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CRITICAL FACTORS OF ATTRACTING SUPPLY CHAIN NETWORK MEMBERS TO ELECTRONIC MARKETPLACES: THE CASE OF SUNBOOKS LTD. AND THE HUNGARIAN BOOK TRADE

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Vertical electronic marketplaces often suffer from the low level of liquidity. Attracting members is critical, however, not even a sound and efficient IT and logistic background is enough to convince both the supplier and the customer side. In this paper the authors present the case study of Sunbooks Ltd. This venture has started to transform the Hungarian book trade market that suffers from serious deficiencies in field of information and material flow. Despite the vast investments and that the marketplace is prepared to serve the whole Hungarian book industry, the market share started to grow very slowly. The authors identify three contingency factors which can be accounted for the evolution dynamics of this virtual network. They explain how the business model is subjected to the evolution of market characteristics, and how the third factor, the "soft issues" determine the evolution opportunities even in a supporting market situation.

Keywords: electronic trade; book market; Sunbooks

1. INTRODUCTION

"I believed that I will integrate two or three further industries in the rest of my life, but after experiencing how much slower and harder it goes, now I would be satisfied with transforming only the Hungarian book trade."

Dr. Gábor Rényi (57), the CEO of Sunbooks Ltd. that operates the first B2B electronic marketplace of the Hungarian book industry expresses clearly what almost all leaders of third-party B2B marketplaces feel. The swiftness, accuracy and efficiency ought to have induced a rapid success of these new intermediaries. How-

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ever, many of them struggle for convincing the market actors and achieving the critical mass and liquidity. This paper provides an in-depth analysis of this situation presenting Sunbooks Ltd. that attempts supply chain integration for the entire Hungarian book industry through an electronic marketplace.

The purpose of our research is to analyze the networks evolved around Sunbooks' marketplace in the last five years. The first part of the analysis is external: What are the motivators and inhibitors on the side of publishers and retailers, respectively, to join the system? What are the limits of growth based on the dominant market strategies? The other part of the analysis is internal: Despite the large number of joined partners, the network still channels in about 10% of the Hungarian book trade, while the logistical background has been prepared to serve the whole market. Will the over 6 million euros investment ever reach the breakeven point? What kind of measures can be proposed to the management to leverage sales?

By covering these issues, we hope that the paper can contribute to the better understanding of Internet-mediated networks in other industries or countries as well.

2. THEORY AND PRACTICE OF ELECTRONIC MARKETPLACES

The most profound consequence of the ongoing changes in business environment is the influence they have on how economic value is created and extracted. Organizations confronted with technological innovations, globalisation, shifting customer needs and fragmented markets tend to show an increased willingness for cooperation. Strategic alliances, supply chains, and industrial clusters are just few among the several, sometimes overlapping network forms which may connect companies.

The unprecedented development of information and communication technologies, particularly that of the Internet and the mobile devices expands the scope and increases the strength of collaborations, hence more complex inter-organizational networks arise. Beside the collaboration forms, the types of Internet-based business models proliferate as well: different abbreviations, like B2B, B2C, C2B, A2A, C2C, M2M, P2P etc. are created to cover the diversity of Internet-mediated commercial activities.

These so-called "e-business models are methods, concepts, frameworks, or architectures, by which companies can use the Internet to carry out their strategies of capturing dominant market positions, establish viable market niches, adding value for their stakeholders, or sustaining themselves over time" (Lam – Harrison-Walker 2003). The "liberal nature" of this and other common definitions on e-business models has led to numerous and various types and "lists" in the litera-

ture: frequently cited are those of Timmers (1998), Bambury (1998), Rappa (1999), Tapscott et al. (1999), Applegate – Collura (2000), Weill – Vitale (2002), and Chen (2003).

The most repeated, and also debated, classification distinguishes B2C (consumer focused) and B2B (inter-organisational) business models, according to the markets they serve. Many suggest that the latter is more viable because inter-firm cooperation still suffers from serious problems concerning the optimization of material and information flows. The most typical e-business models are some sort of supply-chain variations. Beyond direct sales and e-tail models, several types of internet intermediaries have been emerged. A special case of intermediary model is the portal, which does not directly sell a product or service, but facilitates the process by building and bringing together virtual communities of customers (consumers) and suppliers.

The electronic marketplace model facilitates direct communication between buyers and sellers (Chen 2003). It is characterized by a many-to-many relationship; more participants from both sides assure a certain level of market liquidity. Based on the pre-Internet definition of Bakos (1991), an electronic marketplace is a virtual place of exchanging goods, services and money, supported by information technologies. The intermediary, that is, the operator of the marketplace is one of the participants (buyer/seller), a third party, or a consortium. It performs:

- transactional services (search, compare, catalogue browsing, auction services, order and tracking, invoicing),
- interaction-facilitating services (managing documents and logistics, timing, customer service),
- supporting services (security, systems integration, availability, reports, catalogue management).

In this paper we focus on B2B marketplaces, which have two main forms: the horizontal and the vertical marketplaces. The former offers indirect goods or services demanded by many industries. Vertical marketplaces, on the contrary, are industry-specific, the distributed goods or services become part of buyers' products. Therefore, a vertical marketplace with their sellers and buyers actually forms a supply-chain network.

Depending on the number of buyers and sellers on an electronic marketplace, e.g. to what extent the many-to-many relationship exist, the bargaining powers of the parties are different (see *Table 1*). This paper discusses a neutral vertical marketplace, where the main pairing and pricing mechanism is catalogue ordering with customised price discounts.

Table 1. Concentration of electronic marketplaces and the pricing mechanisms (developed from Kápolnai et al. 2002: 101, Nemeslaki 2004: 183)

Seller Buyer	Limited	Many
Limited	Concentrated marketplace	Buyers' market
	Negotiation, bargain, barter	Reverse auction, tender
Many	Sellers' market	Neutral marketplace
	Auction	Dynamic pricing

Looking over further e-business models it is apparent that vertical electronic marketplaces show characteristics of more models. Referring to the e-business model classification of Weill and Vitale (2002), electronic marketplaces are value net integrators, content providers, and also virtual communities at the same time. The main focus of this paper is the network integrator role of marketplaces; a vertical electronic marketplace that aspires to transfer the whole industry into one integrated, efficient network.

Amit and Zott (2001) argue that a "business model construct" can be described with the strategic network theory. Their business model components (see *Table 2*) summarize the most important indicators of vertical electronic marketplaces.

Table 2. Business models from the strategic network perspective

	Content	Structure	Governance
Strategic network theory	Resource that actors can access	 Network size Centrality of position Nature of ties (weak, strong, bridging) 	TrustReputation
Business model construct	 Information and goods that are being exchanged Resources and capabilities, required to enable exchanges 	 Network size Ways in which parties are linked and exchanges are executed Order and timing of exchanges Market mechanism Flexibility and adaptability of transaction structure 	 Locus of control of flows of information goods, and finances Nature of control mechanism (e.g. trust, incentives)

Source: Amit - Zott (2001): 514.

The strategic network theory also helps us to understand the participants' motivation in a vertical electronic marketplace. Dyer and Singh (1998) point out that the critical resources extend over organisational boundaries, and sharing the knowledge is critical to achieve efficiency and effectiveness in the industry. Kogut (2000) enhances the accelerated market responses of a strategic network. Gulati et al. (2000) add the strategic networks' ability to access (mainly information) technologies that improve transactional efficiency.

However, the experiences with vertical electronic marketplaces are often disappointing. Pioneers like Chemdex failed to achieve the required liquidity and profitability. Experience shows that convincing suppliers of different size and position to join is a very critical issue: it needs to balance different service portfolio and price constructs. In many cases, however, traditional power relations cannot be overcome in spite of these efforts. Wise and Morrison (2000) stress that the weakness of the value proposition of most of electronic marketplaces, and also the fragmentation of the "electronic marketplace market" causes low profitability in general. They expect a consolidation of marketplaces, after which only mega-exchanges survive.

Probably the most successful examples can be seen in the metal and automobile industries. However, the best-operating vertical marketplaces are owned by previously dominant players of the industry, so the neutral nature of such networks is at least questionable. In the book trade industry there are some special examples. The book industry e.g. in Finland is integrated into one system that intermediates between all publishers and retailers.

3. INTERNET AND E-BUSINESS IN HUNGARY²

In Hungary, corporate access to the Internet has been below the European level for long. In 2001, 90% of the business organizations in the EU had access to the Internet and 60% of them had homepages. Respective data for Hungary were 70% and 39%. Small and medium-sized enterprises stayed in a particularly disadvantageous position, as sometimes even their computer equipment was lacking and only one-third had access to the Internet. At that time, the average ratio of e-commerce was around 3.6% in the EU, while in Hungary, also due to the lack of confidence, the volume of electronic trading was almost negligible and increased only slowly. For 2005, larger organizations have all linked to the Internet in Hungary. However, among micro enterprises (5 to 9 employees) after a quick development Internet penetration seems to stagnate this year at 66%.

Concerning household informatics, Hungary's backlog has been even more serious. In 2001, one-quarter of all Hungarian households had computers, but only

6% of them had access to the Internet. For 2005 the proportion of computer-equipped homes has only grown to 35%, though already half of them are connected to the net (of which 50% with broadband connection). Although the use of the Internet and its frequency and quality are fundamentally determined by the prevailing social and economic conditions, what is in people's "heads" occupies a prominent position among the reasons for the present situation. Among those not using the Internet, the insufficient knowledge about the means of information communication is frequent, which is coupled with a lack of interest, anxiety in some cases, and suspicion and lack of trust towards anything new. People find the price of the equipment, as well as the costs of operation, high.

At the field of regulation, Act CVIII of 2001 on Certain Issues Relating to Electronic Commercial Services and Services Concerning the Information Society was a milestone in the IT-centred legislative process which started with the Act on Electronic Signature.

The most successful applications of the Internet are the electronic taxation (electronic tax return for companies and electronic forms for the residents), free content providers (news portals, forums, thematic sites), and some B2C services (lunch ordering, DVD lending). One of the two robust horizontal marketplaces has already been closed, while the other, Marketline, recently repositioned its offerings. The few vertical electronic marketplaces could not really expanded over their industrial boundaries. The most promising is Sunbooks, an intermediary in the book trade industry.

4. THE SUNBOOKS MODEL

After all, it is not a surprise that in 2000 a new venture, called Sunbooks Ltd., appeared on the market to mediate the book trade business in Hungary. Five years before, in July 1995, Jeffrey Bezos founded Amazon.com, a virtual bookstore, which is probably the most famous e-commerce solution in the world until today. That time, compared to the US, the book supply chain in Hungary suffered from even bigger inefficiency problems concerning both its material and information flows, which led to relatively low customer service level. In contrast to the Amazon model, however, Sunbooks' marketplace did not eliminate, but reinvented the classic wholesale function, offering value added services both to the publishers and to the book retail chains.

The main idea behind the business model is the reorganization of information exchange and logistics between book publishers and retailers. In the traditional supply chain it is the wholesalers that distribute published books and other prod-

ucts regionally. They transport books from publishing houses to their own warehouses and after storing, they serve the retailers in the area.

In the traditional sense, Sunbooks is more than a book wholesaler. Beside book distribution and storage it takes on all the tasks that are not tightly connected to the core competences of publishers or retailers (warehousing, shipping and delivery, stock-taking, billing, collection etc.). *Figure 1* shows the activities of Sunbooks in detail.

It is a relevant difference to traditional wholesalers that Sunbooks is not margin-oriented. Sunbooks defines itself as a neutral service provider: the company manages transactions according to conditions set by the publishers and it does not even have margin-like earnings. Another important difference is that it does not purchase goods: the books under the supervision/administration of Sunbooks remain the property of the publishers until their sale.

The system operated by Sunbooks is a vertical electronic marketplace, where the demands of sellers/vendors (publishers) and buyers (retailers) meet. They manage orders, administer billing and payment, and both sides get information on the operation of themselves and the whole market. The services of Sunbooks are accessible via the Internet for both publishers and retailers: contracted partners can enter the system on the www.sunbooks.hu website.

Elements of the Sunbooks system: technology and logistics

Sunbooks has aligned two big business partners to the launch of the project. IBM Hungary shipped the hardware base of the electronic trading system and integrated the computer and software elements for a proper running of the system. Initially the Hungarian Post (Magyar Posta) joined the effort by providing full logistic background with its country-wide transportation capacity and a 11,000 square meter warehouse located in Budaörs. The initial difficulties and losses, accompanied with the differences in the organization culture made the relationship tensed between Sunbooks and the Hungarian Post. After four years, Sunbooks had to replace its logistics partner in order to meet the high expectations of customers needs and accommodate the rapid growth expected in the company. The new partner, Áti Depo established a 4,500 square meter warehouse located in Szigetszentmiklós.

When IBM designed the IT, it used its international experience. The system consists of three main parts. The application called NetCommerce (by now it is renamed for WebSphere) managing electronic commerce runs on IBM RISC servers, located at the Sunbooks' headquarters. The BMS (Business Management System) developed by Magic Onyx is the ERP (Enterprise Resource Planning) system

of Sunbooks, and it runs on IBM NetFinity PCs, in the headquarters. The warehouse of the Hungarian Post hosts the Oracle-based WBS (Warehouse Business System), which is responsible for logistics and inventory management. The three software units cover three distinct activity areas, namely: information exchange

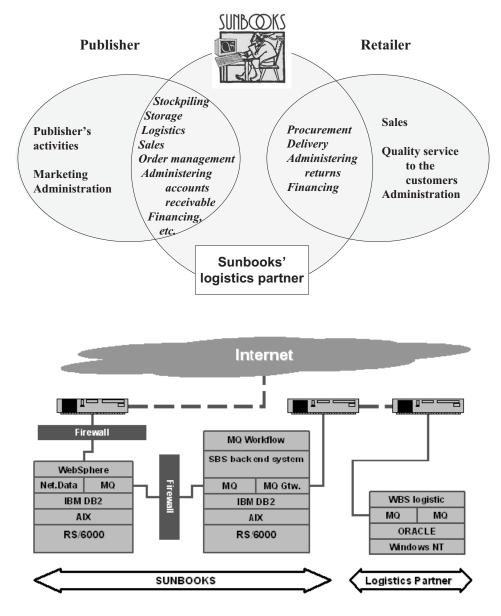


Figure 1. The logistics process and its IT support

about books, financial management, and logistics. The building blocks are held together by the IBM's MQ Series software. *Figure 1* gives an overview about how the different parts of the system are connected.

From time to time, publishing houses contracted with Sunbooks to upload the data of their books to the sales database. The data include not only general information about the books (like title, author, consumer price, short description, scanned front page, etc.), but also relevant data connected to transportation and pricing (ISBN code, the physical size of the book, possible discount from the net consumer price to different customer groups, etc.). Contracted publishers are not bound to offer all their books on the network; they may decide to sell certain products through traditional distribution channels only. However, it is wise for publishers to show even their oldest books in the system, since then they are accessible to every contracted buyer. Of course, via the system retailers contracted with Sunbooks can only order items that have been uploaded by publishers. On the other hand publishers can get a huge amount of data (statistics, trends) from the system, which can be useful for developing their business activities.

NetCommerce as an end-user application includes the complete electronic commerce software and secures the connection to several thousand partners (publishers and retailers). Transactions are registered by BMS. Both software elements have a leased line connection to the WBS of the Hungarian Post, so the orders recorded by NetCommerce immediately appear in the other two systems. Therefore, retailers can only order books which are really available.

Initially, ordered books have been transported from publishers to the warehouse in Budaörs by ordinary postal service (today this is managed by another logistics partner). On delivery a $\pm 3\%$ difference is accepted; if the difference exceeds this, the warehouse contacts the publisher. (In advance, publishers can only give an approximation about the number of pieces, since it depends on the folds.) The standard data of new books are recorded in the system: title, volume, weight, charge, etc.

The storage is commissioned by WBS, which offers store places in the warehouse for incoming books. The books are transported by fork-lift trailers to the commissioned storage places. All the shelves in the warehouse and even the pallets have their own identification code. Therefore, with the help of infrared scanning devices a logical placement takes place simultaneously to the physical placement. Employees read the code of the pallet, then that of the book-pack, and finally the shelf: these three data give the exact position of every book in the warehouse. Books with a slow turnover are placed on the lower shelves, while frequently ordered ones are either put on the upper shelves or placed in a separate room, where a special rolling shelf-system is installed for quick delivery. The whole book stock is the property of the publishing houses.

Each day retail orders are aggregated until noon, and the books are put into transport cases. The content of the cases is optimized by computers based on the physical parameters of the books stored in the system. Each case has an identification code which enables monitoring the cases even if they are at the retailers. The content of the cases is controlled by weighing, and a status report is sent to Sunbooks about the order. In 24 hours the Sunbooks orders are shipped to retailers.

The logistics system is connected to a fully automated back-office system, which handles partner databases, billing operations, and accountancy. This was developed by Magic, an IBM subcontractor.

The partner networks of Sunbooks

As mentioned above, Sunbooks' commercial partners are retailers and publishers. Sunbooks' *retailer partners* include bookshops, schools, libraries, and special customers. Among special customers the most relevant are hypermarkets (Tesco, Auchan, Cora, OBI, Praktiker, etc.), MOL fuel stations (250 are contracted with Sunbooks), and newspaper stalls. It is interesting to note that Sunbooks delivers books to a couple of (B2C) virtual stores as well.³ There are also partners that only sell books as supplementary goods (computer stores, for example).

The usage of Sunbooks' system for retailers is absolutely free and the switching costs are relatively low. They only need an Internet access to be able to order books. Even in this, Sunbooks gave a hand by offering discount Internet access for the contracted bookshops at the beginning.

As opposed to traditional procurement routes, retailers can order books even one by one, and do not have to move out from their shops for the books to be delivered. House delivery is free and much faster than in the traditional way. Bookshops can minimize stock and are able to order exactly that amount of books the customers need. Retailers can find the offer of all the publishing houses contracted with Sunbooks, so theoretically they have to be in touch only with one supplier. The process of ordering becomes fast, simple, and cheap, since Sunbooks delivers all services to the door.

The Sunbooks system serves as an information tool for bookshops as well. They are able to track their sent orders, returns, their credit line, and financial transactions. The system also enables them to view the novelties of publishers (books which are due to be published soon) and so they can immediately choose the ones that look promising.

Sunbooks also takes on some of the tasks of the *publishers*. On the one hand, it records the standard data of books in an electronic database. On the other hand,

Sunbooks does part of the marketing. Examples for this are organizing autographing events or seasonal sales, and disclosing novelties on the homepage, so offering retailers a fast way of getting information.

In the contract, publishers agree to pay a commission to Sunbooks on every book sold (just like in the traditional system), which is around 10% of the net consumer price. At the same time, Sunbooks is not a cosignatory, so at the end of the month it pays for all the books delivered to retailers, even if some retailers have not settled their account towards Sunbooks.

By using Sunbooks' database, the publishers are able to track the sale of their books according to categories, geographical regions, or distribution channels. As Sunbooks has reached the critical sales volume, the database is able to provide publishers with valuable information about the whole book industry. (Of course, company specific information will still be kept in secure.)

The main difference between the partner network of Sunbooks and the traditional supply chain is the number and the nature of ties. Although participants in the traditional network had more connections to wholesalers, they were able to contact only a part of the potential partners. Theoretically, if Sunbooks' electronic industry marketplace covered the whole book market, every actor would have to maintain only one connection, however, they would raise all the participants on the electronic marketplace (*Figure 2*).

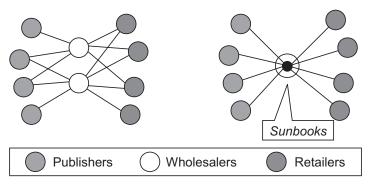


Figure 2. The change in the network configuration scheme

5. FACTORS THAT INFLUENCE THE NETWORK DYNAMICS, THE INVESTMENTS AND THE RETURN

Up to November 2001, Novotrade Investment Company, the owner of Sunbooks had invested more than 3 million Euros in the development of the system. Solely

the systems shipped by IBM (hardware and software) cost 1.8 million, system integration and development ate up another 1.2 million. According to an early calculation done by Novotrade Investment Company, by the time Sunbooks is able to cover the costs of its own operation, the sum invested in founding and operating the firm will have exceeded 4 million euros. In summer 2005, however, entrepreneur-CEO Rényi had to admit, that the amount of money invested in Sunbooks has already reached the double of this: 9 million euros. This was already partly financed by a foreign (UK) investor, which has gained 51% ownership in the company one year ago. On the figure below some key data represent the trajectory of the firm over the last 5 years.

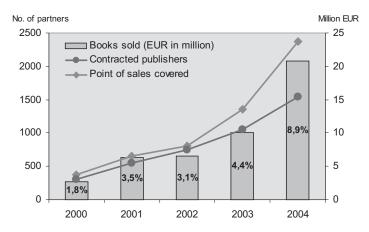


Figure 3. The dynamics of Sunbooks' growth

While Gábor Rényis's original expectation relating to the time when his venture makes profit has not been fulfilled, the company has showed a steady growth over the last 5 years. Few would think that behind these balanced figures is the equilibrium of several contrasting forces that could have either driven up quickly or seriously jeopardize corporate performance without each other. By looking behind the numbers we identified three, mainly contextual factors, which can be accounted for the results: (1) Information technology and logistics as the core of the business model; (2) Market characteristics, i.e. bargain power positions, interests and competition trends; and (3) Soft issues, i.e. human attitudes, role of the traditional relationships and trust.

Information technology and logistics

The first factor we identified is the business model in the narrower sense, i.e. an innovation in the technology and the logistics of the book trade industry. In the traditional supply chain both the information and the material flows suffer serious deficiencies. The low level of computerization, the missing or incompatible databases, and the lack of IT-based communications resulted in the following problems.

- The publishers have limited information about the retail sales, and about the stocks waiting still in the supply chain.
- The publishers have very few information about the demand on books and book types, and the information is not up-to-date.
- Retailers are insufficiently informed about the new book titles and their sales potential.

These information gaps produced an inefficient material flow.

- Redundant and unjustified warehousing on total 30–50 thousand square meter that is oversized compared to the market size. Printing-houses, publishers, wholesalers and retailers all hold a high level of stocks.
- Surpluses and shortages of one book at the same time, at the different stages of the supply chain.
- Redundant transportation of the books from warehouses to warehouses; relatively high ratio of goods returns.
- Inadequate processes at the B2B "last mile". Retailers have to visit warehouses
 of more wholesalers, or wait for their fixed route trucks that have a limited and
 unsteady assortment.

The three integrated IT systems of Sunbooks makes possible to align the sales/orders to the financing/accounting and the procurement/warehousing. It is accompanied by the order-driven warehousing processes. The 24 hours delivery even for only one book without an extra cost for the retailers eliminates the need for stockpiling, resulting in a rapidly response the consumer needs at the same time. However, the central intelligent warehouse of Hungarian Post seemed to be oversized (capable to serve the whole market while covering 5–10% of it) that extended the payback period. Retailers reported some logistics problems, too: e.g. some books published for Easter appeared in Sunbooks' catalogue few weeks after the holiday, and also the shipment of goods returns often delayed. After a few

months of operations the new logistics partner Áti-Depó seems to overcome these difficulties.

The balance of the first contingency factor is unambiguous. All actors of the book industry suffer from the slow, expensive and inefficient operations of the traditional supply chain. Sunbooks' answer for these challenges is transparent, swift and smart. Neither publishers, nor retailers have to hold considerable stocks, and both are well-informed about supply and demand on books. Regarding this factor an easy success of Sunbooks seems to be likely, resulting in a situation where every publisher and retailer uses the same system and database. However this is not the fact, and even not the near future. Because there are two further contingency factors that matter.

Market characteristics

Looking at the market characteristics we have found why the biggest publishers resisted joining this marketplace. First of all, book trade in Hungary is determined by a handful of publishers. Only 25 out of 3,000 companies engaged in book publishing are responsible for 70% of the total turnover. The largest publishers are also involved in the wholesale business; some of them also have a chain of retail stores. Publishers get 53–55% of the book price (without VAT) as revenue that enhances their bargain power. On the other side, the retail margin is 35–37%, and retailers are more fragmented. The traditional supply chain (*Table 3*) draws our attention to the conflict of interest at the largest publishers. Their market position compensates the inefficient operations and logistics, while the publisher-owned

Table 3. The traditional supply chain of the Hungarian book trade

	Publishing	Wholesale	Retail
Revenue share	53–55% of retail price	9–11% of retail price	35–37% retail price
Actor characteristics	3,000 publishers, but only 5–10 big	Big publishers have their own firm	4 big chains, numerous small stores, hypermarkets
Actor's activities in the traditional supply chain	Produce books Minimal marketing Warehousing A few direct sales	Transport, logistics Retail routes Warehousing Sales and reconsignment	Sales to consumers Marketing actions Warehousing Obtaining books Maintains databases

wholesalers maintain their market positions and generate additional revenues. It is overall obvious that without persuading large publishers it is impossible to achieve the breakeven point for Sunbooks.

Our second factor, the "market characteristics" explains why the breakthrough in the book trade did not happen. Maybe Sunbooks would have disappeared, unless some changes in this factor had happened. Recent trends in retail, publishing and wholesale of books aid Sunbooks' plans. The growth and the concentration of the book store chains slowly compensated the market power of the big publishers. The role of the hypermarkets also increased, and publishers' margin got under pressure. The growth of the market size stagnates, while the number of the annual new issues increases further. Note that the Hungarian book market is very small (250 million euros), while the number of the newly issued titles is excessive (10,000 titles yearly). Therefore competition also intensifies. Companies involved in publishing, wholesaling and retailing may find it difficult to compete in 3 areas at once.

The Hungarian Book Club (Magyar Könyvklub), originally a mail order book retailer, also publishes books and had its own wholesale system. In January 2004 the Hungarian Book Club gave up his wholesale venture, and outsourced the logistics to Sunbooks. Because the main wholesalers shared their assortment with the Hungarian Book Club, Sunbooks suddenly covered 90% of the books published in Hungary (without textbooks). That was one of the reasons why Sunbooks could increase its market share rapidly, and hopes to achieve even 20% in 2005.

With this development, independent book stores become able to eliminate some other forms of their procurement, and start to rely on Sunbooks more intensively. In 2004, 7% of Sunbooks customers ordered daily. These shops ordered 65–75% of their stocks from this electronic marketplace, while only 25–35% from all other wholesalers.

Another driver of Sunbooks' growth is the increasing sales at the hypermarkets. Tesco, Auchan, Interspar and the others are procuring books mainly (sometimes exclusively) from Sunbooks, because its flexible shipment and accurate IT systems that are critical in hypermarkets' business model. They also order CD-ROMs and DVDs or even Playstation Games from Sunbooks' expanding assortment.

While the initial market characteristics determined the limits of the evolution, this factor also drives the growth of Sunbooks now (*Figure 4*). The pressure on operational excellence at all actors of the market would suggest an even more rapid development of the marketplace, unless the third factor biases it.

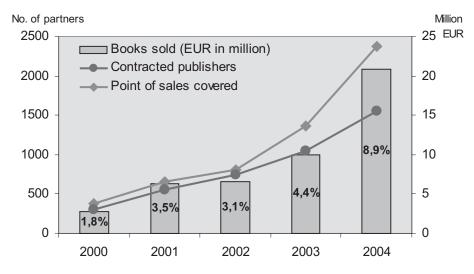


Figure 4. Market characteristics as drivers of the evolution dynamics of Sunbooks

"Soft" issues

People are unwilling to move from the beaten track. It is very difficult to deal with the "human factor". Old habits die hard; and it is a laborious process to cross the established relationships.

CEO Rényi at Sunbooks admits that he underestimated the role of the soft issues he calls the "human factor". The Hungarian book trade was known to the meager use of computers, the friendship and routine-based operations, i.e. the "old-fashioned" way of doing business. The promotional "road shows", the repeated presentations at professional forums, and the personal consultancy (e.g. real profitability calculation showing the costs of the traditional logistics and stockpiling) for each targeted publishers and book stores became major part of Sunbooks' and Rényi's activities. These initiatives helped to convince some partners, but not all. Retailers do not want to "burn their boats", i.e. buy exclusively from Sunbooks. Publishers are afraid of the future monopolistic behaviour of Sunbooks. The vision that in an effective book trade market no other wholesaler is needed than Sunbooks is discouraging for the potential members of the marketplac.⁴

Considering this contingency factor we think that the evolution dynamics of Sunbooks' electronic marketplace will be determined by the resistance of the "human factors" for further years. Despite the outstanding opportunities from the business model and the market characteristics perspective, biggest market players

who are not constrained to achieve a significant improvement of operational efficiency will not join the marketplace. They will rather establish their own system, giving up the benefits and refusing the risks of the single industry marketplace.

6. DISCUSSION

Studying an electronic marketplace is often limited to the conceptual analysis of its business model. We believe that a good idea, an impressive and efficient value proposition, the involvement of creditable partners in development and operations, and a stable logistics and IT background are the basis of the success. However, the market positions of the targeted members, the competitive forces and the development of the market cannot be neglected. Conflict on interest and lack of efficiency pressure can hinder B2B marketplaces to achieve the critical mass, while market trends accelerate this in other cases. But we identified that the effect of the business model and the market trends are sometimes weaker than the "soft issues" factor. Attitudes change slowly; traditional relationships cannot be transformed to an electronic marketplace at one blow.⁵ And, first and foremost, the most important resource of a vertical electronic marketplace is trust. Partners have to share their operations and information with the marketplace, a thing that they never will do unless they completely trust in the operating companies and believe in their long-term services. The "governance" perspective of the business model construct described by Amit and Zott (2001) and quoted in Table 2 seems to be even more important.

NOTES

- What actually electronic marketplaces do and what seems to be a successful function in the real world has been surveyed by Holzmüller and Schlüchter (2002).
- Based on the Strategy of the Ministry of Informatics and Communications, see Brochure of Information on the Formulation of the Hungarian Information Society Strategy and the Schedule of Further Tasks, Thursday, 21 July 2005, downloaded from http://www.ihm.gov.hu/strategy.
- Note that Sunbooks is a B2B marketplace and does not sell books for private consumers. The turnover of the 3 main B2C book retailers (Bookline, FókuszOnline, Libri) in Hungary is only 16 million euros, 6–7% of the book market.
- ⁴ Although this functions very well in Finland, Sweden, Denmark and the Netherlands.
- Kumar et al. (1998) discussed the case study about the decline of the electronic marketplace for the textile manufactures near Prato with a similar conclusion.

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