

Impact and Perspectives of Electronic Commerce (IPEC):

The Music Industry in the Netherlands

By drs. Martijn Poel (TNO-STB) & Prof. Dr. Paul Rutten (TNO-STB)¹

Project leader: Prof. Dr. Pascal Verhoest (TNO-STB)

¹ Richard Hawkins, Silvain de Munck and Cecile Wetzels (all TNO-STB) are acknowledged for their valuable contribution to this report.

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Summary

This report is about change in music industry. The Internet is leading to a redefinition of business models and a reconfiguration of relationships within as well as between sectors. The prospect of e-commerce and on-line delivery place the music industry in the vanguard of this change.

The central players in this industry are the record companies, and their main product is recorded music. Presently, recorded music is distributed to consumers on physical media, mainly Compact Disks (CD). But digital recordings can now be distributed easily over the Internet. In comparison, for instance, to audio-visual productions, music requires relatively modest bandwidth capacity. However, on-line delivery of music can be seen as a potential forerunner of on-line distribution of other services with higher bandwidth demands.

The music industry newsletter *Music & Copyright* recently stated: “Music may have had a high profile role and been the starting point for digital distribution, but a wide range of content is about to flow down ever-faster cables and across the airwaves to an ever-growing number of Wireless Application Protocol (WAP) devices” (“Proposed Vivendi-Seagram deal ...” *Music & Copyright* 2000). Even though the bulk of recorded music is still sold on CD, the prospect of on-line delivery of music is having a major effect on the strategies of music companies.

A second important factor again has to do with the characteristics of recorded music (stored on disc or available on line). In terms of transactions the buying of a particular piece of recorded music in a bricks and mortar shop or on-line is a routine transaction where, the only differentiating element is the price. This in contrast to for instance the buying of a second-hand car in which negotiations about price and other conditions is always an important element. Routine transactions are more easily done in an electronic environment than transactions which demand a complex negotiation process.

A third element concerns the consumption of music compared to other relative low bandwidth demanding content, like text services, through electronic devices. The experience of listening to music using the computer as an interface is a less drastic change for consumers than the reading of for instance a newspaper on a screen. Moreover computers increasingly are connected to the home stereo which reproduces the sound in ways ears are used to. With the introduction of the MP3 Walkman, downloaded music is integrated in a pattern of use, which gets more and more similar to the conventional way people deal with music. The domestication (Frissen 2000) of MP3 is progressing fast, were text service providers are still discussing the possibility of for instance e-books which can be read on trains or outdoors.

The music industry can be considered as a cluster of companies and activities which, in some way or another, are directly or indirectly concerned with the exploitation of music. This broad music industry can be subdivided into three, interconnected branches dealing with musical performances, musical rights and sound recordings.

Some argue that parts of the broadcasting sector should be included in the music industry. Music television stations like MTV or national counterparts like The Music Factory (TMF) in the Netherlands and Viva in Germany predominantly broadcasting recorded music, should be included in the definition of music industry. The same is applied to radio stations, like Radio 3 in the Netherlands, Radio One in the UK and NRJ in France and Belgium. Others even contend that the musical instruments and musical equipment producing industry is also part of the music industry (see for instance: Laing 1996).

In this study however, broadcasting media are mainly considered promotion media for the products and services of the recording industry, instead of being an integral part of its value chain. At the same time we consider the musical instruments and musical equipment sector not being a central element of the music industry, in spite of the fact that both instruments and electronic equipment are necessary elements in the operations of all domains of the music industry. But the same goes for the importance of computer hard- and software in almost any sector of the economy, which in those cases does not automatically lead to computer manufacturers and software developers in the value chain of these sectors.

This study is part of a broader study on the impacts of and perspectives on e-commerce (IPEC). The study tries to assess the changes in structure of and control over economic value chains as a result of the introduction of e-commerce and to understand the implications of these changes for business, the public interest and policy.

This particular study concentrates on a specific part of the music industry earlier on described as the sound recording sector or the recording industry. More specifically this study is concerned with the changes in the value chain of the record industry, due to the introduction of business-to-business e-commerce. The focus on business-to-business e-commerce is motivated by several factors. Innovations based on e-commerce applications have been implemented firstly in the business-to-business domain, which provides an opportunity for empirical assessments of impacts of e-commerce. Secondly it is expected that business-to business e-commerce provides the most economic gains within the sector. Thirdly it is the main driver of the redefinition of positions within value-chains. Innovations in this domain will lead to the elimination of some activities and actors in the value-chain and to the creation of new roles.

The next chapter is an introduction into the music industry, more specifically the recording industry. Chapter 3 contains the reports of three in-depth case studies of pro-active companies, which have introduced e-commerce in their operations. The understanding of the behaviour of these firms and their motivations to do so contributes to a better understanding of upcoming changes in this domain of the media- and entertainment industry. Chapter 4 is the assessment of the empirical findings and contains the conclusions in terms of expected changes in the music industry value chain due to the introduction of business-to-business e-commerce.

1. Music Industry: an introduction

1.1 Introduction

This chapter deals with the three most important domains of the music industry: live music, musical rights and the recording industry. Those domains are tightly connected and partly overlapping. Most well-known artists both perform live on stage, and make recordings. The performance and recorded repertoire is often the same, and there is often a symbiotic relationship between these media. Record sales promote the success of live performances, and live performances promote record sales. For both live and recorded performances, authors rights are due to the creators of musical works. In many cases the composers are also the performers.

Most of this chapter is devoted to the recording industry. This is the core element in today's music industry. Apart from a short outline of the history of the enabling technology, the chapter concentrates on recent developments on the Dutch market for gramophone recordings in the context of international developments in this industry. The chapter ends with a discussion of the problem of piracy, an obstinate factor which seems to present itself in a more complicated way in the Internet era.

1.2 Live music

Live performance is the oldest way of making a business out of music, and this business is as viable now as ever it was. In economic terms, popular music takes the biggest share of the concert market. The turnover of the Dutch live music sector was estimated to amount to 500 to 600 million guilders in 1996 (Rutten 1997, 63-66). An estimate of the EU market for live music in 1995 (including both classical and popular music) was ECU 2.3 billion (Laing 1996, 37-44).

The main actors in this domain are the copyright owners (see also paragraph 2.2) of the music performed, the performing artists and their managers and agents, the concert promoters, and the owner of venues and stadiums where the concerts are staged. These actors are present in the domains of both popular and classical music. Past decades have witnessed a spectacular extension of scale in this business due to the creation of superstars who tour the globe, reaching hundreds of thousands of fans with their live concerts. The modern phenomenon of stardom emerged as a result of the role played by the recording and broadcasting industries in the distribution, promotion and exploitation of music. Moreover, live concerts increasingly are part of the promotion and marketing of recordings. Concerts can also become media events in their own right when they are recorded and/or broadcast on radio or television.

There exists a complex network of business relationships between the live-concert sector, the broadcast media, and the recording industry. Each time a musical property is used in any of these contexts, value is added to that property. The author rights system ensures that some of the value added goes to the composers and their representatives, the music publishers.

In the field of pop and rock concert promotion, industry concentration is emerging. The American SFX Company has bought up promoters as well as venues in the US, the UK, Scandinavia and the Netherlands. For instance, Dutch concert promoter Mojo Concerts, which holds an almost monopoly on promotion of mid-size and mega pop and rock concerts, as well as outdoor festivals, is now 80% owned by SFX. Mojo Concerts had a turnover of 65 million guilders in its concert promotion activity with a net revenue of 2.8 million guilders in 1996 (Rutten 1997, 29-31). SFX also includes the organisation of sporting events, has a position in the market for sponsorship acquisitions, and has alliances with ticket sales offices and Internet companies. In the first months of 2000, SFX in turn has been taken over by Clear Channel, a top ten entertainment company in the United States, until then specialising in radio and outdoor advertising.

1.3 Musical Rights

When a musical work is recorded and released, the record company pays a certain percentage of the dealer price to the copyright owners. In the Netherlands, these ‘mechanical’ rights are collected by the STEMRA foundation, and then paid by record companies to composers and their representatives. As large record companies also own most of the big international music publishers (see also paragraph 2.3.2), they can benefit directly from this arrangement. STEMRA collected 141.9 million guilders (US \$ 60.3 million) from record companies in the Netherlands in 1999 (BUMA/STEMRA 2000).

When music is performed live on stage, or when a recording of a musical work is played in public (for instance in restaurants, shopping malls, clubs, or on radio or television) authors rights are due to the composer of the work and the music publishers. In the Netherlands, these ‘performance’ rights are collected by BUMA. In 1999 BUMA collected 185.7 million guilders (US \$ 76.4 million), an increase of 12.4% compared to the previous year (BUMA/STEMRA 2000). The basic ‘authors’ right which underlies both mechanical and performance rights is recognised in the Berne convention of 1886, to which the Netherlands is a signatory.

Both BUMA and STEMRA are part of an international network of collecting societies who have mutual agreements of co-operation, collecting and paying rights according to the laws valid in their respective territories. The operating principle is national treatment, implying that all rights-holders are treated in the same way

within a specific territory (see for instance Laing, 1993). Collecting societies like BUMA/STEMRA are under heavy pressure from international music publishers to cut costs. BUMA has a legal monopoly, but STEMRA does not. Thus, American publishers could eventually decide to start their own mechanical rights operations in Europe. As one of the many initiatives to reduce operating costs BUMA/STEMRA has started an initiative together the American society ASCAP and the British MCPS/PRS. They are building up the International Music Joint Venture (IMJV), an international service centre comprising the construction of an international database and the building up of a royalty-processing organisation. The partners expect other societies to become part of the IMJV operation, or to be served by IMJV as clients.

When music is recorded, some rights are acquired also by the musicians performing on the recording. This right was recognised in the Rome convention of 1961 (see for instance: Laing, 1993), to which the Netherlands is a signatory. In the Netherlands these rights are collected by SENA.

The newest source of rights is a levy on private copying using recording media like, videotapes, cassettes and blank CD's. These levies are collected by Stemra and distributed among authors and neighbouring rights owners – performers and record companies.

1.4 Recording industry

1.4.1 Distribution and reproduction technology

Sound recording began in the last decades of the nineteenth century. Edison developed the first mechanical sound recording technology using wax rolls. This technology was superseded by the flat 77 rotations per minute (rpm) shellac disc developed by Berliner. Significant subsequent innovations include electrical recording, the 33 rpm long play vinyl album, the 45 rpm vinyl single, stereophonic sound, the compact cassette, and the digital CD, the first digital medium to succeed on the consumer market. The various innovations in audio storage and distribution media have been accompanied by complementary innovations in studio sound recording technology.

Many types of sound media failed in the market - like the 8-track cassette in the sixties and early seventies, and quadrophonic sound in the seventies. Other failed innovations were Sony's digital audio tape in the eighties (although it found a market in the professional world) and Phillips' digital compact cassette (the supposed follow up of the analogue compact cassette) in the nineties. It still remains to be seen if Sony's digital mini disk will prove successful.

The latest technological innovation is direct digital distribution of music via the Internet. MP3 is a compression technique for audio files. The ISO Motion Picture

Experts Group's (MPEG) Layer 3 Audio (MP3) was developed in Germany by the Fraunhofer Institute. To be able to listen to MP3 files, MP3 software must be installed on the PC. Specialised MP3 'players' have been introduced on the market as a portable stand alone devices, or as integrated into mobile phones. Using the standard MP3 compression, one minute of music can be captured in a 1 Mb file. Files can be downloaded from the Internet and attached to e-mails. Posting, collecting and trading MP3 files is facilitated by internet platforms such as MP3.com, Napster, Gnutella and by specialised MP3 search engines.

In May 2000 the music industry newsletter *Music and Copyright* reported that 9.2% of all American college students use Napster daily to search for music files on the Internet. More than 70% of US students use Napster at least once a month. It is expected that, in the short run it will be possible to download tracks using portable, wireless devices, thus cutting out the use of the personal computer altogether.

A collaboration of Fraunhofer, AT&T, Dolby and Sony has developed a new and better compression format, Advanced Audio Compression (AAC). The new technique is introduced and trademarked as MP4 by Californian GMO (Global Music Outlet). Their package includes digital watermarking and copyright information (MBI, April 1999).

Alternatives for MP3 are a2b and Liquid Audio. a2b is owned by AT&T. Unlike MP3, a2b is encrypted. Music distributed with a2b can only be decrypted by owners of a special software key. Illegal music sharing and copying is therefore more difficult. Liquid Audio also includes copy protection, encryption and watermarking. Liquid Platinum enables musicians to promote, sell and distribute their own music on the Internet.

Another important technological innovation with potential consequences for the future of the recording industry and the CD is streaming audio that enables the webcasting of music. Two standards and companies compete in this field: RealAudio (from RealNetworks) and Microsoft's Media Player. In order to listen to a streaming audio file or webstation, a user must stay on-line. In contrast, MP3 files can be downloaded, copied and distributed. As with MP3, the music is compressed, and a player must be installed in order to decompress and listen to the music. The number of internet radio stations using streaming audio is overwhelming. Some stations even offer on-line access to their programme archives. Streaming audio is also used for 'previews' of tracks not yet released.

Both the software enabling digital downloads from the web, and the streaming audio software, are expected to revolutionise the music industry in general, and the recording industry in particular. Potentially, these innovations strip the recording industry to its bare bones: i.e. to being an industry based entirely on the exploitation of rights. This awareness has been growing among record company

executives for many years. Already in 1989 the vice-president of A&M Europe, an important independent label taken over by Polygram in the 1990s, claimed in an interview with one of the authors of this report: “The music industry should stop considering itself as producers of vinyl and cardboard. We are engaged in the business of marketing of artists and their creative talent. We are right owners” (quoted in: Rutten 1991). But awareness has not led to immediate strategic re-orientations in the industry.

The irony, however, is that the digital technology, which forces the recording industry to reformulate its core competence, is at the same time one of the biggest threats for its future. Recently the major companies have been developing strategies to cope with their future in the digital era. At the end of this chapter the potential changes as a consequence of digital technology for the future of the music industry will be discussed.

1.4.2 The Market for Recorded Music

The global music market showed a slight increase of 1% resulting in a global value of US \$ 38.5 billion in 1999, accounting for around 3.8 billion units (mainly CD's and cassettes) overall. Growth in terms of units was flat, the sales of CD's increased by 3%, but at the expense of cassettes. The global market is stagnating after a substantial period of growth in the 1990s. Present growth regions are the United States (8% rise in value and 5% rise in units) and South east Asia. Excluding Japan (which showed a decrease of 7% in value and 11% in units) the Asian region grew by 4% in units and 1% in value, with the highest growth rates in Indonesia and South Korea. The European market stayed flat in value and showed a 3% decrease in units. Latin America had negative growth figures for the second year in a row, 6% down in units and 5% down in value. Mexico was a positive exception. Africa is a small market accounting for less than 1% of the global sales in value terms (IFPI 2000a).

Table 1.1 Top twelve recorded music markets

Ranking	Country	Ranking	Country
1.	USA	7.	Brazil
2.	Japan	8.	Australia
3.	United Kingdom	9.	Spain
4.	Germany	10.	Mexico
5.	France	11.	Italy
6.	Canada	12.	Netherlands

Source: NVPI 2000b.

The value of the Dutch market (CD's, cassettes en vinyl) has fluctuated in the past decade at around 1.1 billion guilders, but is presently in decline. It has shown subsequent negative growth in 1998 and 1999. In terms of size, the Dutch market dropped out off the top 10 of biggest markets of the world in 1999. Since the Netherlands was one of the first markets to boom with the arrival of the CD in the early 1980s, it is also one of the first to witness saturation and decline. Still, per capita spending on recording is US \$ 38.50 per year - among the highest in Europe 1999 ("Dutch soundcarrier market..." *Music and Copyright* 2000).

Table 1.2 Development of the Dutch phonogram market (1990-1999)

	1999	1998	1997	1996	1995	1994	1993	1992	1991	1990
Turn-over	1.080	1.113	1.184	1.113	1.148	1.143	1.164	1.146	1.275	1.170
Growth	-3%	-6%	6%	-3%	1%	-2%	2%	-10%	9%	29%
#Albums (*)	34.0	34.8	37.7	35.4	36.4	36.2	36.5	35.6	43.2	41.0
#Singles (**)	5.5	6.6	7.8	7.9	7.9	5.9	5.7	4.2	5.0	6.3

(*) Including: CD's, vinyl albums, cassettes (units in millions)

(**) Including: CD's (2-track and multi-track), vinyl (7" and 12") (units in millions).

Source: NVPI (1999, 2000b)

In terms of the demographic composition, and taking general market decline into consideration, the Dutch market demonstrates a fairly stable picture. With a clear exception for 1999, the 20-29 age-group has dropped in terms of its share of the value, but the other age groups remain fairly stable. This 20-29 and 12-19 age groups are the ones who are in general more 'netwise', being open for on-line distribution of music.

Table 1.3 Record sales by demographic (1995-1999) Dutch market

	1999	1998	1997	1996	1995
12-19 year	14%	13%	13%	14%	13%
20-29 year	28%	31%	30%	31%	31%
30-39 year	27%	25%	26%	24%	25%
40-49 year	16%	16%	16%	15%	16%
50-59 year	7%	8%	8%	8%	7%
60+	8%	7%	8%	8%	8%
Total	100%	100%	100%	100%	100%

Source: NVPI (2000b)

Of the music sold on the Dutch market, two thirds is international popular repertoire and one quarter is domestic popular music performers. Around 10% is classical music, pre-dominantly produced outside the Netherlands. This illustrates the international character of the music market in the Netherlands. This translates in the structure of the Dutch recording industry, which is a mixture of Dutch offices of multinational record companies who are part of big international conglomerates and relative small enterprises combining the release of their own products with the distribution of products licensed from foreign companies.

Table 1.4 Composition of Dutch phonogram market (repertoire) (1990-1999)

	1999	1998	1997	1996	1995	1994
Pop international	69%	64%	65%	67%	64%	65%
Pop national	23%	27%	26%	22%	23%	20%
Classical	8%	9%	9%	9%	11%	12%
Others	-	-	-	2%	2%	3%
Total	100%	100%	100%	100%	100%	100%

Source: NVPI (1999, 2000b)

In the course of the 1990s Dutch artists in the popular domain have regained territory they lost in the late 1980s and early 1990s. This resurgence is due to several circumstances. Big global stars are not as successful as once they were in this market, and the record industry has re-focussed their investments on local talent. Furthermore, a network has developed of small independent labels which have been investing in local popular repertoire. At the same time the production and marketing of Dutch artists has been professionalised. The emergence of private radio led to more room for local repertoire on the airwaves. It turned out that there was a demand which was not met by the public music stations up to that time (Rutten, Dekkers & Jansen 1996).

1.4.3 Piracy

Music piracy has been an obstinate problem throughout the history of the recording industry. The essence of piracy is that musical works and recordings are exploited commercially without the consent of rights owners. The traditional forms of piracy are counterfeiting - the exact reproduction of legally recorded music - and bootlegging - the repackaging of existing recordings or illegal live recordings. In both cases musical rights are violated. Due to the emergence of the Internet and the introduction into the market of relatively cheap digital reproduction technology, new forms of piracy have emerged.

The International Federation of Phonogram Industries (IFPI) signals “increased traffic in mass produced audio CDs, an alarming surge in illegal sales of CD-Recordable discs and an exponential spread of pirate music files on the Internet” (IFPI 2000b). According to estimates of the music industry newsletter *Music & Copyright* some 40 million blank CD-Rs have been sold in the Netherlands in 1999 (“Dutch soundcarrier market...” *Music and Copyright* 2000).

According to IFPI, the capacity in global optical disc manufacturing capacity is outpacing by far the growth of legitimate demand, and this is one of the main factors responsible for the boom in CD-piracy. IFPI estimates that the present demand for legal production is less than half the current capacity, whereas capacity has grown by 340% in the past five years to 23 billion units per annum.

Piracy should be distinguished from home copying of music for personal use. However one of the problems of the developing digital age is that the difference between home recording and piracy is becoming more and more vague. Copying a CD bought in a shop on a CR-R for personal use is permitted. Selling copies of the same CD to friends at the schoolyard is piracy. Digital reproduction technology in the hands of consumers poses a major problem for the music industry.

IFPI estimates the size of global music pirate market to be 1.9 billion units in 1999. The tendency is for the traditional pirate medium, the analogue compact cassette (1.4 billion in 1999), to be replaced by the CD (500 million in 1999). In value IFPI estimates the illegal market to be US \$ 4.1 billion. In Europe, the piracy problem is greatest in the Eastern European countries and in Greece and Italy. Pirated sales in the Netherlands are, according to IFPI, under 10%. (IFPI 2000b).

Together with rights organisations and musicians, the music industry has made many efforts to stop illegal copying and piracy by setting up strong lobbies and public awareness campaigns. The Dutch record industry association (NVPI), together with BUMA/STEMRA and others, invested around US \$ 800 thousand in an anti CD-R copying and anti-piracy campaign using the slogan ‘Don’t stop the music’ from October 1999 onwards (“Dutch sound carrier market...” *Music and Copyright* 2000).

2. Value Chain of the Recording Industry

2.1 Introduction

This chapter focuses on the activities of the different categories of actors in the recording industry value chain. The main developments in each link of the chain will be discussed in brief resulting in a typology of retail models, which grasp the innovation patterns that can be detected in the sector.

2.2 Constructing the value chain

A useful way to determine which parties add value in a value chain is to break down the price of the end product in a specific sector according to who adds what kinds of value where. Laing (1996) has made an estimate of the distribution of value among the parties in the chain of the record industry. He distinguishes two products priced differently.

Table 2.1 Shares of retail price of CD or MC

	Retail Price 10 ECU		Retail Price 5 ECU	
	ECU	%	ECU	%
Composer and Publisher	0.9	9%	0.4	8%
Recording artist(s)	1.0	10%	0.3	6%
Studio Producer	0.2	2%	0.05	1%
Record Company	2.4	24%	1.1	22%
Manufacturer	0.8	8%	0.8	16%
Distributor	2.0	20%	1.0	20%
Retailer	2.7	27%	1.35	27%

Based on: Laing (1996), p. 13.

It must be stressed however that Laing's outline is a prototypical construction for explanatory purposes, which does not always correspond to reality. Some elements in his price composition can vary considerably from case to case.

The music industry is high-risk businesses where products demand a relatively high up-front investment combined with high uncertainty about returns. It is not exceptional for a record company to invest two to four hundred thousand guilders in an album by a domestic artist (excluding investment in music videos etc.). Sales in this case may be less than a few thousand copies. For artists that are promoted by multinational companies, the investments are much greater. As a rule of thumb, record companies expect one out of seven releases to recoup the investments made. In such a high-risk environment, new artists seldom negotiate the 10% royalty given by Laing in his prototypical example. Other amounts can also vary considerably. For instance, record retailers can negotiate bulk discounts. Contrary

to for instance the United States, Dutch retailers do not have right of return on unsold items. This increases the risks to retailers of carrying too much stock.

In the break up of the consumer price as presented by Laing, several roles and functions can be distinguished:

- composers create the work and publishers exploit its commercial potential;
- recording artists perform the work in recording sessions and become the central element in promoting and marketing the recording;
- studio producers capture the performance in a form that can then be sold on the market;
- record companies co-ordinate, finance and market the recording
- Manufacturers produce copies of the recording;
- Distributors physically distribute the recording and may engage in marketing activities of their own;
- Retailers sell the recording directly to the public.

Each of the above parties occupy specific positions in the value chain of the sector. Figure 1 illustrates these positions and serves as a starting point for the following discussion of their role and function:

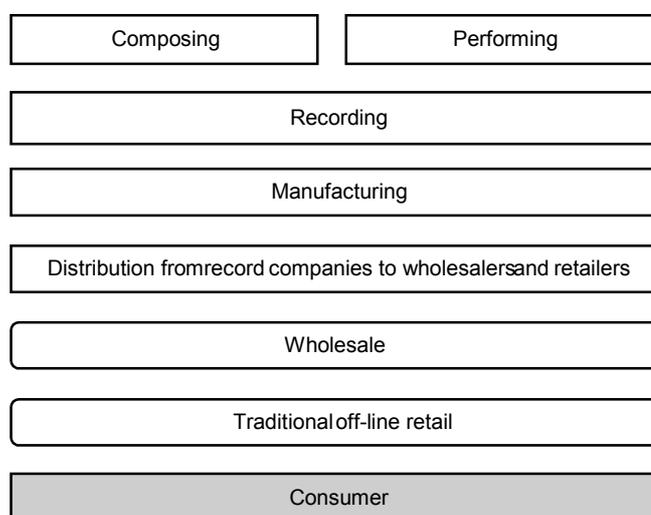


Figure 1 Music industry value chain

Square angled boxes indicate the addition of use value, whereas rounded boxes indicate the addition of transaction value. The only actors who add transaction value to the products of the recording industry are wholesalers and retailers. In all other instances use value is added.

2.3 Composers and publishers

The music product that is eventually marketed by a record company can originate either inside and/or outside the company as such. Properties can be developed by artists who are under contract to record companies. Alternatively, they can be acquired from artists not under contract, or from artists under contract to other companies by special arrangement. Most creative artists earn their livings in a variety of ways, and data on their economic position is difficult to assemble. Many combine composing, recording and performing with other activities like teaching or working in non-musical jobs.

Composers can enter into a contract relationship with a music publisher, who, in return for a percentage of the author rights revenues, tries to optimise the exploitation of the composer's work. One of the ways to achieve this is to get compositions recorded and released on CD, thereby generating income from mechanical and eventually performing rights. Alternatively, composers can form their own publishing companies, thus retaining complete control of their own copyrights. In some cases, promotion can be sub-contracted to other publishers.

The contractual relationship of the composer with the music publisher is exclusive. The reward system is based on the laws that establish intellectual property rights in each jurisdiction. The mechanical rights organisation STEMRA registered twelve thousand authors and five hundred music publishers in 1996. According to estimates of STEMRA around 250 individual Dutch composers earn a substantial income from author rights (Rutten 1997, 45).

According to estimates of insiders in the music publishing business, the fifteen biggest music publishers, very often divisions of international entertainment companies, account for ninety percent of total music publishing revenues. This leaves about ten percent for the remaining 490 small publishers. The most important music publishers in the Netherlands as of 1996 were BMG Music Publishing, EMI Songs Holland, MCA Music Holland, Peer Music, Polygram Publishing, Sony Music Publishing, Warner Chappell, Intersong/Basart, TBM International and Nanada Publishing (Rutten 1997, 45-47).

Recording artists sign an exclusive contract with a record company and get paid on royalty basis. Royalties are negotiable. Relatively new artists seldom succeed in negotiating high royalty rates. The record companies usually have the strongest position in these negotiations because there are many more artists looking for recording contracts than companies willing to sign artists. However, in some cases, the product of some artists is in great enough demand that they can negotiate with more than one company, which gives them more control over their contract. Often recording artists negotiate an advance on royalties when they sign the contract. If their album starts selling, mostly of the investment made by the company will be recouped from the artists royalties. Costs made in connection to the debut album,

which have not been recouped from sales, will be transferred to the eventual earnings from the second album.

Mostly record contracts are multi-album deals. But the deals are usually a one-sided: the artist cannot get out of the contract, but there is no obligation for the company to finance the full number of albums mentioned in the contract. Recording artist George Michael went to court after his contract with Sony Music Entertainment expired, claiming that, since all the investments in his recordings had been recouped by Sony from the royalties of the successful sales of his albums, he is the owner of the recordings and not Sony. He lost his case. Sony's argument was that the only way the company could cope with the costs of recordings which fail on the market, is the earning of vast amounts of money on successful artists. The number of high-earning recording contracts in the Netherlands in 1996 was estimated at 300. The amount of royalties paid by the Dutch recording industry to Dutch artists in 1996 was estimated to be 24 million guilders (Rutten 1997, 47-48).

2.4 Recording Companies

Record Companies channel the creativity of composers and musicians into a marketable sound recording. Artist and repertoire (A&R) managers, employed by record companies, form the interface to the creative community. They spot talent and coach it through the recording process. Part of that process involves selecting and commissioning repertoire, and selecting studios and technical personnel. The total number of full time record producers in the Netherlands was estimated to be 95 in 1996, whereas some additional fifty worked part time. The amount of money spent on the recording of local artists by the Dutch recording industry was estimated to be 11 million guilders in 1996. The total estimated number of recording studios in the Netherlands, ranging from professional to semi-professional and amateur is around 1000 (Rutten 1997, 49-50). In Laing's break up of revenues in table 2.1, all of these activities are included as functions of record companies. Most promotion, marketing and physical distribution is done by the same company. Laing defines these activities as functions of the distributor.

Record companies add use value to the product of the recording industry. They capture the creative performance of composers and musicians on a digital recording device. They also provide creative and commercial input through the A&R manager, as well through the producer who may not be employed by the company, but hired for a specific album. Furthermore, the record company can be directly responsible for manufacturing the records, promotion and marketing of the music and the artists, and for physical distribution. Sometimes, companies only operate as distributors and marketers. In this case, they buy the rights to the exploitation of a specific recording made by another company, for instance an independent production company, a foreign record company or the artists themselves.

As can be concluded from table 2.2, over two thirds of the value of the recording market in the Netherlands is created by selling recordings made abroad, by foreign artists, very often international megastars. These records are both marketed by the local offices of multinational companies and by Dutch companies who have acquired the license to market and distribute foreign repertoire in the Netherlands. All of the major Dutch record companies market foreign products to some extent. Many companies, big and small, invest very little in local repertoire. For example, Warner Music just recently signed the first contracts with Dutch artists in more than a decade. Polygram used to urge its local offices around the world to acquire at least 20% of their local turnover with local signings. This strategy ended when Polygram was acquired by Seagram of Canada in 1999, and merged with Universal Music. Universal is strategically closer to the practices of Warner Music than to those of Polygram before the take-over.

When local artists are signed by a local office of an international major company, the local offices very often try to encourage foreign sister-offices to release the record in their territories, but this seldom happens. When a specific artist is considered to have cross-territorial sales potential, international headquarters take over the artist concerned. This happens most often with artists from the Anglo-American territories. Local affiliates are obliged to give priority to these releases and allocate marketing budget to it. This happens with artists from small countries, like for instance the Dutch ‘Stehgeiger’ Andre Rieu who sold millions of his popular interpretations of music of Johan Strauss in Germany and the United States (see for a discussion on the position of local repertoire on the international market: Rutten 1993). This process illustrates Keith Negus’ phrase “culture produces industry and industry produces culture”. Negus maintains that the music industry has to take music culture as the starting point of its activities, whereas the music industry at the same time actively intervenes as a formative force in that culture (Negus 1998).

The record company is also responsible for the promotion of the product, which is done through a combination of direct advertising (newspapers, magazines and the music press), and acquiring airtime in radio and television broadcasts. At the same time, the company tries to convince retailers to stock CDs. Very often, record companies and big retail chains set up joint promotion activities concerning specific releases. There is even a common practice that, when a specific album is promoted using television commercials, the price per dealer (paid by the retailer to the record company) is raised by one guilder. The Dutch record industry association (NVPI) together with the Dutch association of record retailers (NVGD) and the rights organisation (BUMA/STEMRA), have set up a joint promotion organisation called CPG (Collectieve Promotie Geluidsdragers) to promote record sales in the Netherlands. They jointly finance television and radio commercials around major events and occasions - like Christmas. Also, they jointly organise ‘de

Platentiendaagse, a ten day event during which they raise the profile of the music industry by giving away samples and organising a major television broadcast.

These practices indicate the strong vertical connections and controls that exist in the recording industry value chain. In recent years, however, the structure has been challenged. Record companies increasingly by-pass the specialist retailers and promote their products through other retail channels - supermarkets, for instance. At the same time, the prospect of direct delivery to customers, or the competition provided by e-retailers like Bertelsmann On Line (BOL), threatens established vertical relationships between record companies and retailers. The same developments can be seen internationally. At a convention of the American National Association of Recording Merchandisers (NARM) in March 2000, an alliance of entertainment of retailers - the Global Entertainment Alliance (GERA) - was established to create a stronger position for retailers vis-à-vis those record companies who increasingly want to deal directly with customers through the Internet. *Music & Copyright* concludes that: "...anger seems to have replaced the uneasy relationship between retailers and record companies." ("Supermarkets and ..", *Music & Copyright*, 2000)

Laing estimated the number of record companies in the European Union at about 3,000 (Laing 1996. 20). The Dutch record industry association (NVPI) had 57 members at the beginning of 2000 (NVPI 2000a). Nevertheless, two thirds of the Dutch market is dominated by the same five companies that dominate the music industry world wide: Universal Music Group, Sony Music Entertainment, Bertelsmann Music Group (BMG), Warner Music and EMI. This group will be reduced to four after the merger of Warner Music and EMI. Of the total market share of member companies of the NVPI, the majors take 75%, which implies that their collective share of the total market is 66%. A similar conclusion can be drawn on a European scale. These same five majors dominate the global music market (see also: Burnett 1996).

Table 2.2 Marketshare (*) main companies on Dutch phonogram market (1999)

	Company	market share
1.	Universal Music Group	26.5%
2.	Sony Music Entertainment	18.6%
3.	Bertelsmann Music Group (BMG)	12.3%
4.	Warner Music Benelux (**)	8.7%
5.	EMI Music Holland (**)	8.5%
6.	Arcade Music Group (***)	6.8%
7.	Zomba Record Holding	4.5%
8.	Virgin Benelux (!)	3.2%
9.	Disky (!!)	2.5%
10.	Play it again Sam! (!!!)	1.7%
11.	Edel Records	1.3%
	Others	3.7%
	Total	100.0%

(*) Share based on total of the Dutch branche-organisation (NVPI) members. Share of the branche is estimated 85% of the Dutch market. (**) Announced merger with AOL. (***) Bought by Roadrunner Records in 2000. (!) Fully owned by EMI. (!!)

Source: NVPI (2000)

Recent strategic moves within the music industry seem to indicate that companies are preparing for the Internet era. However, the take over of Polygram by the Seagram company - thereby creating the *Universal Music Group* - seemed to be mainly inspired by traditional arguments concerning issues of size, market structure and cost efficiency. Recent developments predict a return of Polygram to European hands. The French firm Vivendi (a minority stake holder in Canal Plus and the owner of press agency Havas) has closed a US \$ 30 billion agreement to take over Seagram. Vivendi seems interested in merging Universal Studios with the film production activities of pay-television channel Canal Plus. Music as well as audio-visual products could prove an important asset in setting up Vivendi's Internet portal, called Vizzavi, together with UK mobile phone company Vodafone.

This strategic philosophy behind the Seagram take over seems to be inspired by the take over of Time Warner by America On Line. Following this move Warner Music announced the take over of EMI (including Virgin Music), thus creating a new mega force in the music industry. The potential synergy of owning both content and networks of electronic customers through Internet services are the main assets of the mega media company of the future.

Sony is also preparing for the Internet era. The company has set up a new headquarters for Internet-related business and a US subsidiary called Sony Broadband Entertainment. This company will house all the company's US entertainment assets including film (Columbia Pictures) and music (Columbia Records, Epic Records etc.). These assets can be combined with a strong brand in

the games content and hardware: Sony Playstation. The PlayStation2 technology will be licensed to third parties and could serve as an Internet link. This technology has potential synergy with the Vaio PC, developed by Sony as well as Sony's digital televisions and settopboxes and mobile terminals.

Bertelsmann, owner of BMG, has mainly sought to strike distribution deals, mostly handled through its e-commerce division: Bertelsmann E-commerce Group (BEG). The take-over of Time Warner by AOL has severely obstructed the prospects of further collaboration between Bertelsmann and America On Line. Recently Bertelsmann signed a deal with Terra Lycos, an ISP and a portal. In the mean time, Bertelsmann is developing third party Internet distribution and sales services and has set up Digital World Services for that purpose. This company offers record companies and retailers a variety of options for selling digitally transmitted music to consumers. The company also intends to offer the services to non-music partners. It benefits from the company's expertise in call centres and clearinghouse services ("Proposed Vivendi-Seagram deal the latest move in global media restructuring". *Music and Copyright*, 2000).

The above moves by the major global actors in the recording industry are to a significant extent driven by the prospect of the on-line distribution era. Within the recording industry value chain, actors feel that they must strengthen their position by extending their control in the specific links of the chain in which they operate, mainly through mergers and acquisitions. The acquisition of EMI by Warner Music is an example of this tendency. The take over of Polygram by Seagram, followed by the establishment of the Universal Music Group, has turned out in the same way.

However this urge for control extends across value chains. Media conglomerates acquire more and more assets by buying catalogues of rights in content, along with related production capacity and expertise. This strategy seems at first sight not fundamentally different from the ones pursued by traditional media conglomerates like Disney and Time Warner during the past decade. They also combined assets in different media industries, creating synergy by marketing the same product formula through different media outlets: broadcasting, video, book publishing, CD, computer games, toys, merchandising rights etceteras (see for instance: Hermann & McChesney, 1997).

However, the Internet presents a fundamentally different business environment. Instead of marketing different forms of content through different distribution channels, the Internet portends the integration of service environments, and potentially a new structure for the media industries. One of the key assets in this new structure is access to the customer. To reach out to the digital consumer, media industries have to build relationships with Internet service providers and portals that originate in the telecommunication, computer software, and cable industries. But these industries also now have significant financial power to acquire media

assets of their own. The take over of Time-Warner by AOL and the announced acquisition of Seagram by Vivendi should be understood from this perspective. Both companies plan to use the acquired content powerhouses to build their on-line strategies.

The possession of content can be used in more than one way. Firstly the combination of content and access to on-line customers provides them with guaranteed access for on-line content services to the market. However the attractive content can also be used to attract customers to certain Internet access platforms and portals. As a result the network of users or subscribers ‘owned’ by the provider is extended. In turn the access to the network of customers can be sold to other content- and service providers, in search of an audience (see also: Rutten 2000). In this strategic game, the music industry as a sector is subject to developments which it cannot control on its own.

2.5 Record manufacturers

The production of CDs, cassettes etc. is one step downstream from the production of the recorded content. Some companies have their own production plant, while others outsource manufacturing, and there is some sharing of capacity. The costs of manufacturing for the six main players on the Dutch market in 1996 (Arcade, BMG, EMI, Polygram, Sony Music and Warner) amounted to 77.8 million guilders. For the whole Dutch music industry the amount spent on manufacturing in that year was estimated to be 86 million guilders in 1996 (Rutten 1997, 50) on a total turnover on the market of 1.1 billion guilders. According to Laing (1996, 22), in 1996 Europe has around eighty CD manufacturing plants. In that same year seven plants were operational in the Netherlands.

Table 2.3 Most important audio media manufacturing plants the Netherlands

Name	Owner	Location	Employees (*)
Dureco Manufacturing	Dureco	Weesp	55
EMI Compact Disc	EMI	Uden	410
Europe Optical Disc	DOC Data	Tilburg	76
		Amersfoort	151
Sentinel	-	Hilversum	80
Sony DADC	Sony	Haarlem	590
Total			1362

Source: Rutten (1997), p. 51.

(*) Data on employment from 1996

2.6 Physical distribution

Physical distribution is still an essential part of the value chain and is taken care of by different companies, depending on the kind of distribution concerned. BMG,

Warner and Universal have pooled their distribution to wholesale and retail for the Benelux countries in one company - Record Service Benelux (RSB) - which operates from Breda employing around 175 people. The companies themselves take care of distribution from the factory to the distribution company. Other major companies have their own distribution networks, and Music Net, a distribution company set up by Dureco in Weesp, also distributes many smaller independent labels. The distribution costs of the six big companies were 15.5 million guilders in 1966 - out of 17.1 million guilders for the industry as a whole.

2.7 Wholesaling

Wholesalers perform an intermediary role by integrating the products of many suppliers for the convenience of music retailers. When many retailers operated independently (not as part of retail chains), wholesalers performed a specific function of assembling repertoire from many different sources. Retailers came to the warehouse of to purchase goods for their store. Now that most retailers are consolidated into chains, this practice has almost disappeared. Some of the functions of wholesaling have been pulled into the record store chains, or are otherwise performed co-operatively between independent stores and/or franchise holders. Sometimes specific wholesalers serve a specific retail niche with more specialised repertoire. Some wholesalers service a chain which they own, but at the same time provide certain services for other retailers. Wholesaler Home Entertainment Services is owner of a chain of over 60 stores operating under the brand name Ear & Eye. Rigu Rotonde is owner of Music House/Studio88 with around 50 stores. Bertus Distributie, the third wholesaler of national importance, has no business interests in the retail sector.

2.8 Retailing

With over 1400 outlets, the Netherlands has one of the most dense music retail networks in the world. The estimated number of specialist CD retailers in the European Union is 7,000, which implies that 20% of all the European outlets can be found in the Netherlands. The Netherlands have the same number of music retail shops as does Germany, with five times as many inhabitants.

Table 2.4 Soundcarrier sales by location (1997-1999) Dutch market

	1999	1998	1997
Specialist retailer	55%	58%	58%
Department stores	13%	13%	13%
Clubs & mail order	16%	14%	14%
Other	16%	15%	15%
Total	100%	100%	100%

Source: NVPI (2000)

Retailers are the recording industry's interface to the customer. For that reason they are subjects of substantial marketing and sales efforts by the record companies. Orders from retailers who are part of a chain (owned or franchised) always go through the headquarters of the chain. The days are over when independent retailers went to wholesalers nearby to purchase specific titles. Wholesalers still exist and perform functions for specific stores. Independent stores use a mixture of direct ordering (through the electronic intermediate Entersys) or ordering at a wholesaler (for instance Bertus Distributie).

Dutch music retailing is still dominated by specialist retailers, whereas in other countries like France and to some extent the United Kingdom, the so-called hypermarkets have marginalised specialist music retailing. A unique feature of the Dutch retailing sector is its strong trade organisation, NVGD, which has helped Dutch music retailers to keep a strong position vis-a-vis other parties in the value-chain. This has led to concerns about possible anti-competitive behaviour - restricting market entry and price fixing. But as the record industry develops plans to deal directly with customers over the Internet, and to supply pharmacies and supermarkets, these concerns have cooled. NVGD is itself developing a plan to start an e-commerce service under the brand Platenzaak.nl (recordstore.nl), using the network of member shops to reach customers.

By far the biggest chain of specialised stores is the Free Record Shop with between 140 and 150 outlets. The Free Record Shop took over the fourteen shops of the van Leest group some time ago and acquired Virgin Megastores in the Netherlands and Belgium in June 2000. Shortly thereafter, the Free Record Shop announced the closing down of the Virgin megastores in Amsterdam, Rotterdam and Den Haag. The three Belgian Virgin megastores, in Brussels, Antwerp and Liege, will be redesigned into Free Record Megastores. This music retail concern hopes to realise a turnover of 500 million guilders in 2000, but has cut back on the space allocated to sound recordings in favour of other entertainment products like video, books, DVD and CD-Rom ("Free Record shop sluit Virgin-winkels". *Financieele Dagblad* 2000).

Other specialist chains include department store V&D (around 70 outlets), Ear & Eye (around 65), Music Store (around 70 outlets) and Music House/Disque88 (around 50 outlets). Music Shop is a central purchase and selling organisation with over 150 affiliated members (Rutten 1997). The Bertelsmann Group is a strong player in the mail-order business. The three main mail-order companies are owned by the ECI company which is owned 75% by Bertelsmann.

2.9 E-commerce and innovation in the value chain

Having described and discussed the value chain of the recording industry, attention is now focussed on understanding the changes which are presently taking place

within the value chain. As a starting point, a retail model is used. This refers to a specific way of selecting, ordering and delivering the product of a sector to the consumer, as well as to the underlying pattern of relationships between relevant economic actors that produce, distribute and market the product. The hypothesis here is that the traditional retail models are changing due to e-commerce. The nucleus of change in a retail model can be found anywhere in the value chain. It can either be in the business-to-business relationship or the business-to-consumer domains or in both at once.

Two elements are used here to identify different retail models. The first is how the customer encounters the product - e.g. in a shop, through a mail-order catalogue, or in an on-line environment. The second element concerns how the product is delivered to the customer. Figure 2 juxtaposes these elements, resulting in nine retail models, of which six have empirical value for this study.

		Distribution (logistics)		
		Offline: Shop	Offline By mail	Online: Internet
Sales (transaction preparation and settlement)	Offline: bricks and mortar shops	Traditional	Order in shop, deliver by mail	Offline sales, online distribution
	Offline catalogue Order by mail and telephone	Mail-order, pick up in shop	Mail-order	Mail-order, online distribution
	Online: Internet	Online sales, pick up in shop	Online sales, deliver by mail	Online sales, online distribution

Figure 2 Digital product retail models

2.9.1 Traditional retail models

At present two of the above nine retail models are applied in the recording industry value chain. There are over 1000 conventional record shops in the Netherlands. Of the 1.1 billion guilder Dutch phonogram market in 1999, over 80% was realised in such a setting. The other traditional model is mail order. About 14% of the turnover on the Dutch market is realised through this model. The German company Bertelsmann is a dominant player in this domain.

2.9.2 Transitional and new models

Retailers are responding to the possibilities of the Internet in several ways. It is debatable whether or not these activities constitute altogether new business models, but certainly they represent new ways of exploiting existing models.

The most commonly applied model using Internet is *online ordering- delivery by mail*. This is the model used by Amazon.com, CD Now, and virtually all of their competitors. Some on-line retailers using this model also operate conventional shops, the integrated so-called ‘bricks and clicks’ strategy. The Free Record Shop has launched its own on-line CD-store and is one of the case studies in this report (see Chapter Four). But this model is transitional - basically an adaptation of the catalogue sales model which has existed for many years. In this case, the telephone or postal service is replaced and/or supplemented by the Internet.

A more interesting development is *on-line ordering - on-line delivery*. This exploits the unique capabilities of the Internet to a much greater degree, and cuts out huge distribution infrastructure requirements. To date, however, most of the activity using this model is either experimental, or, many argue, outright illegal.

One of the most pro-active companies in this domain is MP3.com, who developed an open standard for musical downloads and offers an extensive catalogue of music on the web (see also paragraph 2.4.1). The company is controversial since the MP3 format can be used to up and download music files. It is used by consumers to distribute all kinds of music through the web without paying royalties or author rights. Nevertheless, MP3 has led also the expansion of legal music files. The core of its activity has been the presentation of music by new artists. However, 90% of its revenues have come from on-line advertising. The company had US \$ 21.9 million in revenues in 1999. The fourth quarter results of the company showed a huge increase compared to the same period in 1998: US \$ 15.6 million against US \$ 600.000 (‘Controversial Internet music company...’ *Music & Copyright* 2000).

Other Internet companies, like a2b and Liquid Audio are developing similar services based on standards that comply more to the needs and wishes of the established music industry, as embodied in the Secure Digital Music Initiative (SDMI). These companies do not promote open standards and try to ensure that property rights are not violated.

Many established companies view MP3.com as a value-chain pirate, and are gearing up to respond to this challenge. All global players in the music industry are planning the launch of musical download services on the Internet, but they are not always acting in a co-ordinated way. Sony for instance uses the ATRAC3 proprietary encoding format, the only format which complies with the Sony portable digital audio devices like the Memory Stick Walkman and the VAIO Music Clip. The company will use Microsoft technology to protect the files from

unauthorised copying. ('Sony and EMI offer downloads...' *Music & Copyright*, 2000). One of the other areas where a common standard is lacking is the software for micropayments and market tracking, both vital in a market characterised by large numbers of relatively small value purchases ('Micropropayments and market tracking...' *Music & Copyright* 2000).

In their efforts not to disadvantage the traditional retailers too much, major companies are trying to integrate on-line download services with the traditional retail models (see paragraph 3.8.3), or to look for other ways not to bypass the traditional retail channels. EMI will soon start to sell downloads from 800 retail websites, including those of Tower, HMV, Cdnw and BestBuy ('Sony and EMI offer downloads...' *Music & Copyright*, 2000).

2.9.3 New retail models not yet implemented

Two other retail models await implementation: *on line ordering - delivery in shop* and *order in shop - on-line delivery*. Both are process innovations, but the second one provides possibilities for product innovation.

The NVGD is developing a service together with a large part of their membership, which enables customers to order CDs on-line and to pick them up in a store nearby. The dense network of music retail shop in the Netherlands is an asset that the organisation wants to use, using face-to-face contact in the stores and the existing trust of clients as a unique selling point for their service.

In order to keep good contacts with the traditional retail sector Sony Music Entertainment has started to develop a service selling digital downloads from in-store Internet terminals in the USA. This enables traditional brick and mortar stores to share in on-line sales, and to expand the repertoire offered to clients. Liquid Audio has developed a service called Kiosk, which offers individual tracks to customers in store enabling them to make customised CD's and compiling and downloading them on the spot. This is an example of product as well as process innovation.

3. Case study presentations

Three music industry enterprises were chosen for case study:

- **Entersys** - a B2B ordering facility for recording companies;
- **Bookmark** - an on-line retail fulfilment company that integrates aspects of B2B and B2C;
- **Free Record Shop** - a traditional retailer who is expanding to an on-line B2C environment.

Between them, these enterprises encompass most of the important value chain dynamics discussed above.

3.1 Case study 1: Entersys

Entersys is a collaboration between the RSB companies (Polygram/Seagram, Warner, Bertelsmann MG, Universal, Dino) plus EMI, Sony, and Arcade. Customers include wholesalers, retail chains, and individual retailers. The initiative dates back to 1984. The Entersys electronic catalogue and ordering system migrated from Videotex to both EDI and Internet. In the value chain, it is located between production (recording, manufacturing) and wholesale-retail. The participants/owners are the record companies. The added value is the management and integration of the chain, with all initiative and control in the hands of the record companies - not the wholesalers or retailers. Wholesalers are threatened by the increased quality and use of Entersys. In order to prevent bypass altogether, wholesalers have invested in sophisticated EDI systems of their own with retailers.

Entersys covers transaction preparation - market information (charts), product characteristics (titles), terms and conditions (price), and availability - and transaction completion, *not* including logistics. Production support - links with the actual production process (e.g. manufacturing) - is possible because the record companies gain faster knowledge about what is sold, increasing production as required. Although the system has been functioning for nearly fifteen years, it is still in the process of shaping the value chain. The switch to EDI has already increased the use and capability of the system, and the role of the Internet is still evolving.

3.1.1 Background

Positioning Entersys in the music industry value chain

Entersys is an electronic catalogue and ordering system for the music industry in the Benelux countries. Entersys evolved out of Begotel, an earlier, videotex-based system set up by the record companies in 1984. Begotel was subsidised by the Ministry of Economic Affairs, but most systems development and operation costs were carried by the major record companies. In 1995, an estimated 500 out of 1200 retailers used the Begotel system. These were mainly large record shops and/or shops within a retail chain (including more than 100 Free Record Shop outlets). Record company sales representatives also used the system.

Most retailers were positive about Begotel, but small retailers stressed the high investment costs. Bouwman & Nouwens (1995) concluded that Begotel enabled retailers to simplify working processes and enable Just-In-Time ordering and stock management. The latter tightened vertical relations within the sector. The major record companies were positive because electronic ordering reduced costs. However, Begotel never replaced traditional systems entirely - the processing of telephone orders continued.

In the early nineties, the Begotel system was adapted several times. But the Begotel organisation was growing into an inefficient bureaucracy, and eventually the record companies withdrew support. In 1996 they started Entersys, with EDI and Internet (WWW/email) communication options. A new and slim organisation was formed to operate the system. The organisation is completely financed and managed by the major record companies. The switch from Begotel resulted in some lost customers and some new ones. The Begotel Videotex customers were offered the Internet based option, including software and a (free) Internet subscription, but nearly all of them chose the EDI option.

The economic activities of Entersys can be positioned in between the producing and trading activities of record companies and the trading activities of both wholesalers and retailers. The system makes the integration of product databases possible, providing new access and possibilities for processing orders.

Entersys is closely linked with activities of record companies. Orders are processed within the commercial framework of deals between individual record companies and retailers or wholesalers. This provides a central outlet for customers, with the costs shared between the record companies. The basic value chain presented in chapter two is amended in this case by adding the elements of pooled order-taking through Entersys, and pooled distribution through RSB.

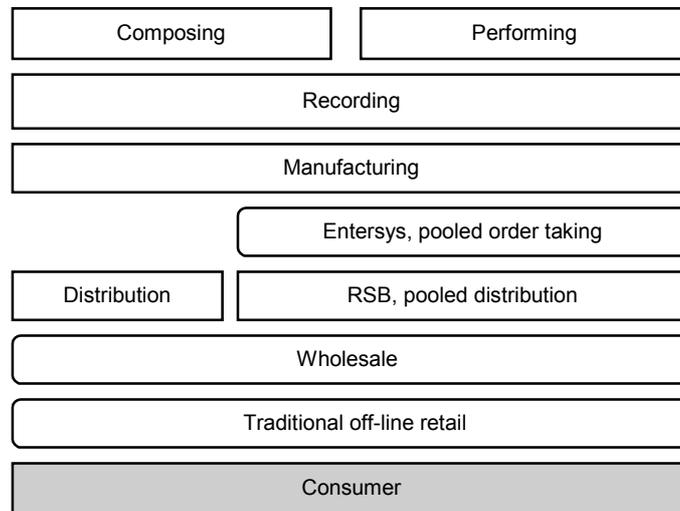
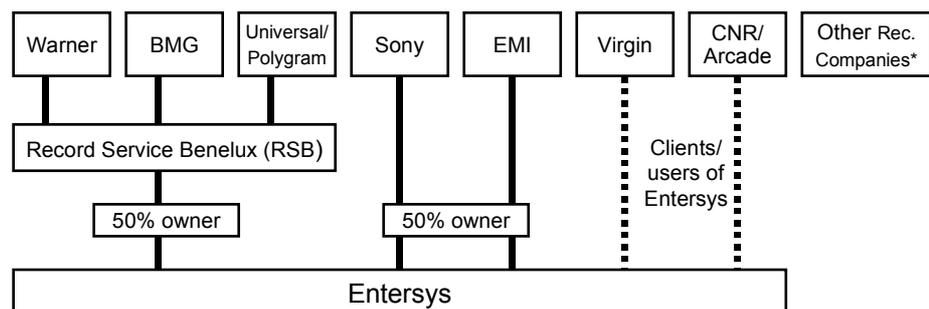


Figure 3 Positioning Entersys in the music industry value chain

Entersys is a Foundation owned and managed by the 5 major record companies: Universal (including Polygram), Warner, BMG, Sony and EMI. Figure 4 depicts the structure of Entersys in terms of its owners, and the upstream clients of both Entersys and RSB. Warner, BMG, and Universal operate RSB as a joint venture and take a 50% share of the Entersys Foundation. Sony and EMI have the remaining 50% share. Entersys is staffed by only two full-time employees, provided by RSB and Sony on an out-placement basis. They manage the operations and commercial contacts of Entersys, mainly supporting and connecting retailers.



* The distribution for some other record companies is provided by one of the major record companies using RSB and/or Entersys. Therefore, the distribution of CDs on behalf of non-clients may be routed through RSB and/or Entersys.

Figure 4 Ownership and upstream clients of RSB and Entersys

No information is available on the revenues of Entersys, but in 1999, the system electronically processed about 280,000 orders, consisting of approximately 1.3

million ‘order lines’ (product times number). This represents 33% of total order lines by RSB.

Entersys does business directly with seven suppliers and customers. The five major record companies that own Entersys are also upstream users of the service. In addition, Virgin and CNR/Arcade pay Entersys for its services, based on processed order-lines. The latter parameter is also used to share the costs between its owners/users.

Around 50% of all CDs sold by Dutch retailers, are ordered using Entersys. This percentage is much lower in Belgium and Luxembourg. At the end of 1999, Entersys was supplying 108 retailers and wholesalers in the Netherlands and 5 in Belgium. In comparison, RSB serves 450 Dutch retailers and 300 Belgian retailers. 95% of Entersys customers are enterprises with less than 10 employees. Between 25% and 50% of Entersys customers are based abroad, as are about 50% of the suppliers.

Business profile of the firm

Entersys can be seen as a one-stop-shop for the major record companies, rather than as an independent intermediary between suppliers and customers. Entersys enables retailers and other customers to place orders centrally by integrating individual catalogues. The orders are then passed on to the record companies directly. Entersys is not involved in commercial negotiations, or in the physical distribution of products.

Entersys’ activities are closely connected to the pooled distribution activities of RSB and to the distribution of Sony, EMI and CNR/Arcade products. The record companies provide the products and information in the catalogue (CD title, tracks, availability, and delivery time). Universal, Warner, BMG and Dino also use Entersys for audio and video DVDs. VHS tapes are not in the system because of the strong position of non-specialised retailers - e.g. drug stores who selling between 70 and 80% of VHS tapes.

Entersys services are designed to suit the needs of mainline actors in the music industry, not those of marginal audio/video product outlets. The system enables daily updates and communications regarding the record company catalogues. Realising the level of automation necessary to build up the kind of interface that provides Entersys with daily information updates involves high costs and commitment. The result is that smaller record companies can be excluded from the system.

The central question is if and how Entersys will increase its added value and maintain or strengthen its position in the value chain. A management team makes strategic decisions regarding the functionality and use of the system on behalf of

the shareholders. The record companies themselves are responsible for screening and selecting new Entersys retailers, who must be in positions to justify the investment of Entersys shareholders. Some on-line order fulfilment companies may not qualify to use the system. On the other hand, the general strategy of Entersys is to improve and expand the functionality of the system, in order to maintain and increase the number of users.

Entersys is designed to facilitate sales of CDs from record companies to traditional retailers and wholesalers. When the market share of its customers decreases, the volume and number of Entersys users also decreases. Because of its expertise in order processing and linkage to physical distribution, Entersys has a more obvious potential role in the on-line retail model than in the on-line distribution model. Independent online retailers, online shops of traditional retailer, and on-line retailers that are owned by record companies are all welcome to use the system. But record companies still discuss whether or not to serve new on-line order fulfilment companies through this channel.

It is not an option to transform or expand Entersys to process orders directly from consumers. Record companies have other divisions to cover the Internet consumer market, e.g. Bertelsmann's BOL. However, if the traditional retail model declines as a producer of revenue, Entersys may have to enlarge in order to maintain the necessary economies of scale - it may become more economic to have one system for Benelux, Germany and perhaps the Nordic countries.

The Entersys strategy can be interpreted as contributing to the business performance of traditional retailers. Providing a platform to order products efficiently from most important record companies reduces transaction costs for retailers. Potentially, wholesalers can be bypassed altogether. Furthermore, through the close ties with RSB and the distribution processes of Sony, EMI and CNR/Arcade, Entersys enables retailers to achieve more efficient stock-management. If ordered before 13:00 hours, RSB delivers products the next day. One of the Entersys goals is to increase the share of electronic orders from Dutch customers from 33%, to 50 or 60%. One of the means is better communicate with the systems of department stores V&D and Bijenkorf, which are currently being upgraded to an interoperable EDI based standard. Another priority is to increase the number of Belgian users.

An improved feature of Entersys (service innovation) is the automated creation and sending of receipts to customers. Quick confirmation of the deliverable parts of an order enables retailers and wholesalers to prepare for delivery of the goods, in terms of timing, personnel, and preparation of pricing stickers. Regarding the time of delivery, the needs of large customers have the largest impact on planning distribution resources and routes.

Information in the system could be used to produce and send invoices to users electronically, and to improve the information linked to return orders. The percentage of return orders is relatively small in the Netherlands, around 5%, mainly because of the strong position and large quantity of specialised audio/video retailers. In Germany and the UK, the percentage is between 10 and 15%. The Dutch percentages may increase when sales channels like mail order, TV-sales, supermarkets, drugstores (Kruidvat) and Internet shops become more important.

The future of both Entersys and RSB (shared physical CD distribution) will partly depend on the extent to which sales will go online. If online sales and digital downloading take a strong share of the market, it is an option to integrate RSB with larger German or Nordic equivalents. The integration may be postponed by reducing or critically monitoring the costs and at the same time expanding the efficiency and functionality of Entersys.

Bundling of different entertainment products

The Entersys catalogue already contains audio and video DVDs from a number of major record and video companies (there is significant product differentiation). This enables retailers to bundle the sales of different entertainment products more efficiently. Retailers connected to Entersys, can order DVDs without extra costs, for example, and this provides an incentive for firms to connect to the system. Two Entersys owners - Sony and EMI - do not use the system to bundle entertainment products. A possible strategic motivation for this choice is the availability of more profitable specialist channels to sell products like video DVDs and games. Sony and EMI could focus on direct on-line sales for these products, thus bypassing wholesalers and retailers.

Technology profile of the firm

Nearly all Entersys customers use EDI to contact Entersys and place orders (see below). The EDI system has been built on the EDIFACT standard, as customised for the music industry. In 1999 a new workstation application was introduced. The Entersys software on the user PCs enables importing and exporting ASCII files. Smaller retailers not operating their own database use this option. The Entersys workstation application also includes a network/communication module. Some large users work with the EDI converter. This enables them to work with their own file format, and to communicate with Entersys using the prescribed EDI format. The database is stored off-line in the user's own computer, and is updated twice a week. Entersys installs the necessary processing and communication software. Users only pay telecommunication costs for connecting to the system. Retailers and wholesalers have access to the entire database, and their systems can communicate with Entersys.

Record company representatives log into the system using their laptops, but sales agents only have access to their own products in the database. They visit retailers and promote the CDs from their company. The arrangement preserves established personal networks in the music industry. Sales agents provide retailers with information, special promotions, and discounts, sending orders directly to Entersys.

3.1.2 Interview responses

Motivations: expectations of the firm regarding the effects of e-commerce.

Entersys management stressed two initial stimuli for developing Entersys:

- An electronic ordering platform is becoming a necessary precondition for dealing with key customers.
- For record companies, Entersys is also a tool for improving long-term competitiveness in the market.

Accordingly, the four main motivations for record companies to operate Entersys were entirely practical:

- to improve the efficiency of transaction processes;
- to improve the quality of management of interactions with customers and suppliers;
- to support the launch of new products (the system enables record companies to inform retailers quickly on new CDs and other special actions);
- to structure and arrange relations with customers and suppliers more effectively (which may involve building up more direct relations with retailers).

Obstacles and advantages in exploiting the potential of e-commerce

Comments were recorded regarding the following factors. Some respondents pointed out specific obstacles and advantages, while others commented on the apparent lack of obstacles and advantages that might have been anticipated.

Factors relating to telecommunications infrastructure.

- The state or capabilities of the available telecommunications infrastructure neither stimulated nor discouraged the record companies from developing Entersys.

Regulatory factors.

- Developments were not influenced directly by regulatory factors regarding transaction security, authentication and certification of payments (payments bypass Entersys), or protection of intellectual property.

Internal factors. Four internal factors were identified as stimulating the development of electronic commerce:

- Existing computer technologies were sufficient to support the system.
- There was a sufficient existing pool of staff skills that could be adapted to the new venture.
- Initial investment costs could easily be justified.
- Management was proactive towards e-commerce.

External factors relating to relations with other enterprises.

- Entersys was seen as an opportunity to strengthen commercial relationships at a time when technical and market conditions were evolving rapidly.

Strategic factors relating to competitiveness.

- The system facilitates or encourages stronger relationships with users. Retailers are connected to the industry's ordering platform. The necessary software is installed on their own PCs.
- The system was not disruptive to existing personal relationships in the industry. Sales representatives still visited the shops in their region.
- There were no competing transaction systems, and the Entersys concept operated independently of individual brand image.

Government policy in general.

- None of the government policy factors included in our questionnaire - R&D subsidises, awareness raising programs, government initiatives regarding competition policy, and government provision of electronic

services - were identified specifically as presenting advantages or disadvantages to the Entersys participants.

Effects

This subsection indicates some of the specific impacts of e-commerce on transaction processes as provided by interview respondents in Entersys. These impacts are then evaluated in terms of the kinds of innovation they represent in the music industry value chain. We differentiate between effects that are very likely or measured (E1, E2 etc.) and effects that will probably be realised in the near future (F2, F3 etc.). This allows us to analyse the impact of electronic commerce in an early phase of implementation. In some cases, an effect is linked with a future effect (E2, F2). Both types of effects are mapped onto an interpretative grid. The primary, horizontal axis contains elements of the transaction process and links with the production process. Electronic commerce innovations may be applied to one or several of these elements. The second, vertical axis contains the secondary innovations. Each of the three main types of innovations (product, process, relational) is further itemised, enabling detailed mapping of effects.

Effects on transaction preparation

The EDI based Entersys system contains information on titles, tracks, price and suppliers for any given CD. The Internet web site functions primarily as an information and marketing tool, containing hit lists, special promotions, and news on releases. The catalogues and information services have basically the same content as when they were provided by telephone, fax and mailings. However, in an on-line environment, this content is more timely and easy to access.

- Electronic commerce is applied to two elements of transaction preparation. The comprehensive, easily accessible and up-to-date electronic catalogue, and the attached information services (hitlists, news), provides wholesalers and retailers with more information on products. This product innovation is specified as enhanced product-service bundling (E1): Entersys improves and extends the information component of the product, and hereby adds use-value. This effect influences the relation between record companies and wholesalers and retailers. The relational innovation is specified as increasing the trust/quality of the relation (E2).
- The electronic catalogue and attached information services, together with the ability to electronically order CDs, are the core of Entersys. Initial connection connect requires an investment by the user (mostly retailers). Entersys also invests in the relationship by screening and connecting the user. Engaging into in direct relations results in relational innovation, the effect specified as the increased loyalty of customers (E3). Once on the

system, few withdraw. However, lock-in effects are a factor in loyalty - the initial connection to Entersys requires an investment by the user. This implies more structured and stable vertical relations within the value chain.

Effects on transaction completion

The *settlement* component consists of ordering, billing and payment. Entersys is involved only in the processing of orders. The record companies themselves are responsible for applying the information supplied by Entersys to their own billing and payment systems. Likewise, Entersys output is also used by the companies involved in *logistics*.

- Entersys applies electronic commerce to ordering. In this case, electronic ordering is a logistic process innovation with two effects: a reduction of logistics costs in processing orders, and fewer faults (E4). Beneficiaries of these cost reductions are the owners of Entersys (the record companies) but probably also a number of downstream users (retailers, and some wholesalers).
- The electronic Entersys output is used as input for billing and payment by record companies. It is thus expected that the primary electronic commerce innovation (electronic ordering) will be linked to the process innovation of better co-ordinating and integrating administration functions. (F5).
- The Entersys system provides downstream users with feedback on the order. This influences the delivery of products. This process innovation involves logistics, and enables retailers (and wholesalers) to prepare themselves in terms of deploying personnel and preparing pricing stickers (E6). Rapid feedback also allows retailers and wholesalers to quickly invest other options to get the desired products. If the recently introduced feedback procedures are indeed appreciated, the trust/quality of the relation is further increased (F6).

Effects on production support

Entersys processes information from record companies (mainly the catalogue), and provides it to retailers and wholesalers. It also transfers information in the form of orders from retailers and wholesalers to record companies. This latter information is then available electronically to record companies, and can be imported into production systems. If and how this information is used falls beyond the scope of the Entersys case study as such. However, the increased scope for significant effects on all aspects of production and product development through innovation in the capture and management of transaction-generated information is clear. Also, a number of process innovations become possible. Examples are using the more direct, timely and possibly rich ordering information to better/quicker manage production lines (CD manufacturing) and distribution (logistics), and create other linkages between administration and production functions. Another option is

improving the timing and quality of market analysis, an essential input for product innovations (F7 maps these future effects).

		Electronic Commerce Innovations											
		Transaction Preparation				Transaction Completion				Production Support			
		advertising	catalogues	info services	negotiation	orders	billing & payment	finance	delivery	transaction info capture	information management	market analysis	market development
Product innovations	diversification									F7	F7	F7	
	differentiation									F7	F7	F7	
	Customisation									F7	F7	F7	
	Bundling		E1	E1						F7	F7	F7	
Process innovations	Design												
	Logistics					E4			E6	F7	F7		
	Production lines									F7	F7		
	co-ordination and integration						F5			F7	F7		
Relational innovations	Geographical expansion												
	Market segmentation												
	Trust		E2	E2					F6				
	Loyalty		E3	E3		E3							

Figure 5 Mapping the effects of electronic commerce: Entersys

Conclusion

Entersys is a centralised order-taking activity organised by record companies. There is a close connection with both the pooled (RSB) and individual distribution systems that connect record companies to retailers and wholesalers. The empirical

data collected for this study does not support any conclusions about the extent to which the various actors in the value chain succeed in realising cost reductions by using Entersys. RSB and individual record companies still take orders electronically as well as non-electronically. One third of Dutch retailers do not use Entersys.

However, collective outsourcing of order-taking is introducing a new element to the value chain. Chapter Four addresses some possible indirect effects of Entersys on the configuration of the value chain.

3.2 Case study 2: Bookmark Direct

Bookmark Direct is part of the Dutch company Bookmark, which consists of four units: Consult, Content Centre, TV-Internet and Direct. Bookmark Direct. Bookmark Direct advises and assists companies setting up direct sales channels, primarily business to consumer e-commerce. Bookmark promotes and implements E-base, a product supplied by the US-based Global Fulfillment network. This service combines a platform for an Internet shop with a network of global fulfilment agencies, and includes management services for ordering, billing and logistics. For many retailers, this arrangement decreases the value added of traditional wholesalers. Bookmark buys CDs from wholesalers under standard terms. But by increasing its scale, Bookmark intends steadily to increase the percentage of products ordered directly from record companies.

Bookmark Direct operates a new kind of wholesale company, buying product from record companies, distributors and other wholesalers, and selling them in partnership with (virtual) retailers. Potential retail partners include radio and television stations, Internet Service Providers, and traditional retailers expanding online and choosing not to develop and manage all business functions themselves. The retail partner focuses on the marketing and promotion of the online shop. Bookmark and its international fulfilment partners manage an extensive multimedia product database.

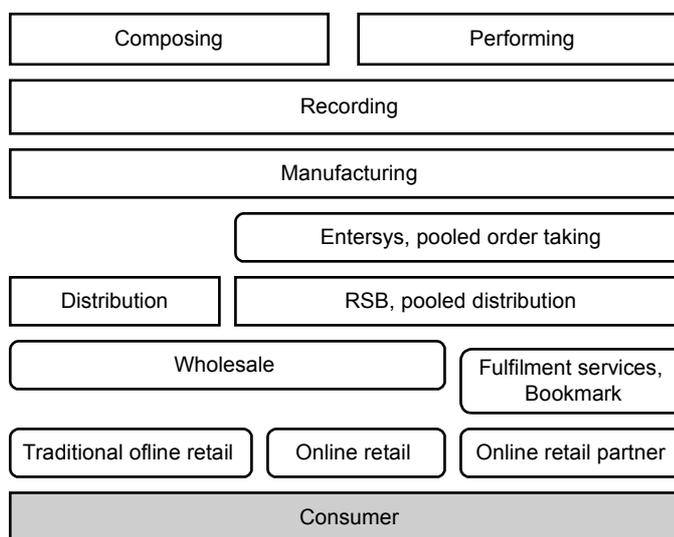
3.2.1 Background

Positioning Bookmark in the music industry value chain

At present, the core business model positions Bookmarks as an intermediary between retailers and wholesalers. However, the ambition of Bookmark is to become an intermediary between record companies and consumers. The latter relationship will be established in close collaboration with retail partners.

Bookmark promotes and implements the Global Fulfillment E-base which is a complete package of all services required to develop and run an online multimedia shop. The basic idea is that the online shop is jointly managed by Bookmark Direct, the fulfilment company, and a retail 'partner' who has an existing strong brand and customer profile.

Figure 6 Positioning Bookmark in the music industry value chain



Business profile of Bookmark

Bookmark procures CDs from wholesalers, on behalf of several retail partnerships, but intends eventually to procure mainly from record companies. Bookmark manages the distribution and billing of products to consumers, often using the brand name of the retail partner. The system enables retailers to sell all products available anywhere in the Global Fulfillment network. This arrangement can lower the entry barriers to establishing an e-commerce interface for retailers and brand owners. Bookmark provides and supports the interface and the partner supplies the brand image and customer relationship.

A strategic aspect of the relation between Bookmark and retailers, is that retailers use a decentralised version of the product database, which they own themselves. They also own their consumer database, and this is an important element of the Bookmark business model. Retailers are seen as equal partners. Bookmark provides its partners with a transparent overview of actual costs, the three largest elements being costs of the CD, postage, and credit card processing. Net revenues are partly used for further improvements. The remainder is split between Bookmark and the retailer. The percentage determined *inter alia* by the marketing efforts of the retailer.

The ambition to build a strong relationship with partners and their customer. This is reflected in the three year minimum term of the contract. Entry costs are approximately EURO 10,000 primarily for integrating the product database and the Internet site.

Technology profile of the firm

The Bookmark interface is mounted on an Internet platform, but the system as a whole requires extensive database and logistics management capabilities. The core building block of E-base system is a product database containing over 1.5 million multimedia products (CDs, books, videos, DVDs, games). CDs make up 80% of these products. The database can be seen as an integrating, meta-database. The second building block is a worldwide logistic network maintained by several logistics companies. Global Fulfillment operates shipping departments that aggregate and ship items of different suppliers to final customers. Products are also distributed directly from producers or wholesalers to customers. E-base encompasses ordering and delivery processes, billing, telephone and email helpdesk services, and database management.

3.2.2 Interview responses

Motivations

Bookmark Direct representatives identified several factors that motivated them to engage in e-commerce initiative for music products:

- Bookmark Direct is motivated primarily by the expectation that an increasing share of revenues will be generated through online sales.
- There is an increasingly close connection between commerce and broadcasting. It is now possible to purchase a CD simultaneously with its broadcast on an online radio station. Bookmark intends to position itself in this market.
- The Internet is not a bargain medium - i.e. it can be exploited effectively without a 'discounting' strategy. The majority of customer decisions are based on satisfaction and loyalty, and loyalty-building is a central element in the Bookmark Direct business model.
- The ambition is to use e-commerce in order to claim a position high in the value chain, when compared to traditional logistic companies; and more central in the value chain, when compared to other companies developing and operating product databases and advising on strategic and marketing issues. Bookmark aims at exploiting integrated information capture on products and customers. Bookmark and its partners are splitting the interaction with the final customer into a sales component, and a fulfilment component.
- It is expected that in the on-line sales model, the economies of scope are substantial. Once established, the extra costs of configuring the database and physical distribution network to accommodate new or different product offerings are low.
- Bookmark anticipates market expansion and extension - gaining more revenues in a wider geographic scope.
- E-commerce is seen as a way to increase generally the efficiency of transaction processes.
- It is expected that e-commerce will improve access to strategic inputs such as capital and knowledge.

Bookmark Direct is entering into an e-commerce initiative in a particularly proactive way, seeking advantages from being a first-mover. The relatively early

entry is aimed at improving the long-term competitiveness of the enterprise in the market. At present, most potential competitors are still deciding how to enter the on-line market. Bookmark provides intermediary services that can lower entry barriers for these firms. Moreover, as Bookmark Direct was already providing fulfilment services to mail order and direct-sales companies, a significant motivation was to avoid the loss of existing customers should competitors enter the on-line services market first.

Obstacles and advantages in exploiting the potential of e-commerce

Factors relating to telecommunications infrastructure

- Declining telecommunication costs and the interoperability of different telecommunication networks were regarded as having facilitated the development of e-commerce. The lack of competition between telecom network operators in the Netherlands was seen as a limiting condition. Limitations of the available bandwidth are seen only as a temporary restriction.

Regulatory factors

- Two limiting regulatory factors are the (perceived) low level of transaction security, and the lack of trustworthy systems for authentication and certification of payments.

Internal factors

- The existing ICT competency of the firm (including skills) was adequate to start the enterprise. The initial investment costs could easily be justified as management regarded the enterprise strategically - seeing Bookmark Direct as a pioneering enterprise of high potential in learning to exploit on-line markets.

External factors relating to relations with other enterprises

External relationships were not seen to provide significant advantages or obstacles to the e-commerce initiative at a general level.

However, two significant operational problems were encountered:

- Some supplier catalogues do not all provide a complete enough range of information. This is a particular problem with pictorial information - i.e. a CD cover photo etc. Most customers regard this as essential product information, and the lack of visuals can create obstacles to Bookmark's

goal of transferring the ‘ambience’ of off-line shopping to the on-line shopping environment.

- Some record companies do not provide complete coding information. Each CD has a product code and each individual track has its own unique code. Companies often do not provide the whole code. This is an obstacle for on-line retailing, and will become even more of a problem as digital downloading of individual tracks becomes a commercial option.

Strategic factors relating to competitiveness

- The application of e-commerce encouraged Bookmark to further develop different kinds of loyalty strategies towards retail partners (the minimum contract period of three years, and the up front investment requirement to integrate the Internet site with E-base).

Government policy in general

- Three external factors related to government policy were identified as possibly encouraging the development of e-commerce - R&D subsidies, awareness raising programs, and initiatives to revise competition policy for commerce in an on-line environment. Bookmark does not itself benefit directly from any of these initiatives.

Effects

This subsection indicates some of the specific impacts of e-commerce on transaction processes as provided by interview respondents in Bookmark Direct. These impacts are then evaluated in terms of the kinds of innovation they represent in the music industry value chain, and either the likely, measured effects or the future effects. Both types of effects are then mapped onto an interpretative grid.

Effects on transaction preparation

As a buyer of CDs from record companies and wholesalers, Bookmark receives regular downloads and updates of its suppliers’ product databases. The information includes product information (title, artist, tracks, cover, price), and is integrated into the Bookmark database. Each joint venture in the Global Fulfillment network has its own database, mainly reflecting local differences in taste. The database for a specific retail site is usually a subset of the Bookmark’s database.

- Regarding catalogues and information services, retail partners can extract their unique product database from the larger Global Fulfillment and Bookmark meta-database. Bookmark also mediates between content

providers and its retail partnerships, hereby enabling retail partners to select information for the products they are selling, and relevant to their target-group. Providing customers with more information on the product is a product innovation, product-service bundling (E1).

- The ability to tailor the catalogue and information to the needs of the retail partner's target-group, is a relational innovation, facilitating market segmentation (E2). This probably will be linked to a relational innovation. It is expected that intelligent market segmentation facilitates more loyal relationships with final customers (F2).

Effects on transaction completion

The settlement component consists of ordering, billing and payment. A final customer places an order at one of the partner Internet sites. The order is processed by Bookmark. Customers can track the status of the order online. After-sales service is mostly taken care of by Bookmark, preferably using email but also using telephone help-desks. E-base includes a payment system. The final customer pays Bookmark. Payments between Bookmark, its suppliers, and its retail partners, are dealt with on structured conditions (e.g. weekly payments).

- The E-base concept implies a close partnership; co-managing an online shop. This covers nearly all aspects of transaction preparation and production support. The minimum contract term is three years. E-base is technically integrated into the partner site. The partnership is a relational innovation, requiring and realising loyalty between the fulfilment company and the retail partner (E3). Inherent is a degree of lock-in through mutual dependency.
- All settlement components are performed electronically (order-taking, billing & payment, and finance (e.g. administration of sales and periodical reports to retail partners)). This is a process innovation, improving the reliability, efficiency and speed of these services. Costs per unit of order taking and billing & payment for Bookmark and its retail partners may decrease as a result of the relational innovation to perform them on behalf of several retail partnerships (these quality and costs effects are jointly labelled E4). To a certain extent, the advantages of electronically performing settlement activities, are noticeable for final customers. It may increase the quality/loyalty of the relationship between the retail partnership and the final customer (F4).

The logistic component of transaction completion cannot be separated for Bookmark as a buyer of CDs and the retail partnership as a seller of CDs. Bookmark buys a CD only when a final customer has ordered one. The complex logistic process is described above. The effects may be summarised as:

- Global Fulfilment's logistic services network is relevant to both the procurement and delivery of products. The process innovation is entangled with the relational innovation to use the logistic network to support all retail partnerships (and procure from a large number of suppliers). The main effect is that chances that a product is available are maximised; the delivery time is minimised (E5). Hereby, the trust/quality of the relation between the retail partnership and the final customer will probably be increased (F5).
- Where there are several available suppliers and distribution routes, the logistics system selects the most cost-effective option, minimising procurement and logistic costs. This process innovation is entangled with the relational innovations to dynamically select suppliers, and to spread (possibly further reduce) the costs of logistic facilities and services across several retail partnerships (E6).
- Global Fulfilment manages a global logistics network, capable of delivering products to customers in a large geographic area. This enables retail partners to expand internationally, engaging into commercial relation with customers in all countries covered by Global Fulfilment and its regional partners (such as Bookmark). In this way, on-line retailing is less limited by physical barriers such as international logistics (E7).

Effects on production support

Bookmark is an intermediary, trading products and providing fulfilment services. It does not produce or manufacture CDs. The intermediary basically adds transaction value, but also add use value, by attaching more information to the physical component of the product. It is not within the scope of Bookmark (and this case analysis) to address the use of orders and other information to improve the ordering and production processes of wholesalers and record companies. As described in the Entersys case (effects), intermediaries are in a position to capture and manage transaction-generated information. Sharing this information with record companies may improve the quality of market analysis, and increase the efficiency and effectiveness of product innovations. Timely and electronically (easy to transfer) information could also be used to better manage production lines and distribution (logistics) and create other linkages between administration and production functions. (F7 maps these future effects).

		Electronic Commerce Innovations											
		Transaction Preparation				Transaction Completion				Production Support			
		advertising	catalogues	info services	Negotiation	orders	billing & payment	finance	delivery	transaction info capture	information management	market analysis	market development
Product innovations	diversification									F7	F7	F7	
	differentiation									F7	F7	F7	
	customisation									F7	F7	F7	
	bundling		E1	E1						F7	F7	F7	
Process innovations	design												
	logistics					E4	E4	E4	E5 E6	F7	F7	F7	
	production lines									F7	F7	F7	
	co-ordination and integration									F7	F7	F7	
Relational innovations	geographical expansion								E7				
	market segmentation		E2	E2									
	Trust		F2	F2					F5				
	Loyalty		E3	E3		E3 F4	E3 F4	E3	E3				

Figure 7 Mapping the effects of electronic commerce: Bookmark

Some specific effects of Bookmark’s activities on other actors in the value chain will be addressed in Chapter four. As mentioned above, fulfilment companies can

be positioned in between wholesalers and retailers. This is to be interpreted as intermediation of the value chain. The Bookmark business model can be regarded as an integration of several applications of electronic commerce. Bookmark is using the possibilities of electronic commerce innovations (mainly relational and process innovation) to build a position in the music industry value chain. E-base enables them to find and retain retail partners. Chapter four will present some conditions under which fulfilment companies may make wholesalers' activities obsolete.

3.3 Case study 3: Free Record Shop, Internet Shop

The **Free Record Shop** is ambitiously pioneering and adapting its B2C retailing in the Netherlands. The online shop opened in January 1998. The company has ambitions to operate throughout Europe and regards e-commerce as a means to expand their geographic scope. FRS is the largest Dutch CD retailer. FRS is a partner in Zonnet, the Free Access Provider managed and controlled by Benelux telecom operator VersaTel.

3.3.1 Background

Free Record Shop (FRS) is the largest retailer of CDs and other digital entertainment products in the Netherlands. FRS is one of the first Dutch traditional retailers to expand on-line, opening their site January 1998. The Free Internet Shop (FIS) is a separate corporation within the FRS group of companies. The case study will focus on FRS as a seller of CDs, but most sections contain observations on the procurement of CDs.

FRS employs 1100 persons (in full time equivalent positions). FIS employs only about eight people. Annual revenues in 1998/1999 were 207 million Euro. Revenues have increased steadily from the 162 million Euro reported in 1996/97. Growth comes from opening new shops, international acquisitions, and by adding new entertainment products to the portfolio. The volume of CD sales has increased, although the share of CDs within total sales has declined to about 55-60%. The company operates 162 Free Record Shops and 33 'upmarket' Van Leest outlets in the Netherlands. It also operates the BRAVO discount shops. FRS also owns three Max Software & Games outlets, and FAME - an entertainment megastore in Amsterdam. FRS has 25 shops in railway stations, a 50-50 joint venture with the Dutch Railway. Belgium hosts 32 shops, Luxembourg two, Finland three, and Norway 14. FRS has a 40% stake in a joint venture, operating 16 shops in Central America.

Positioning the Free Internet Shop in the music industry value chain

Relations with suppliers

FRS buys directly from record companies. Most major record companies participate in distribution companies such as Record Service Benelux (RSB), and also distribute CDs on behalf of smaller record companies. This enables FRS to communicate with a select number of suppliers, and to buy CDs from a large number of record companies. Because of the scale of the FRS retail operation, record companies are proactive in maintaining direct contact with this company - keeping them informed about new releases and negotiating deals. Commercial negotiations are influenced by estimated volume, but are technically separated

from placing individual orders. E-mail is used to facilitate faster and more interactive bargaining procedures. FRS only occasionally uses Entersys to communicate its orders to record companies. For FRS, one disadvantage of Entersys is that it is not a real-time on-line system. Thus, FRS mostly uses telephone and fax (via computer) to place orders with RSB or with individual record companies.

Relations with customers

The Free Record Shop has built up relationships with its customers through its network of shops. FRS operates several concepts, ranging from BRAVO (discount) to Van Leest (upmarket), and from small CD shops at railway stations to large entertainment shops (like FAME and MAX). The Internet shop is a new and complementary place to meet and serve customers. In the value chain, however, on-line retailing, may be positioned at the same level as traditional off-line shops.

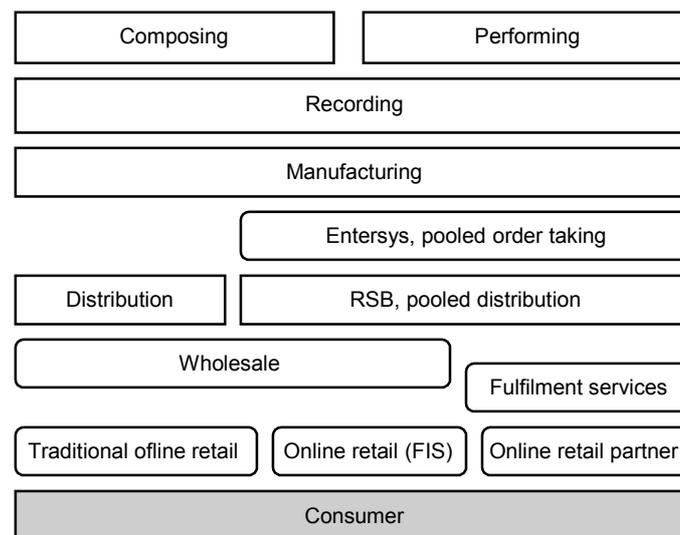


Figure 8 Positioning the Free Internet Shop in the music value chain

3.3.2 Interview responses

Motivations: expectations of the firm regarding the effects of e-commerce

Again, we differentiate between initial stimuli and motivations. Several initial stimuli are mentioned in the annual reports, the interview, and the questionnaire.

- An important stimulus is improving the long-term competitiveness of the enterprise in the market. Potential consequences of the Internet on the competitiveness of FRS are recognised, especially by the management of the Internet shop but also by FRS management.

- A second important stimulus is to avoid the loss of suppliers or customers to competitors already using e-commerce. Our interviewee addressed the threat of both the activities of suppliers (record companies opening online shops) and customers (buying online).
- A third stimulus is to create web-presence, which the company thought the public would expect from the largest Dutch CD retailer.
- Closely linked is: acquiring expertise in view of future evolutions of the market. The 1997-1998 annual report explains the ambitions of the retailer regarding digital downloading. Free Record Shop stresses the value of an independent retailer, offering digital downloads of many different suppliers.
- Two stimuli which were ticked as relevant, but of less importance, are to benefit from first mover advantages, and e-commerce being a necessary precondition for dealing with key suppliers or customers.

Our interviewee ranked five motivations.

- The main motivation is to support market expansion and extension. FRS is focusing on a few countries, both offline and online. Within this territory, the site contributes to higher sales of more different products. Customers all over the world are served.
- A second motivation is to structure and arrange the relation with customers more effectively.
- Closely attached is the motivation to improve the quality of the interaction and relation with customers. The retailer is now in a position to communicate with and hereby collect information on its consumers. In traditional shops, the latter is done with incidental research. Free Record Shop intends to better inform customers on products by their Internet site.
- A fourth motivation is to improve the efficiency of transaction processes. It was stressed that efficiency is indeed important, but of lesser importance than quality and the three incentives mentioned above.
- The fifth and least important motivation to open an Internet shop is to support the retailer's activities regarding product development and the launch of new products.

Improved access to strategic inputs such as capital and knowledge, is not regarded as an incentive to engage into ecommerce.

*Obstacles and incentives related to the introduction of e-commerce**Factors relating to telecommunications infrastructure*

- Two factors were seen as encouraging the introduction of electronic commerce. In general, the development and growth of the market for telecommunications networks and services is seen as an encouraging factor. A second and related factor is the increasing interoperability of telecommunications networks.

Regulatory factors

- Two factors were identified as encouraging the development of electronic commerce. The development and the regulation of systems for authentication and certification of payments, are seen an encouraging factor. The same applies to transaction security.
- Weak protection of intellectual property rights is identified as a discouraging factor. Above, we already mentioned the lack of clarity regarding the use of audio fragments on websites.

Internal factors

- Three internal factors are said to discourage the development of e-commerce. Existing computer capacity was inadequate to support the introduction of the online shop. B2C e-commerce required a new product database. Interfaces had to be developed to communicate with the basic internal FRS database. There is some 'double work' involved in running both systems.
- A second discouraging internal factor is that enterprise staff skills were insufficiently to develop and implement electronic commerce.
- A third factor relates to the uncertainty of future developments. Initial investment costs could not be easily justified.
- An encouraging factor is that management was proactive in developing electronic commerce business plans. An important step was to set up a separate company within the FRS consortium, the manager directly reporting to the FRS board of directors. However, a 'social' barrier mentioned is the culture of the music industry and its employees. The industry employs persons who value personal networks, freedom and fun, and detest efficiency, automation, and electronic interactions.

External factors

- The FRS brand image supported the decision to open an online shop. Above, we already mentioned the relevance of company size. People would expect the largest retailer to go online.
- The second factor is that electronic commerce presented new opportunities to strengthen existing relationships. The company recognises the threat of record companies and artists building direct commercial relations with consumers. Availability of other transaction systems, and factors regarding personal interactions were not applicable, or affecting the company's decisions.
- One limiting condition mentioned during the interview, is providing a good shopping experience. Digital photographs of CD covers and booklets are not widely available. The problem is identified by all interviewees, and is clearly demonstrated when searching the Free Internet Shop catalogue. Record companies should always provide this product information.

Strategic factors

- It is recognised that electronic commerce facilitates and encourages lock-in strategies. Above, we already mentioned the ambition to build more loyal relations with online and offline customers. Options discussed include loyalty schemes and personalised versions of the Free Internet shop.
- Three factors were identified as non applicable / not effecting the decision: the costs of reaching customers or suppliers, the emergence of new forms of intermediation techniques, and new types of supplier and customer management techniques.

Government policy in general

- It was estimated that awareness raising programmes raised the profile of electronic commerce possibilities. A more general factor is that competition policy is stimulating the innovation in electronic commerce. R&D subsidises and government provision of electronic services were either not applicable, or not affecting the decisions of the Free Record Shop.

Effects

This subsection indicates the main impacts of e-commerce on transaction processes and production support, resulting from opening the Free Internet Shop. The information provided by the company representative, is evaluated in terms of the kinds of innovation they represent in the music industry value chain. As in the previous cases, we differentiate between effects that are very likely or measured (E1, E2 etc.) and future effects (F2, F3 etc.). Both types of effects are mapped onto an interpretative grid.

Effects on transaction preparation

For the Free Record Shop, the Free Internet Shop is a new and complementary channel. The described effects are mainly differences between off-line and on-line sales.

- The Internet shop contains a larger assortment and enables rich product information (both transaction preparation). In the Bookmark case, this is interpreted as product-service bundling, a specific type of product innovation (E1). Next to the electronic catalogue and information, ordering is done electronically. This allows the retailer to capture more and valuable information on its customers. This enables the company to know its customers better, and to strengthen relationships with both on-line and off-line customers. The main effect of the Free Internet Shop is that high quality on-line relationships strengthen customer trust (F1). Options for further relational innovation include the announced interaction and entertainment possibilities, and personalisation of services by creating personalised parts of the website.
- An effect of opening an online shop, is that it enables selling a large number of entertainment products, but also marketing and co-selling other products. At the moment, such activities are limited to travel services, but FIS management is researching other options to sell more products to its customer-base. Anticipating that most customers will appreciate the broader range of services, the effects of this relational innovation are the growing importance and benefits of market segmentation and increased trust/quality (F2). It incorporates the strategic factor to foster a required market segment and seeks to sell more products to them, mostly in collaboration with partners. This relational innovation has similarities with other online retail partnerships - e.g. Bookmark.

Effects on transaction completion

The settlement component consists of ordering, billing and payment.

- Ordering, billing and payment are done electronically. This is a process innovation, improving the reliability, efficiency and speed of the settlement process. A general effect of this innovation is improved logistics (E3) - goods can be dispatched more quickly to customers. The innovation also provides added convenience for customers, and it is anticipated that customer experience with successfully completed electronic transactions will increase trust in the retailer generally (F3).

The logistic component of transaction completion basically involves the packaging and dispatching CDs from the FRS central warehouse to individual customers by post.

- The Free Internet Shop sells CDs online. Packages are sent to individual customers. The logistics process is thus totally different from having customers pick up the product in the Free Record Shop. The main effect is the time-lag between settlement and delivery (E4). Separating settlement and delivery probably also effects costs. Whether this increases or decreases logistic costs per unit, depends on a large number of factors, for instance the number of CDs per package. More generally, developing and managing an Internet site, a database, and fulfilment activities requires huge investments. It is expected that eventually, the Free Internet Shop will sell more products than a large high-street outlet, at lower costs per product.
- Free Record Shop focuses on market leadership in a small number of countries. On-line sales facilitates the geographical expansion of FRS activities. Serving customers in a larger geographic area has implications for transaction completion: particularly for delivery. The effect of this relational innovation is to increase the quantity and geographic distribution of customers (E5).

Effects on production support

The distribution process within the FRS is automated. Sales by individual off-line shops and FIS are processed automatically through the internal FRS system. Based on actual sales, the stock system indicates the number of CDs required at any given time. Procurement is still structured around a human interface. The personal feelings and expectations of buyers about the products and market are important, and buyers accept or adjust the stock projections accordingly. Nearly all orders are sent directly to record companies.

It is not within the scope of the FRS case study to address the use of orders and other information to improve the ordering and production processes of record companies. However, as described in the Bookmark and Entersys cases, intermediaries are in a position to capture and manage transaction-generated information. Sharing this information with record companies may improve the quality of market analysis, increase the efficiency and effectiveness of product innovations, enable better management of production lines and distribution (logistics), and create other linkages between administration and production functions. (F6 maps these future effects).

		Electronic Commerce Innovations											
		Transaction Preparation				Transaction Completion				Production Support			
		advertising	catalogues	info services	negotiation	orders	billing & payment	finance	delivery	transaction info capture	information management	market analysis	market development
Product innovations	diversification									F7	F7	F7	
	differentiation									F6	F6	F6	
	customisation									F6	F6	F6	
	bundling									F6	F6	F6	
Process innovations	design												
	logistics					E3	E3		E4	F6	F6	F6	
	production lines									F6	F6	F6	
	co-ordination and integration									F6	F6	F6	
Relational innovations	geographical expansion								E5				
	market segmentation		F2	F2									
	trust		F1	F1		F3	F3						
	loyalty		F2	F2									

Figure 9 Mapping the effects of electronic commerce: Free Record Shop

As mentioned above, online retailing is positioned at the same level as offline retailing. There are therefore no direct effects on the configuration of the value chain as such. Chapter four will present some conditions under which online

retailing and synergies between offline and online retailing lead to consolidation or shake-out of offline retailers.

4. Impact of electronic commerce on the music industry value chain

4.1 The implications of case study findings for value chain dynamics

Although some disintermediation effects can be observed, most of the impacts of e-commerce on the music industry value chain can be characterised as reintermediation. General trends in the industry to reinterpret the wholesale function are reinforced by e-commerce. Vertical integration tendencies are clear, as where record companies (and even individual artists) own on-line distribution businesses and on-line shops. But in many cases, traditional activities are performed by new actors. Fulfilment companies perform some of the wholesale, retail and distribution activities, but wholesalers and distributors are also repositioning themselves to do business in an on-line environment.

The following sections summarise and interpret some of the key findings from the cases studies, in terms of effects and potential effects on value chain dynamics for individual constituencies within the value chain.

4.1.1 Composing & Performing

The effect of Entersys on the position of composers and performing artists is likely to be indirect and small. However, if Entersys succeeds in reducing transaction costs and increasing vertical co-ordination, this may influence other activities of its owners, the major record companies. Examples are A&R and marketing activities.

At this stage it is only possible to speculate on the influence of off-line retailers like the Free Record Shop who are expanding online. However, artists may expect these retailers to maintain both off-line and on-line sales channels. To the extent that they successfully implement synergy strategies, the general availability of artists' products may increase.

Potentially, Bookmark and other fulfilment companies could enable artists to engage directly in retail partnerships to distribute their own work. This would leave them free to focus on creating new copyrighted properties, live performances, and developing relationships with their customers. Options include limiting the product database to the artists' own products, or to genre.

The reduced entry barriers for artists in establishing a retail outlet may increase the independence of artists vis-à-vis record companies and retailers. At present, most of the distribution and marketing channels to wholesalers, retailers and consumers is controlled by record companies, either individually or through pooling (e.g.

RSB). Most record companies have a world-wide network of media contacts, enabling well orchestrated marketing campaigns. The local subsidiaries of record companies play an important role in managing the local distribution and marketing channels.

The Internet provides artists with an additional, or maybe substitute, platform for world-wide marketing and promotion campaigns, but intersection with the mainline music industry may be inevitable. For example, the US based ArtistDirectNetwork, supports sites by Beck, the Rolling Stones and other well-known and less-well-known artists. In January 2000, however, the company entered into a strategic relationship with Universal, BMG, Warner and Sony, in which the four majors invested in the Internet initiative.

On-line distribution may further increase the independence of artists. As with the on-line sales model, sales, distribution and marketing can be handled in collaboration with companies who operate outside the record company orbit. The logistics services of fulfilment companies will probably be performed by specialised and secure digital services providers. This will be closely linked to the copyright management system. As no 'manufacturing' is required, production functions are limited to the recording process. Although traditionally controlled by recording studios (many owned by record companies), sophisticated digital production technologies and expertise are now within reach of many individual artists.

4.1.2 Record companies

The main effect of Entersys on its owners, the record companies, is the reduction of costs to process orders. Second order effects include a more efficient provision of information to logistics, and cheaper and faster co-ordination within the chain. It is not yet clear whether the benefits of Entersys outweigh the costs of operating the system. The record company distribution pool (RSB) is still also taking non-electronic orders (especially from small retailers). Record companies individually are also taking electronic and non-electronic orders directly from large retailers such as the Free Record Shop. There may be an effect on the value chain, when the functionalities of the system are extended.

Bookmark and other fulfilment companies can become large volume buyers of CDs. Their bargaining position may be compared to the position of large off-line and on-line retailers. Various on-line retailers have the ambition to also provide fulfilment services, and enter into as many retail partnerships as possible. Bargaining power applies also to the Internet shops owned by traditional retailers. For example, the bargaining power of the Free Record Shop is increased through large-scale procurement for both their off-line and on-line shops. Economies of scale at the retail level may have other effects on the market position of record companies.

In the case studies, we identified several activities currently performed by record companies, which could also be performed by other actors. In a direct on-line distribution model, for example, one could say that the ‘manufacturing’ function is being transferred to the customer in the sense that the retailer or the individual consumer must make the investment in the technology necessary to produce CD copies of downloaded materials. Large retailers could benefit from this reshuffle of activities. Building on scale effects from ‘customer ownership’, they may be in a position to play a stronger role in marketing and promotion.

The major record companies are unlikely to be inactive in face of the above possibilities. They can be expected to use their deep pockets to control any reshuffle of activities - either through acquisitions of new entrants in specialised segments of the market, or forming strategic alliances with new entrants. Record companies have the advantage of being able to support new ventures in the on-line environment with the strong existing revenue stream from off-line activities.

4.1.3 Wholesalers

Wholesalers are threatened if the scope of ventures like Entersys increases. It will be harder to realise added value by redistributing small packages towards mostly small retailers. In order to prevent by-pass, wholesalers are themselves investing in sophisticated Internet or EDI based systems. Both Entersys and wholesalers try to offer retailers more transaction quality by integrating the catalogues of as many record companies as possible, and by providing correct information on availability and delivery times.

It is too early to predict the demise of wholesalers through disintermediation. A relevant observation is that the number of Entersys users is relatively stable. Strategic options to improve the system must be decided upon by its shareholders, who are the major record companies. Another observation is that some wholesalers are investing in a promising strategic option. They can bring their database, stock management and distribution expertise into a retail partnership with for example a radio station or record company.

The effect of Bookmark’s activities on wholesalers depends ultimately on the success of this concept in the market. Bookmark and other fulfilment companies are trying to acquire the scale necessary to bypass wholesalers. Consolidation of record companies may make this easier, as it decreases the transaction costs of finding suppliers. We reckon that mainstream wholesalers will have a more difficult task defending their position than will ‘genre’ or locally specialised wholesalers, who maintain their own networks of small suppliers. Specialised wholesalers can be of value to both fulfilment companies and retailers.

The activities of the Free Record Shop's have some negative implications for wholesalers. The company already has the scale necessary to bypass wholesalers altogether. Bundling on-line and off-line activities will further increase the company's market share. The scale, brand, trust and customer base of large integrated off-line/on-line retailers contributes to the take-up of on-line sales. The FRS ambition to offer integrated fulfilment services can support a dynamically segmented on-line landscape.

On-line distribution is probably the retail model with the fewest opportunities for wholesalers. Record companies are reluctant to allow other parties to manage the storage and duplication of digital masters. New intermediary functions are 'digital warehouses' (hosting), copyright management, and online distribution of music recordings rather than wholesaling as such.

4.1.4 Retailers

Most traditional retailers benefit from Entersys as the one-stop-shop concept can reduce transaction costs. Entersys provides a single electronic ordering platform linked to all of the RSB partners. However, the added value of the system is less for large retailers, who can operate their own systems to place large volume orders directly with record companies.

The Entersys B2B ordering platform will have little immediate impact on on-line retailers because Entersys and closely connected distribution services like RSB are oriented to delivering CDs to traditional retailers. Entersys was developed to make dealings in the off-line more efficient, and 95% of Entersys users are small enterprises. Although on-line sales may increase, rapid decline is not expected in the market segment occupied by the kind of shops that deal with Entersys. However, Entersys will likely play at least a transitional role during the growth phase of on-line retailers. Bookmark explicitly sketched a scenario for acquiring economies of scale, which concentrated first on ordering from wholesalers, then from Entersys, and, finally, directly from record companies.

The main effect of fulfilment companies on retailers, is that they reduce entry barriers to on-line retailing. Bookmark's E-base enables media companies and others to provide their particular consumer market segments with a ready-made on-line shop. The brand and the customers are already there. Fulfilment companies have the potential to support a diverse landscape of on-line retail partnerships. Part of the strategy is segmentation and personalisation, and the other part is acquiring scale advantages for dealings with suppliers.

The evolving relationships between various types of on-line and off-line retailers have implications for competition, and for creating conflicts in supply channels. Record companies sell CDs to both off-line and on-line retailers. They now also own or participate in the operation of on-line shops. Thus, although record

companies derive substantial revenues from venues like the Free Record Shop in an off-line environment, they can become direct competitors in an on-line environment - basically offering the same products at about the same prices. To an extent, record companies manage these frictions and conflicts by structuring their retail activities as independent divisions, but the vertical integration scenario always looms.

On-line distribution will have many diverse impacts on retailers. For traditional retailers, on-line distribution could divert sales volume from their stores, particularly as on-line retailers position themselves to sell direct downloads. On the other hand, on-line and off-line distribution could be symbiotic in revenue generating terms. Both Free Record Shop and Bookmark have the ambition to combine on-line sales of CDs with direct on-line distribution. Furthermore, the possibilities and complications of on-line distribution have pushed record companies into new intermediary activities, like copyright management services.

4.1.5 Consumers

The viability of on-line music sales and direct downloading is to an extent connected with customer preferences regarding the retail model. In the Dutch market at least, strong indications were that the local record shop would be a survivor of technical change. There are social and cultural factors in music shopping behaviours, and not all customers will prefer surfing the web to searching through CD racks. Consumers derive some positive indirect benefits from facilities like Entersys in that the ordering process is speeded up, and availability is increased, particularly when dealing with small shops. Indeed, one likely scenario is that consumers will use on-line facilities as a fall-back method whenever titles cannot be found on retail shelves. This could be an especially important consideration in speciality market segments, or in minority language markets like the Netherlands.

For the consumer, the greatest potential for impacts on products, presentation, price, and choice may come from fulfilment schemes like Bookmark. In this concept, retailers preserve their own commercial identities with customers and choose their own product offerings, which can be diverse. Retailers not usually associated with music sales can use the on-line environment to develop a business in entertainment products. From one perspective, this may decrease consumer choice as product ranges become tailored to brand images. From another perspective, increasing the range of retailers who sell music products may create more competition in the market and exert downward pressures on prices.

On-line distribution will provide consumers with another way to buy music recordings. An extra advantage compared to on-line sales, is the potential for product innovation in the form of customised CDs. At this point, possible effects of on-line distribution on prices are difficult to determine.

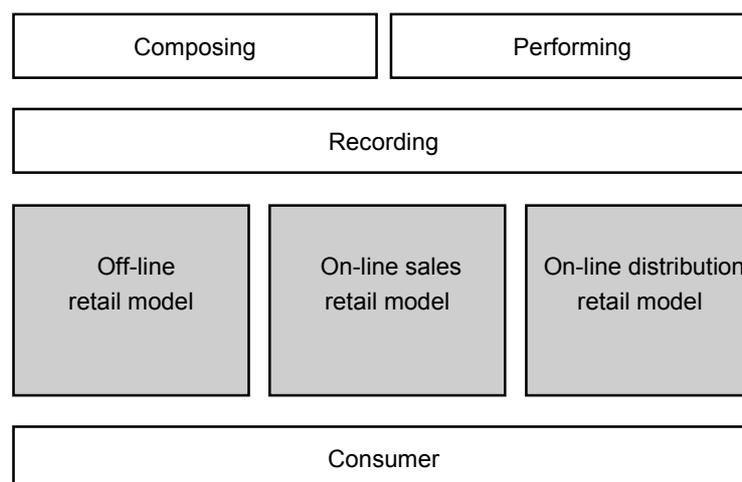
4.2 Mapping changes in the music industry value chain

The introduction of B2B and B2C e-commerce is providing established actors in various section of the music industry value chain with more options. Retailers and record companies can bypass wholesalers. Retailers can order directly from wholesalers, or through enterprises like RSB and Entersys, or directly from individual record companies. Record companies can open on-line shops that both sell packaged CDs, and offer on-line distribution.

New actors, such as fulfilment companies, are increasing the number of options even further. Traditional retailers can expand on-line independently, or in partnership with fulfilment companies. The activities bundled by fulfilment companies also can be offered independently, for example by companies providing database, logistics, marketing and strategic consultancy services.

Any map of the current dynamics in this value chain must reflect this range of new options. Figure 10 situates the three most basic current variants of the retail model. At this point in time, off-line sales activities generate most of the revenues, but this could change rapidly if more consumers engage also with the other two variants. Different consumers may transfer all or part of their buying patterns to the on-line sales and on-line direct distribution modalities. As a result, most retailers will probably have to engage with all three modalities at the same time - i.e. it is unlikely that in the foreseeable future any of these modalities will disappear.

Figure 10 The changing retail model within the music industry value chain



Each of the three variants in Figure 10 can be unpacked to reveal scenarios for the further development and exploitation of e-commerce.

In the value chain for *traditional off-line retailing*, one possible scenario is the disintermediation of the traditional wholesale activities (Figure 11). This could occur if pooling initiatives like Entersys added more service levels to their portfolio, thus incorporating most of the value that traditionally was added by wholesalers. If this occurred, all large and small retailers could obtain all products in a much more direct fashion from record companies. However, it should be recalled that Entersys is a co-operative venture of the large record companies. If fully disintermediated procurement services were to be provided mainly by a record company consortia, competition issues might ensue. Indeed, the role of independent intermediaries could come under additional threat should further consolidation occur among the record companies and/or among retailers.

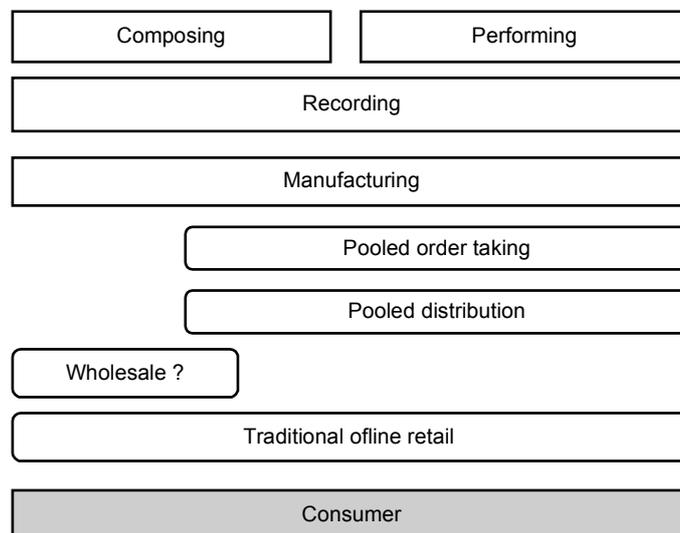


Figure 11 Value chain variant for traditional off-line retailing

On-line retailing is presently in a very dynamic phase, and the implications of developments in the value chain are more difficult to capture. On-line retailing is being implemented by many traditional types of retail operation, ranging from large multinational chains to individual shops. It is also being exploited aggressively by new entrants who have primarily an on-line market presence. Some of the options for change in the value chain as it applies to on-line distribution are shown in Figure 12.

Some on-line retailers keep physical stocks, procured through the same channels as used by off-line companies. Other retailers outsource activities like product database management, stock management, and logistics. Logistics companies such as TPG and UPS have ambitions to expand their activities from ‘driving trucks’ to general management of the logistic processes for on-line retailers. These relationships emulate the services of an integrated fulfilment company - the major

difference is that in this case it is the retailer who co-ordinates the network and selects the partners. Integrated fulfilment companies such as Bookmark can buy products on a large scale on behalf of several retail partnerships.

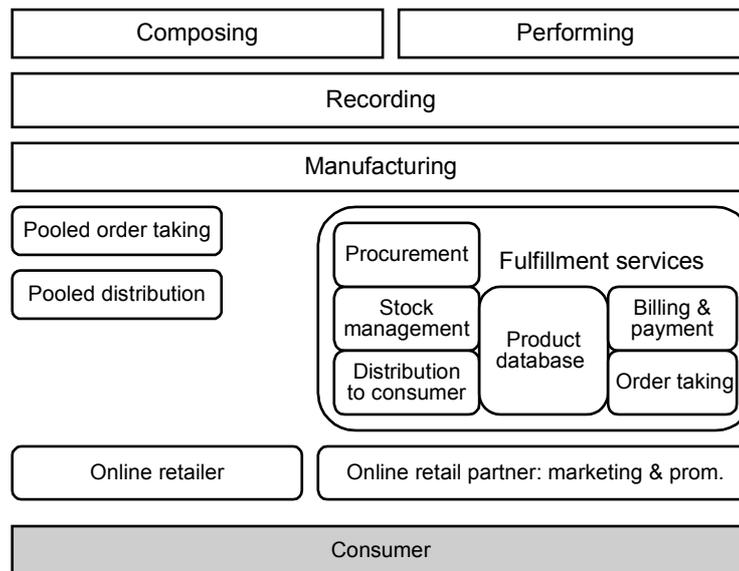


Figure 12 Value chain variant for on-line retailing

The third variant is **direct on-line distribution**. As explained in Chapter One, music files can be distributed in various ways. Some technologies - like MP3 - provide no safeguards against unauthorised distribution. Others - like A2B - incorporate encryption algorithms that preserve author rights, thus facilitating distribution on a commercial basis (including direct to consumer). In this latter scenario, copyright management functions can be positioned close to recording functions. Copyright management systems enable artists and record companies to sell copies to retailers, and/or to keep track of how many copies are distributed to individual consumers.

Within retail partnerships, the options to divide activities between various actors are the same as in the on-line retail model. The difference is that retailers will probably no longer keep stock in the conventional sense, preferring instead to access music files on an 'as needed' basis. Fulfilment companies may still negotiate with record companies and intermediate the ordering process for music recordings on behalf of several retail partnerships. The connections between the various activities have to be very tight, and the systems need to be compatible. Figure 13 illustrates a possible configuration of the on-line distribution value chain.

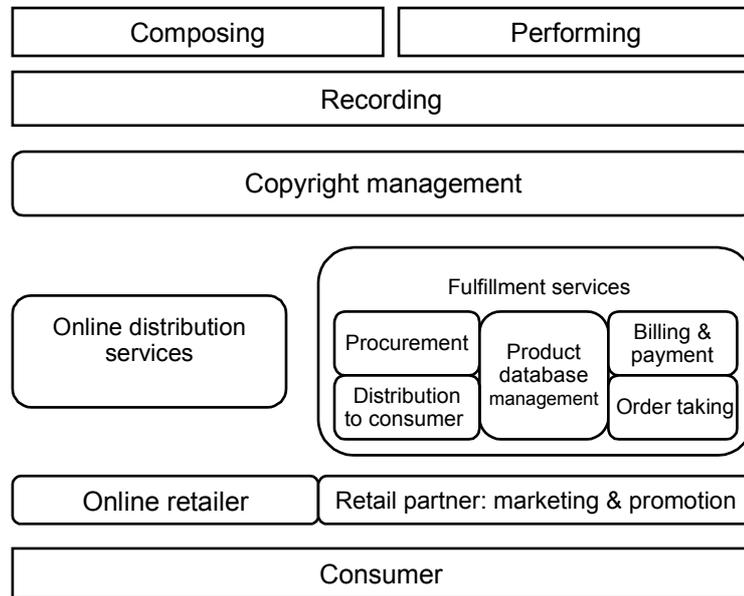
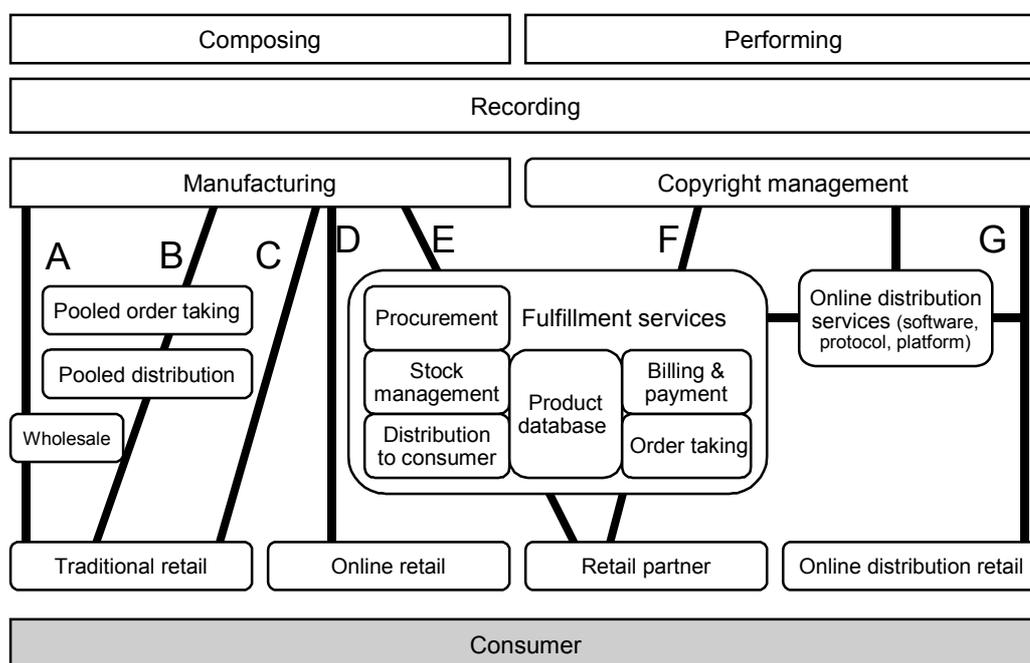


Figure 13: Value chain variant for on-line distribution

4.3 Value chains and value networks

The value chain variants for on-line sales and on-line distribution reflected the increased number of options available for actors to ‘make’ and/or ‘buy’ the necessary operational solutions. In order to facilitate future discussion about scale, synergies and strategies in connection with exploiting these variants, two alternative ways of visualising the possible connections between the variants can be considered.

The first option is simply to draw connections between the three retail variants, based on currently observable practice, and knowledge of the strategic directions being considered or undertaken by various actors in the industry (Figure 14).



- A: CD distributed from record company (RC) to wholesaler, to traditional retailers
- B: CD distributed from RC to traditional retailers, with pooled order taking and distribution
- C: CD distributed directly from RC to traditional retailers
- D: CD distributed directly from RC to online retailers
- E: CD distributed from RC to a company providing fulfillment services for online retail partners
- F: Music recording distributed from RC or copyright manager to company providing fulfillment services for online distribution retail partners, using distribution services
- G: Music recording distributed from RC or copyright manager to online distribution retailer, using distribution services

Figure 14: Seven different flows through the music industry value chain

A second option is to create a value network as depicted in Figure 15. The network scenario stresses the increased options, and highlights questions as to which actors have the ambition and market position to become central actors in co-ordinating the network.

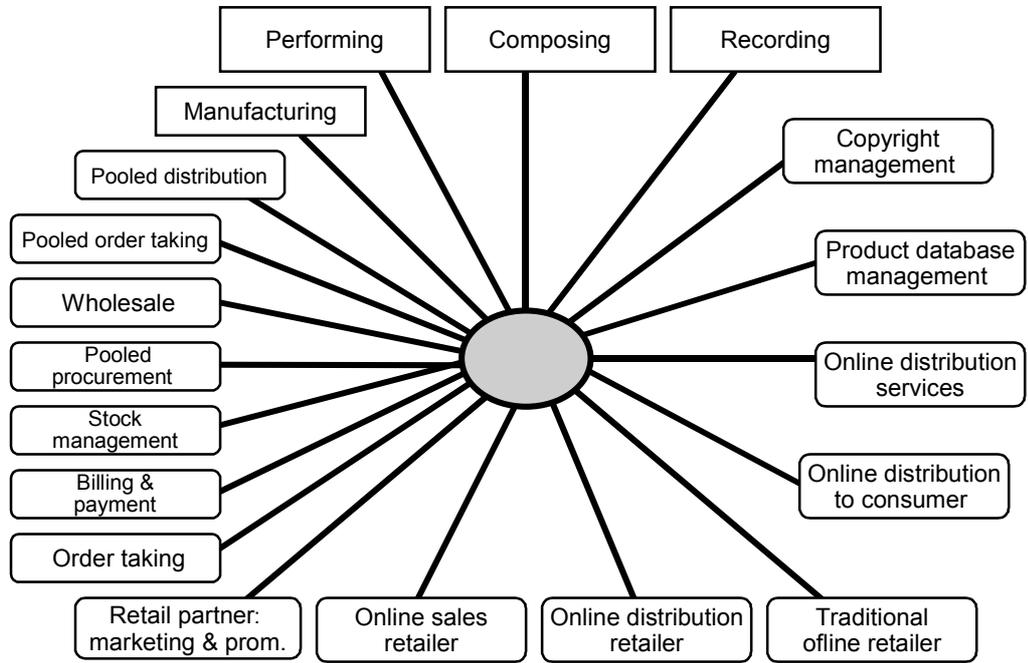


Figure 15 Music industry value network

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Background information on interviews

The case studies are based on interviews with key representatives of the companies. Information was obtained during interviews with:

Mister Martien Verdeuzeldonk, managing partner Bookmark, December 3, 1999, 15.00 - 16.30

Mister Rob Schouw, commercial director BMG Benelux, Wednesday December 8, 1999, 14.00 - 15.30

Mister Nico van Biemen and mister Henk Schel, respectively chairman and boardmember of Stichting Entersys, December 6, 1999, 10.00 - 11.00

- Mister Igor Verhoeven, manager Free Internet Shop BV, part of the Free Record Shop Holding, December 17, 1999, 16.00 - 18.30

Before the BMG interview, Rob Schouw and the authors were questioning whether BMG Benelux could be regarded as a proactive actor in the music industry. During the interview, it became clear that the activities and strategy of BMG Benelux were not proactive, and that they were to a large extent determined by the international headquarter of BMG. Mister Schouw informed us on some industry trends and issues, and on the different activities within the Bertelsmann holding (mainly online bookstore BOL and music club ECI).

One of the elements of the IPEC methodology is 'doublechecking' the information provided by the proactive firms. Given the time and budget constraints, we choose to contact several users and non-users of Entersys.

The authors have found many difficulties convincing wholesalers and retailers to participate in the research project. Three retailers commented on Entersys, and on general developments in the music industry. These are Kroese Arnhem (mr. Henk Visser), De Wilde (mr. Martin de Wilde) and Plato Den Haag. We spend two informing hours talking by telephone to Harry Hovink, director of Plato Den Haag. Because of its pioneering activities in the field of online CD retailing, we addressed both Entersys and Plato's online activities. Of Plato and the Free Internet Shop, both proactive actors, we selected the Free Internet Shop for an analysis in this research paper. Deciding factors include the larger scale of online and especially offline activities, and possibilities to benefit from synergies.

July 2000, concept versions of the cases were send to the interviewees. We have asked them to identify confidential information and misinterpretations. The comments have been worked on in July 2000.

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BMG, Bertelsmann Music Group [bmg.com]

Bookmark, i.a. the Bookmark Newsletter [bookmark.nl]

Buma/Stemra [buma.nl]

CDnow [cdnow.com]

EMI [emigroup.com]

Entersys, joint record companies ordering platform for Benelux [entersys.nl]

Federal Express (FedEx), e-business tools [fedex.com/us/ebusiness/]

Free Internet Shop [frs.nl]

Get Music, collaboration of BMG and Universal Music Group [getmusic.com]

Global Fulfillment [globalfulfillment.com]

International Federation of Phonographic Industries [ifpi.org]

International Music Joint Venture [imjv.net]

LiquidAudio [liquidaudio.com]

MP3.com [mp3.com]

Music House, Dutch music retail franchise organisation, and wholesaler [musichouse.nl]

Plato [plato.nl]

RealNetwork, Realaudio [real.com]

Recording Industry Association of America [riaa.org]

RSB, Record Service Benelux [rsb.nl]

Secure Digital Music Initiative [sdmi.org]

Sky Radio, the online shop build on Bookmark's E-base [skyradio.nl]

Sony Music [sonymusic.com]

TPG, TNT Post Group, Loop e-fulfilment [tnt.com/loop]

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