strategies are “not a particularly useful competitive response because it rarely changes the market dynamics or forces the competitor out of the market” (p. 170). This is illustrated in Italy where the Norwegian firm Schibsted was successfully kept out of the market (because Norway does not belong to the EU) but where nevertheless three different firms now distribute 1.5 million free papers daily. Economic pressures can be successful however, as demonstrated in the Cologne case. In France disputes with trade unions have even led to paper-burning and harassing people who handed out the free papers on the street (Arnoud, 2002).

From a marketing point of view, the possible long-term effects are the most promising. Free newspapers have succeeded in changing “non-readers into readers” (Picard, 2001, p. 170; see Verwimp, 2001 for a critique on this approach). Publishers of traditional newspapers have so far used some strategies to explore this new public. Marketing efforts could take different forms: promotion, protection and exploiting weekend sales.

**Protection** aims more to minimise the effect of the free newspapers by limiting sales; the UK Metro and the Dutch Spits are distributed in specific time slots (not after 9.00 or 10.00) so that other newspapers are not harmed by free distribution. Another possibility is joint distribution with a ‘regular’ paper; in Paris France Soir carries Metro as a free supplement (see Arnoud, 2002). Sales can also be protected by distributing free newspapers via traditional newspaper kiosks (as in the Netherlands and Switzerland) so that buyers also feel compelled to buy other products.

One of the possible long-term effects is an increasing demand for newspapers on days when the free paper isn’t available. In Denmark, Sweden, and the Netherlands weekend-subscriptions or a combined weekend/Monday subscription are introduced.

Apart from promotion for paid newspapers and attracting new readers, synergy can be created by joint advertising in paid and free newspapers. Also publishing weekly or semi-weekly free papers can create advertising synergy (and maybe reader interest), the Warsaw Metro (Agora) for instance uses this model. Publishers of free newspapers have other possibilities for expanding their reach. In some areas they also publish weekend editions (Stockholm, Hong Kong); in Switzerland, in non-metropolitan areas of Basle the free paper Baslerstab is published twice a week.
while ZürichExpress has the possibility of subscription. Very little is known about the success of these strategies, as they have not been applied very long, and newspaper firms are usually not willing to share successful strategies with competitors while unsuccessful strategies are also kept secret as long as possible.

Conclusions

Free newspapers are here to stay: in the last few years more than 80 new titles have been launched and 60 survived. It has been proved that it is possible to make a profit and even to publish more than one newspaper in a metropolitan area. Free dailies have proven to be attractive to a younger audience; thus the future looks relatively bright. The readers of the free dailies are likely to be ‘new readers’; (young) people who did not read a newspaper before, although some substitution is possible. Other markets and possible long-term effects should be studied in the future. These long-term effects are the most promising for existing firms, and there is considerable evidence that newspapers are developing some strategies to benefit from the growing (free) newspaper readership.

Endnotes

1. Free daily newspapers should not be confused with freesheets, community papers, shoppers, or (free) weeklies. These weekly, semi-weekly or bi-weekly publications are delivered door-to-door in many European countries and are also known in the USA. In the Netherlands, for instance, the average household receives three different titles each week (Persmediamonitor, 2001; see McNair, 1999 for UK-examples). In World Press Trends (2001) they are referred to as free papers. They carry no national or international news and focus on local advertising and community information.

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This journal publishes articles on the management and economic aspects of mass media, as well as economic policy issues affecting media worldwide. It focuses on the structure, conduct, and performance of the newspaper, magazine, radio, television, cable, film, and other media industries. Since its establishment in 1988, the journal has sought to broaden understanding and discussion of the impact of economic and financial activities on media operations and managerial decisions. To that end, it publishes studies comparing various media industries and research on economic issues in specific media industries. Case studies of economic problems in individual units of media, as well as articles devoted to social and political policy and financial and regulatory aspects of media economics are presented. The journal is intended to provide not only theoretical knowledge for use by media scholars, but also economic and financial insight to media managers and those who make public policy regarding media.

Audience
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*Prices are subject to change. Institutions must pay institutional rates. Journal prices expire 12/31/03.
Well-known media sociologist Jeremy Tunstall has compiled an interesting and wide-ranging reader that addresses the subject of media occupations and professions across a variety of time periods (dating as far back as the mid-19th century) and across a variety of national contexts (though with an emphasis on the U.S. and Great Britain). The collection brings together 21 excerpts from previously published work, as well nine original contributions. The book’s selections address both the journalistic and the entertainment components of the media industries; however, the selections are a bit more heavily weighted toward the former. This is of course not surprising given the much greater focus that researchers have devoted to journalists, editors and publishers over the years, as opposed to actors, directors, and script writers. Given the increasing extent to which individual media organizations produce both news and entertainment content, and the increasing blurriness of the line between news and entertainment content, Tunstall’s organizational scheme seems quite appropriate.

The book is divided into five sections. The first section, titled “Origins,” contains a selection of readings that provide an historical perspective on media occupations and professions. These selections (which include an excerpt from Leo Rosten’s 1937 book on Washington correspondents and an excerpt from Max Weber on political journalists) are particularly interesting in terms of the historical perspective they provide on contemporary issues. For instance, Rosten at one point notes the pressures that the daily news cycle placed on Washington correspondents. The decision-making challenges that this “tyranny of the immediate” (as Rosten calls it) placed on journalists in the 1930s have, of course, only been compounded by the immediacy of newer media technologies such as television and the Internet. Certainly, the tyranny of the immediate is much more oppressive today than it was in the 1930s, and journalism may be suffering as a result.

The book’s second section, titled “Moguls and Barons,” presents selections that focus on the characteristics, backgrounds, and behaviors of high-profile media owners. This section begins, appropriately enough, with an excerpt from Tunstall and Michael Palmer’s 1991 book, Media Moguls in which the authors define media moguls as those who own and operate major media companies in an entrepreneurial, eccentric, and risk-taking style. This section also contains interesting pieces on German media mogul Alfred Hugenberg, who assisted Hitler with his rise to power and on the power structure of the Soviet Union’s broadcasting system.

The third section, titled “Stars,” contains pieces on the motion picture star systems in the United States and India, as well as pieces on the rise of talk radio stars in the U.S. and the behaviors of entrepreneurial newspaper editors in England. Particularly illuminating is a 1941 piece (again by Leo Rosten) on Hollywood stars and actors that provides a sobering reminder that the outrageous salaries that today’s stars receive are far from a recent phenomenon. American silent film star Mary Pickford, for in-
stance, was earning as much as 1.2 million per movie in the early 1920s, and many early motion picture stars (such as Shirley Temple) were able to earn up to 15 times their salaries through product endorsements and licensing agreements.

Section four (the most extensive section in the book) is titled “Professionalizing Media Occupations.” The selections included in this section address issues such as the rise of labor unions; the changing educational prerequisites for entering media professions; the role of family and personal connections in professional entry and advancement; and the changing occupational requirements for some media professions. On this latter subject, Tunstall includes an interesting excerpt from Joe Foote’s 1998 book on the changing role of correspondents in television news. In this excerpt, Foote characterizes broadcast networks’ increasing reliance on anchors over correspondents as shifting “the center of gravity from news gathering to news processing,” a transition that not only marginalizes news correspondents but that also can affect the thoroughness and accuracy of news coverage. Many of the pieces in this section also deal with journalism’s long struggle for professional status and the surprisingly low esteem in which the journalistic profession has been held throughout most of its history. As many of the selections in the book illustrate, it is only relatively recently in the history of journalism that the select few journalists at the highest tiers of the profession have achieved enormous prestige, financial compensation, and influence.

The book’s final section, titled “National and Regional Overviews of Media Occupations,” contains overviews of media industry structure, history, and occupations focused on Sub-Saharan Africa, China, Australia, France, the former Soviet Union, and Germany. Unlike the other sections of the book, all of the selections in this section are original contributions. As such, they are more fully developed and self-contained than many of the other selections, which are primarily excerpts from previously published books, and as such occasionally come across as somewhat disjointed and lacking in analytical context (particularly since some of the excerpts are quite short).

As this overview of the book’s subject matter suggests, a common theme of many of the selections is the dramatic hierarchies that exist in media occupations, with those at the top of the pay scale of a given occupation in many cases earning exponentially more than those at the bottom of the pay scale. The most obvious examples are the pay disparities between a national network news anchor and a small-market news anchor, or those between an A-list Hollywood actor and an extra. However, the book does an excellent job of illustrating that these hierarchies encompass a variety of factors, including gender (i.e., pay differentials between men and women), geography (i.e., large market versus small market), and technology (broadcast versus print, television versus motion pictures, radio versus television).

As this overview also suggests, much of the value of the book arises from its historical detail. Indeed, most of the selections focus much more intently on descriptive detail than on analysis. In this regard, the selections chronicle a variety of interesting phenomena, including the rise of talk radio stars, the emergence of New York as the media capital of the United States (and perhaps the world), and the development of the “star” system in print and broadcast news. The book also provides a useful introduction to the variety of methodological approaches that can be taken in the study of media occupations and professionals. Tunstall’s selections are drawn from projects with a wide range of methodological approaches, including surveys, interviews, content analyses, case studies, and field studies. As a chronicle of the past and present of media occupations and professions around the world – and of the various means of studying them – Tunstall’s collection is a useful resource for academics, professionals, and students.

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Semiotics, Marketing and Communication. Beneath the Signs, the Strategies
written by Jean-Marie Floch, with a foreword by John Sherry, translated by Robin Orr Bodkin
reviewed by René Algesheimer and Marcus Dimpfel

Semiotics is the theory of signs and meanings. Semiotics teaches, what signs are and explains, why everything one understood results in signs. Signs mark something and distinguish it from something unmarked. Marketing deals with a constructed reality of symbols created by the consumer. One primary purpose of marketing is therefore to manage, match, mark, and communicate objects of meanings. Thus, following the foreword of Sherry, one of the main questions that arise in marketing is how meanings are generated, negotiated, and transformed within the experience economy. Answering this question should provide a deeper understanding of consumer behavior and target the creation and communication of ideas, products, and services to the market.

Having this in mind, “Semiotics, Marketing and Communication. Beneath the Signs, the Strategies” is a comprehensive and critical treatise of theoretical and practical issues in marketing semiotics. It is a really useful and inspiring guide for academic and professional marketers, interested in linking goods with meanings.

Jean-Marie Floch is considered as an authority on the application of semiotics to marketing and communication. He was professor at the Institut d’Etudes Politique de Paris and also worked as a consultant, always being interested in applying his theories to a wide range of industries. Jean-Marie Floch died in 2001.

In the following chapters, Floch offers practical insights into ongoing applied semiotics, but remarks that this is not a demonstration of applied semiotics, because semiotics is always an ongoing process. Hereby, Floch focuses on two types of objects of meaning: the commercial messages of brands and behaviors, and conducts and etiquettes, which are both really important for the service industries.

In chapter two, Floch presents a case study, in which he develops a behavioral typology of the Paris Transit Authority’s (RATP) railway users. The main goal of RATP is to increase revenues to expand services by a comprehensive customer relationship management. Therefore, Floch concentrates on the interactions between metro passengers and employees working for the Paris Transit Authority (RATP). The objectives are to understand the different kinds of interactions as well as how these are viewed by the passengers. Utilizing semiotics, Floch understands the journey of the railway passengers as a structured text. It has an entry and an exit, can be divided into different stages, and can be considered as a series of events that are finalized. “To approach a journey as a text, is to postulate that it ultimately has a meaning”, (p. 16). By documenting and analyzing journeys, Floch identifies four types of passengers: surveyors, daydreamers, strollers, and pros. As theoretical constructs, these types are related to each other and represent a set of behaviors that any observer might recognize. Having discovered that, Floch shows, that each traveler within the same type characterizes the experience of the journey in similar ways, while it is very different to another type of passengers. Thus, Floch is able to deduce implications for improving the marketing communications of RATP for each category.

Chapter three presents another case study that deals with defining a visual recognition for Crédit du Nord. Hereby, semiotics is used to explore and exploit
a global communication strategy in the financial sector. The goal is to clarify the key concept in all commercial communications of Crédit du Nord and to strengthen the clarity of the messages. Floch shows, that all messages that a customer perceives and links to the bank are understood and arranged in relation to a narrative schema that “...facilitates telling the story of the bank”, (p. 48). Based on this analysis, Floch develops a new logo for the bank that transfers customer’s perception to the selected idea of clarity.

In chapter four, Floch offers a study of press advertisements promoting psychotropic drugs. This study concentrates on visual elements in advertisements. A discourse of pharmaceutical companies, gleaned from their scientific brochures and printed materials for medical practitioners is analyzed. The objectives of the study are to assess the overall use of discourse in the sector “... in relation to the visuals that were adopted and explain their encoding, the presence and impact of which all advertisers and agencies perceived more or less intuitively”, (p. 74). Furthermore, it is important to identify sources and types of mismatching meaning between pharmaceutical discourse and medical practitioners. Floch therefore utilizes narrative analysis as well as content analysis and compares the results. In chapter five, Floch examines automotive advertising and consumer value systems. With this case study, Floch shows, that semiotics is also suitable for marketing-mix studies. He does not only concentrate on a meaning produced, but also on the positioning of a brand and consumer’s expectations. Furthermore, Floch states that semiotics also contributes to a better understanding between designers, advertisers, and manufacturers by recognizing pertinent features that adds value to a product by its design.

Chapter six shows the contributions of structural semiotics to the design of a hypermarket. Semiotics was used to analyze customers’ preferences by a discourse analysis. In this context, he examines representations and expectations of what the hypermarket should provide. This makes it easier to identify the values, customers ascribed to hypermarkets, as well as their associations to different types of layouts or atmospheres. The implications of the analysis are used to define the general conceptions and design of the hypermarket. Specifically, Floch gives clear recommendations to lighting, zoning, or marking.

In chapter seven, Floch examines the IBM logo and compares it to the logo of Apple. He states that a visual identity like a logo is defined in terms of difference and continuity. Difference means, “...recognition and proper positioning of a commercial enterprise and ...an expression of the company’s specificity”, (p. 165). Continuity testifies the “...ongoing industrial, economic and social values of a company”, (p. 165). The objective of the visual identity is to represent the expressive traits of the company and the consistency of content that “...ensure the expression of the company’s ‘texture’ ... and ...make it possible to recount its ‘mission’”, (p. 165). By utilizing semiotics, Floch examines history, structure, color, forms, and messages of the different logos. Furthermore, he devotes himself to the question, how semiotic parameters can produce a visual identity. Floch summarizes his findings with a citation of Lévi-Strauss: “A mask is not primarily what it represents, but what it transforms - that is to say, what it chooses not to represent. Like the myth, the mask denies as much as it affirms. It is made not only of what it says or believes it says, but also of what it excludes”, (p. 194).

To conclude, “Semiotics, Marketing and Communication. Beneath the Signs, the Strategies” is a comprehensive textbook for those that are either interested in marketing semiotics, or are in search for new inspiring methods to improve marketing communication. Both have been exposed to fundamental theoretical concepts and principles in semiotics as well as applicable case studies. The book is based on a well-developed theory that supports the author’s objective, and presents applicable practical problems that are analyzed in detail. Although Floch lines up different and very interesting case studies, he does not integrate them into theoretical background that he delivers in chapter one. As a consequence, the reader may feel theoretically lost. The style of writing is clear and motivating. Sometimes the reader will ask whether it is necessary to utilize semiotics to reach a conclusion that could be reached easier. Practitioners will find this book a comprehensive resource for detailed information. Additional notes and a list of selected bibliography of semiotics at the end further enhance the book’s value.

Rating

Rating Criteria Rating
Theoretical Approach / Methodology ++++
Structure +
Depth of the Analysis ++++
Contribution of new Knowledge +++
Applicability +++
Clarity and Style of Writing ++++
Rating Points: excellent: ++++ poor: +

Palgrave, 2001
225 pages
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Time and the Information Market: The Case of Spain
written by Alfonso Nieto

reviewed by Bohdan Jung

This book is part of a series “Media Markets Monographs”, a biannual publication edited by the Media Management Department, School of Communications, University of Navarra. This series aims to publish original research work which focuses on the analysis of media and communication markets from a variety of perspectives. The editors of the “Media Markets Monographs” encourage the submission of works which deal with conceptual developments and practical aspects of theory, rather than simply empirical research papers. These criteria are amply met by “Time and the Information Market: the Case of Spain”, which spans a wide number of issues related to the way different information markets compete for time of audiences and advertisers, including some philosophical and sociological considerations on the use of time.

Alfonso Nieto takes up the argument that a big portion of human life is devoted to consumption of products related to the media marketplace. The relationships established by supply and demand for time constitute a special market within the marketplace, called the time market, which can be studied from the perspective of not only supply and demand, but also media. This mediation comprises advertising, distribution and promotional activities. The time market in information exerts much influence on such essential aspects of human life as professional activity, culture and leisure.

The author’s argument is presented in five chapters, which cover conceptual framework of working with time (which includes limits on the concept of time, as well as the idea of information time), the offer competing for the use of time (dailies, magazines, radio, watching), the demand side (reading demand, radio and TV time, demand and decision in time), the mediation of time (identifying and manifesting offer, its continuity, identification of time and its acceptance), concept and functioning of the time market (with linkages to the age and professional group, leisure time, cultural and societal implications, the emergence of the information society). The chapter structure is comprehensive, the range of subjects wide, interesting and original, with some of distinctions between offer, supply and the mediation of time departing from the conventional usage of these terms.

Three chapters are documented with data from Spain and some international statistics, which show how the supply and offer of mediated time has evolved in the 1990s. The author notes that even though the total time given to media (and information) consumption has increased considerably, the available programming and particularly advertising spots have had much higher growth dynamics. He analyses different types of information consumption from the perspective of the particular time commitment they require (the question of intensity, flexibility, adaptability, time shifting etc.). Alfonso Nieto argues that time dedicated to information has six main manifestations: a) market position, b) people’s participation, c) consumption, d) permanence, e) cost and f) coverage, which are they applied to the analysis of main segments of the information market. These are set against the background of wider considerations on the universality and the wealth of information, growing valuation of time as an immaterial asset and chronofagia. It is through such wider considerations, which include reflections on the nature of tranquility in personal time management, relations between information, culture and leisure, as well conceptual subchapters on the nature of real, subjective and virtual time, that this book moves beyond traditional media participation and consumption statistics quoted in chapters II-IV.

From the methodological point of view, the book benefits from a multiple perspective. It offers exemplifications of the Spanish information market, which are based on conventional analysis used in media economics, marketing and communication studies, reflections drawn from the literature on time management and valuation of economic assets, but also considerations, which could be placed in the broad philosophic and humanistic discourse about the temporal dimension of human existence. This ambitious approach is the source both of the book’s strengths and weaknesses as the bridge between highly general discourse and ‘hard facts’ from the Spanish market is not always very clear (this may also be the result of the complicated sentence structure, which could be the consequence of translation into English – resulting in formulations such as ‘mediation for time continuity in favour of the demand’). No reference is made to time budget studies (such as “The Use of Time”), the dynamics of social time and the body of knowledge referred to as ‘leisure studies’, where the author could find answers to some of the questions about time choices that he raised. The study could also benefit from further analysis of the way media compete with each other for the audiences’ and advertisers’ time and attention.
It must be added that the book has an attractive layout and even when it discusses well-known phenomena, it does so in a different, original way, from a broader perspective and in a language which is rarely seen in publications of this type. It also has a positivist undercurrent, which underlines the importance of making good use of time, such as self-education. This is manifested in its final sentence (p.155): “Fortunately, the majority of people increasingly look for more time to fill their lives with human and transcendent meaning: time that gains time.” Hope the media industry notices this!

Call for Papers

Volume 5 – Number I
Spring 2003

The Future of Convergence

Guest Editor: Michael O. Wirth, University of Denver, U.S.A.

The 1990s were dominated by the belief that the concept of convergence (i.e., the disappearance of technological differences among distribution networks so they begin to compete by delivering multiple applications over the same network to different platforms) would eventually result in a small number of large transnational corporations dominating the communications industry. However, the results of some of the most aggressive attempts to achieve communication industry convergence (e.g., AT&T, Bertelsmann, AOL/Time Warner, Vivendi Universal, etc.) have been less than successful to date. The purpose of this issue is to provide a forum for papers focused on the future of convergence in light of the economic, financial, managerial, technological and regulatory realities of today’s marketplace.

Analytical papers focused on the future of convergence as related to the following topics (or other appropriate topics) are invited:

- Corporate Culture/Core Competencies
- New Media vs. Old Media
- Marketing Challenges
- Strategic Planning/Strategic Management

Important Deadlines

Submission: January 30th 2003
Decision: March 15th 2003
Publication: Spring 2003

JMM – The International Journal on Media Management accepts short papers up to 3,000 words or longer papers up to 6,000 words. Please refer to the Contributors Section at http://www.mediajournal.org for our templates and additional specifications.
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For more conferences please visit our conference calendar at:
http://www.mediamanagement.org

November

Information Society Technologies for Broadband Europe
Bucharest, Romania
http://broadband02.ici.ro/

ETHICOMP 2002
Lisbon, Portugal
http://www.ccsr.cse.dmu.ac.uk/conferences/ethicomp2002/index.html

Understanding the Future of European E-Content Industries
Tampere, Finland
http://www.europrix.org/europrix/academy/scholars/Index.htm

7th INFORMS Conference on Information Systems and Technology (CIST- 2002)
San Jose, California, U.S.A.
http://www-rcf.usc.edu/~stallaer/CIST2002

ASTED International Conference Communications, Internet, and Information Technology
St. Thomas, US Virgin Islands
http://www.iasted.org/conferences/2002/vi/c376.htm

EU Enlargement and IT/Tele-communications
London, U.K.
http://www.eurotechlink.org/index.htm

December

■ 12/03/2002 – 12/05/2002
Online Information 2002
London, U.K.
http://www.online-information.co.uk/online/conference.asp

Implementing the New Electronic Communications Regulatory Framework
Brussels, Belgium

January 2003

■ 01/06/2003 – 01/12/2003
Advances in Infrastructure in E-Business on Internet
L’Aquila near Rome, Italy

March

■ 03/27/2003 – 03/30/2003
American Academy of Advertising:
2003 Annual Conference
Denver-Broomfield, U.S.A.
http://business.clemson.edu/market/2003AAcallforpapers.html

April

■ 04/03/2003 – 04/06/2003
Business Transformation and the Entertainment Society
Orlando, Florida, U.S.A.
http://www.iabd.org/

■ 04/04/2003 – 04/07/2003
Broadcast Education Association, 48th Annual Convention
Las Vegas, U.S.A.

■ 04/16/2003 – 04/19/2003
Electronic Culture and Communications Forum
New Orleans, U.S.A.
contact: cat.white@att.net

■ 04/24/2003 – 04/26/2003
Networked World: Information Technology and Globalization
Santa Clara, U.S.A.
http://sts.scu.edu/globalization/

June

■ 06/07/2003 – 06/08/2003
Academic Seminar at the National Cable & Telecommunications Associates
Chicago, U.S.A.
www.cablecenter.org

■ 06/08/2003 – 06/10/2003
Global Information Technology Management Conference
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http://www.gitma.org/2003_main.htm
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