

# **The Power of the Middleman in Electronic Markets – The Case of the German Bookselling Industry**

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The paper focuses on the hypothesis of “disintermediation”, that establishes a diminishing role for traders, or intermediaries respectively, with the arrival of electronic commerce, because producers and consumers may transact online in a direct way. However, the analysis of the German bookselling industry, which has a relatively well-established branch of b2c electronic commerce, presents an ambiguous picture of disintermediation. Structural changes which are not only caused by technological development, result in a wide range of types of traditional and new online intermediaries which fulfil specific combinations of intermediary functions.

## **The “Disintermediation” Hypothesis**

In the early discussion of electronic commerce, we can find the hypothesis of “disintermediation” (e.g. Benjamin, Wigand 1995). The spread of information and communication technologies (ICT), in particular the Internet, allows the reduction of necessary time and costs for gathering the information that is relevant for trading transactions. Therefore, producers and consumers should be able to better transact directly. As a result, the intermediary functions of traders, e.g. wholesalers and retailers, would become more and more unnecessary.

However, critics of the “disintermediation” hypothesis state that ICT, in fact, supports the intermediary functions and does not substitute them easily (e.g. Sarkar, Butler, Steinfield 1995; Bailey, Bakos 1997; OECD 1999). The intermediary functions include, for instance, information, aggregation, assortment, transport, storage, selling transactions, and after-sales services. Instead of the complete shift of intermediary functions to automated electronic markets, it seems more a question which institution or economic actor in the online and offline world can perform particular intermediary functions better than others. Today, the case of a complete disintermediation in electronic commerce, where producers and consumers perform all intermediary functions without any trading intermediaries, is relatively seldom in terms of the sales volume.

## **Analysis of the German Bookselling Industry**

In the following, we present some of the key findings from our study of the German bookselling industry (Riehm, Orwat, Wingert 2001), that was conducted on behalf of the Akademie für Technikfolgenabschätzung in Baden-Württemberg in 2000. Their financial support is gratefully acknowledged. One of the purposes of our study was to investigate the changes in the industry structure that are caused by electronic commerce, and, in doing so, to test the “disintermediation” hypothesis. To this end, we interviewed

29 industry experts from 22 institutions, including book wholesalers, online and offline retailers, publishers of printed and electronic books, the industry association and science. The interviews are backed by an extensive study of the available business and theoretical literature.

To analyse the impacts of electronic commerce, the bookselling industry is particularly instructive, because, books were one of the first goods that were traded over the Internet. Therefore, we can examine a relatively long period of online activities and offline reactions. In 2000, around 2,150 online bookstores existed on the German market, most of them as online branches of stationary bookstores. Books are also one of the most frequently traded goods in b2c e-commerce. In Germany, the total value of books sold over the Internet was about € 193.2 million in 2000. However, if one considers relative figures, online book sales are just 2.3 per cent of the estimated €9.42 billion sales of the entire industry (including journals and magazines) (Börsenverein des Deutschen Buchhandels 2001). Another reason to choose the bookselling industry is that we can find a variety of types of book trade as depicted in Table 1.

<b>Criteria</b>	<b>Appearances</b>
<i>(a) Type of books:</i>	printed <i>versus</i> electronic books
<i>(b) Type of selling:</i>	direct selling <i>versus</i> trade by intermediaries
<i>(c) Channels of transaction:</i>	conventional <i>versus</i> online
<i>(d) Channels of transportation:</i>	conventional <i>versus</i> online

**Table 1: Differentiation of Book Trade**

For printed books, we know that books can be sold directly by mail order business or with the intermediation of traders, in general the book wholesalers and the book retailers. In contrast to conventional bookselling in local stores, we talk of electronic commerce if the transaction (i.e. informing and contracting) takes place online over electronic networks. Printed books can only be delivered by conventional methods of transportation. The relatively new electronic books - or eBooks for short - may have significant implications for book distribution because, as digital goods, they can be delivered on electronic networks. This has the technical potential of selling directly from authors or publishers to consumers with the use of online channels for transaction and transportation and this would be another case of disintermediation in the book market.

### **Changes within the German Bookselling Industry**

The current situation of the German bookselling industry has many facets that are not only shaped by the emergence of electronic commerce.

The German bookselling industry shows a modest change in the structure of sales channels. To illustrate this, Table 2 depicts the sales developments of different types of book sellers.

	1980	1985	1990	1995	1997	1998	1999	2000
Stationary Bookstores* (in per cent)	74.7	76.9	74.4	74.7	73.4	72.8	72.3	71.7
Mail Order ** (in per cent)	6.5	5.8	7.8	6.4	6.9	7.0	7.3	8.1
Direct Sales by Publishers (in per cent)	11.3	11.4	13.8	14.7	15.9	16.4	16.7	16.6
Book Clubs (in per cent)	7.5	5.9	4.0	4.2	3.8	3.7	3.7	3.7
Total Sales (in €billion)	3.9	4.7	6.4	8.4	8.9	9.1	9.2	9.4

*Note:* \* including book sales in department stores, superstores, and other retail establishments selling books; \*\* including web-based book sales.

*Source:* Börsenverein des Deutschen Buchhandels 1982, 1986, 1992, 2000, 2001.

**Table 2: Retail Sales for Various Types of Book Sellers in Consumer Prices, 1980 to 2000**

A characteristic of the industry is that book price fixing reduces competition with price variables. The price fixing was established by an industry consensus between publishers, book wholesalers, as well as book retailers, and requires retail prices which are recommended by publishers. Industry proponents attempt to back the book price fixing by arguments such as securing the production of culturally valuable literature, maintaining the variety of opinions or the book distribution even in remote locations, but the European Commission is currently increasing the pressure on it. About three quarters of the interviewees estimate that within the next five years book price fixing will no longer exist. For instance, relatively small bookstores organize themselves in co-operatives to share marketing synergies and to gain bargaining power vis-à-vis publishers. Some industry representatives articulate greater fears about the drop of book price fixing rather than about the challenges of the Internet.

Market concentration within particular sales channels is increasing due to mergers and the growth of bookstore chains, but up to now the German bookselling industry is less concentrated than other national retail industries and also less concentrated than foreign bookselling industries. To illustrate, in 1996, the six largest German book chains had a 10 per cent share of total sales, and in 1999 it amounted to 16 per cent. In contrast, in 2000, the four largest French book chains had 43 per cent of total sales, and in the USA they had even gained 49 per cent. One reason for size growth and concentration is that a powerful market partner achieves better rebates from the publishers. Another reason might be that significant segments of consumers prefer brand-name bookstore chains because of their broad assortment and their pleasant atmosphere created by reading corners, cafés, and so on.

Parallel to the changes in market structure, one can observe a kind of “media change” caused by digitisation and the availability of electronic networks. The underlying digitisation of the book content enables new business activities, in particular printing on customers’ request (“books on demand”), converting the book content for dedicated electronic reading devices (“electronic books”), and delivering the book content completely or piecewise over electronic networks. Overall, a once digitised book should be exploited in different ways (“content syndication”). However, this trend also contributes to the “boost” of book titles. In 2000 for example, around 83,000 new book items flooded the German book market (Börsenverein 2001). Moreover, the new media usages compel traders to adopt new types of distribution and sales, i.e. a kind of “digitisation of trade”. This encompasses the new types of online selling and content delivery over electronic networks.

## **Disintermediation in the Bookselling Industry**

In book market history, there have been many attempts by authors or publishers to establish direct selling of printed books and to circumvent book wholesalers and retailers. Experiences with recent attempts at direct online-bookselling repeat the characteristics of these mostly unsuccessful approaches in history. The discussion in economic theory also concludes that book trading concepts have advantages over direct bookselling, including the consideration of costs and efforts of transacting for both producers and consumers (transaction costs). Therefore, it is unlikely that direct bookselling will dominate in general in the near future for printed as well as for electronic books. The hurdles of disintermediation include technical and economic reasons, which are described in the following.

Direct booksellers have to bear the costs of the online shop technology and of the selling operations, including processing of purchase orders, invoices, or returns and complaints. Instead of this, intermediaries can gain significant economies of scale by specialising in the transaction infrastructure and the related activities.

Consumer studies conclude that most consumers are not sufficiently willing to pay for online content, one reason being that great portions of content are offered online as advertising measures. As a consequence, many online offers may not be viable with some exceptions, such as scientific or business literature. This may change, as recent business models demonstrate, especially if they provide an added value to the consumer, like instantaneousness of access, multimedia features or that buyers do not have to pay for not needed parts of a book. Additionally, effective and cost efficient systems of electronic payments are, at the moment, not commonly accepted, not available or affordable, in particular for small direct sellers.

Electronic books, as digital goods, need a display device to be consumed. However, current approaches for eBooks, such as specialised software and dedicated display devices, are reluctantly accepted by consumers according to their subjectively felt limited user comfort. Furthermore, PC screens are not frequently used to read entire books, and printing eBooks transfers the printing cost to the consumer and may, in some cases, be prohibited by the publishers. More important, to secure copyright protection the employed “digital rights management” approaches attempt to exactly specify the ways of use, i.e. the number of readings, copying, printing, lending, and so on. The consumer will no longer be the owner but only the (temporary) lender of an electronic book. In general, these approaches may curtail the consumers’ fair use rights (e.g. copying for friends). Additionally, the use of an eBook is tied to a single proprietary reading system of a company, that may rather discourage purchases.

Furthermore, electronic markets are characterised by considerable information asymmetries and information complexity. Without improving measures or institutions, customers are uncertain about the quality of the products and services they would like to buy. The anonymity of electronic markets, the regional distance and (in some cases) the cross-border destinations of transactions, as well as the absence of nearly simultaneous cash payments contribute to the uncertainties. One of the measures for improvement is the reputation of the online seller, but this requires not only the long-term provision of satisfying services and products but also costly advertising measures. Additionally, consumers mostly have limited resources of attention for product offers. Complete market observation, evaluation and selection of all books for a specific interest is, in most cases, not possible due to limited time resources. However, the more resources are

needed in order to get consumers' attention, awareness and trust in the quality of the provided products and services, the greater are the barriers to entry to electronic markets. On the one hand, this is a hurdle for direct bookselling, and therefore concentration in online markets may increase again. On the other hand, this also may create opportunities for stationary bookstores to transfer their established reputations from offline to online retail.

### **The Changing Role of Intermediaries in the Bookselling Industry**

Especially with direct selling the consumers may face a kind of "information overload" due to the complexity of supplied book titles and considerable uncertainties about offered services and products. The results are transaction costs that consumers would have to bear for search, information and evaluation. In economic theory, the existence of trade intermediaries is explained by their specialisation to reduce these transaction costs. They carry out informing, selective and evaluative functions, enable the matching of supply and demand and conduct the payment services. Additionally, they aggregate products to assortments to enable combined purchases. With the advent of electronic commerce, these intermediary functions are spread over more types of middlemen. However, the differentiation of intermediary functions is still in its infancy, which makes it difficult or even unserious to speculate about future developments. Considering the German bookselling industry, we can find a wide range of new combinations of intermediary functions which are fulfilled by established book traders or novel online intermediaries, the so-called "cybermediaries".

#### *New Online Intermediaries and Online Activities of Conventional Book Retailers*

The pure online booksellers of printed books, such as Amazon in its early years, are the well-known examples for the shift of intermediary functions to the Internet. With specialisation on the automated performing of particular intermediary functions, such as the selective and evaluative consumer information with comprehensive book catalogues or the electronic processing of orders, they may achieve economies of scale and learning curves. They can provide their services to a wide range of customers and, by this, may attain cost reductions per customer. Anyway, the delivery of printed books still has to use conventional transportation and distribution services that cause considerable costs. In Germany, consumers are used to the free shipping of books. Owing to the book price fixing, online bookseller have to compete with service instead of competing with prices, as is the case in the USA. However, the German book industry is waiting for the day when the first online bookseller breaks the costly habit of free shipping.

The development of online bookselling of printed books currently shows three significant trends. First, pure online booksellers are developing into "online superstores", which is illustrated by the development of the online retailer Amazon. It is assumed that the underlying strategy is to shift the reputation they have obtained in the book business to product branches with a higher profit margin. Second, some online bookstores, that are pure online shops or online branches of stationary bookstores, concentrate on specific thematic fields, also providing additional information and knowledge, to bind customers with a thematic interest to their websites. For instance, the online book retailer LOB.de, which already specialised in medicine and computer books, additionally established a separate online bookstore for veterinary books (VETbooks.de). Third, pure online booksellers merge or cooperate with stationary book

traders to follow a “multi-channel” strategy. Once more, Amazon provides an example, because they cooperate with the book chain Borders in the USA. Besides the pure online-bookshops, many stationary (conventional) bookshops have also entered the online-bookselling business to complete a “multi-channel” strategy. Only a few bookstores established online branches using their own means. The bulk of stationary bookstores participate in online shops, which are operated by the industry association or book wholesalers.

The “multi-channel” strategy may be chosen to meet high customers’ expectations. Customers may expect to be served in different ways, e.g. with outlets, call centres and on the Internet. Consumers purchase activities, such as to inform about a thematic interest, to browse through and compare several offers, to inspect the book directly, to comfortably read test-wise, to pay in a convenient and anonymous way, and to get after-sale services may more and more be spread over different online and offline channels. In these cases, consumers can choose according to their preferences or risk attitudes which activities to perform in different channels. For a single company it becomes more important to pursue all activities in order not to lose customers to competitors.

However, the Internet offers more opportunities for book traders than just another type of mail order business, and this can be considered as the main benefit of electronic markets. Pure online trading platforms, in some cases with the implementation of auction schemes, bring suppliers and demanders of used or nearly new books together utilizing the wide reach of the Internet and the cost-effective automation of selling transactions. In Germany, we can find, for example, the online platform Justbooks that started trading used books in 1999. The online traders do not acquire the property of the books, they just connect book sellers and buyers who can be private persons or professional antiquarians or bookstores. Trades become possible that otherwise are hampered by prohibitive transaction costs, because conventional trades, which go beyond the local level, have incurred too high search and communication costs.

Other new intermediaries include, for example, product and price comparison sites or product search machines (e.g. Dealtime), which all fulfil some intermediary functions. By this, they reduce consumers’ transaction costs for product search and information and increase the competition. However, online booksellers react to competitive pressures and try to tie consumers with greater personalisation of transactions. Also the so-called “virtual communities” perform some kinds of intermediary functions, because they collect product information in the form of comments or evaluations by other consumers. However, customers face the problem of evaluating the quality and credibility of such comments, in particular, if the “virtual communities” are established by online retailers themselves or if the contributions are not moderated and reviewed. Moreover, because consumers may expect inappropriate rewards for their evaluation efforts and free-riding behaviour of other customers, they may not contribute sufficiently.

Recently, several new online intermediaries have entered the market to aggregate a range of electronic books into thematic assortments, additionally providing services, such as format converting, portioning, copyright protection, data storage, and selling (e.g. Dibi.de, Ciando.de, or Xipolis.de in Germany). On the one hand, with content aggregation they reduce the consumers’ transaction costs for search and also for information if they also give product descriptions, such as abstracts or reading samples. One of the success factors may be the ability to bundle pieces of content according to

customers' preferences and to cream off individual willingness to pay. Additionally, websites with high volume Internet traffic may have advantages to attract customers, and they do not necessarily have to stem from the publishing industry. On the other hand, authors and publishers may take on some of their functions if software developments facilitate the self-production and protection of eBooks.

### *Online Activities of Book Wholesalers*

Surprisingly, instead of being "disintermediated", the book wholesalers have a significantly strong strategic position in terms of book sales and as a technological service provider for the industry. In Germany, there are two large book wholesalers, i.e. Georg Linggenbrink and KNO/K&V (Koch, Neff & Oetinger/Koehler & Volckmar), as well as a few smaller ones, such as Umbreit and Wehling. Their position is even improved by the advent of online-bookselling. The reasons are as follows.

The few book wholesalers in this concentrated market have a comparatively large company size that allows sufficient investment in the establishment of their own online-bookstores (e.g. Libri.de by Linggenbrink and Buchkatalog.de by KNO/K&V). Small stationary bookstores with insufficient resources for their own online-bookstores participate in these models and are inclined to purchase more books from the wholesaler. In 2000, about 900 stationary bookstores participated in Libri.de and about 1,100 bookstores in Buchkatalog.de. Regarding the inter-firm market organisation, it is commonly assumed that ICT decreases the external co-ordination costs, in particular if the interfaces are standardised and communication is automated. Both advantages are promised to be fulfilled by Web-based business practices. As an economic result, decreasing co-ordination costs allow companies to outsource processes and activities and to focus on the companies' core competences. However, to achieve this efficiency improvement necessitates investments in ICT and its' standards. A fragmented structure of relatively small stationary book retailers hampers those investments, because each player does not have the necessary size and/or is afraid of free-riding behaviour of others. Therefore, the main traders that invest in the ICT infrastructure are the book wholesalers which are considered to be the technological leaders of the industry (besides some pure online booksellers). For instance, book wholesalers invest in electronic scanner cash registers and electronic data interchange for stationary bookstores to attract more orders. As another illustration, one of the first German pure online booksellers started under the umbrella and with support of one of the largest German book wholesalers.

By the long-term fulfilment of large parts of the book market logistic tasks, book wholesalers have gained significant competence in logistics and also in computing, especially in cataloguing and processing of book catalogue data. Pure online-bookshops build up their catalogues on the basis of the wholesalers' catalogues that are considered as one of the main competitive variables in online bookselling. Moreover, most of the pure online-bookshops delegate parts or the complete book distribution tasks to wholesalers, even delivery to the consumer under their name (e.g. Buch.de, Booxtra.de, or Books.de give distribution tasks to the wholesaler KNO/K&V).

In other words, book wholesalers have considerable competence in online-bookselling to consumers. Today, they do not deliver directly to consumers, because they would otherwise lose their main customers, the conventional bookstores. However, this may change either when the German book price fixing vanishes and the fragile industry

consensus is destroyed, or when market concentration in the book retail industry increases, shifting market power away from the wholesalers.

One would think that book wholesalers are at least threatened by the appearance of electronic books, because publishers could relative easily distribute eBooks over the Internet and new specialised intermediaries would emerge. However, German book wholesalers have even tried to gain a foothold in the distribution of electronic books. With concepts of “books on demand” and the underlying digitisation of content, they attempt to claim the rights for content syndication as eBooks and other electronic publications. An example is the wholesaler Lingenbrink, who established a “Books on Demand” business and participate in Dibi.de, which is a company for eBook production and trade.

## **Conclusions**

Instead of a complete disintermediation by electronic commerce, we can find ambiguity regarding the “disintermediation” hypothesis: on the one hand the (stationary) bookselling industry is certain to loose market shares to online booksellers, but more to online traders than to direct online sellers. On the other hand, the Internet will offer new business opportunities for bookselling, including stationary bookstores, for instance, by the so-called “multi-channel” strategies. Also, the online supply of electronic books or extracts from book-based content is deemed to be profitable which also causes the emergence of new eBook intermediaries.

The remaining question is: what can we learn from the German bookselling industry for other industries? However, the book price fixing distinguishes the book industry from others, because it stabilises the industry structure and cushions it against “shocks” like the appearance of online trade. Also it is believed to foster an effective book distribution infrastructure in terms of speediness of (overnight) delivery and regional reach. Therefore, supposed advantages of pure online retailers, i.e. speed and reach, fritter away, in particular, if costs of distribution are considered. Price fixing also enables a great number of book titles, or at least it is assumed to do so. Due to this, there might be a larger supply of products on the book market than there would be under more competitive conditions.

However, we can conclude for a general level that for physical goods “old” economic laws of the advantageousness of the aggregated flows of goods and of the specialisation in trade activities apply to stationary as well as to online traders. To meet sophisticated consumers’ expectations, more online and offline retail channels are needed that require retailers to invest or to cooperate. However, the plurality of distribution channels grants also a plurality of business opportunities.

More disintermediation might come for digital goods with easier and more cost-effective technology for their production and protection by content creators themselves as well as with better consumer electronics that allow digital goods to be consumed more comfortably and ubiquitously as well as independently from proprietary systems. Also advanced Internet technology for online electronic payments and improved transaction liability might be supportive. To sell directly over electronic networks requires significant changes at producers’ company site, i.e. the complete digitisation and structural renewal of content, organisational changes and, in some cases, virtualisation in the form of enhanced co-operation. However, organisational inertia and technological shortcomings may impede conventional content producers from

participating quickly in direct online selling. Additionally, as mentioned above, the aggregation of the flows of digital goods, the potential for their multiple commercialisation, the advantages to attract attention and to build trust in the quality of the provided books and services as well as transaction specialisation may bring intermediaries also advantages in comparison to direct selling. Instead of disintermediation, we have seen in the case of the German bookselling industry a differentiation of the fulfilment of intermediary functions. That leads us to emphasise “the power of the middlemen”.

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