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D. V. Muravskii, S. A. Yablonsky

**DETERMINING
DISRUPTIVE INNOVATION POTENTIAL
OF MULTI-SIDED PLATFORMS:
CASE OF DIGITAL BOOKS**

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In this work, disruptive innovation theory is applied to studying multi-sided platforms (MSPs). It is argued that a successful MSP is one that is capable of making products, which are likely to disrupt the current market. The authors develop a mechanism by which it is possible to determine the disruptive potential of an innovation. Its application is then demonstrated on the case of E-publishing and digital books. Based on the study, we suggest that determining disruptive potential should be a key strategic question, when creating and managing MSPs.

Daniil V. Muravskii — Doctoral Student, Marketing Department of Graduate School of Management, St. Petersburg State University.

e-mail: muravskii@gsom.pu.ru

Sergey A. Yablonsky — Candidate of Science (Computer Science), Associate Professor, Information Technologies in Management Department of Graduate School of Management, St. Petersburg State University.

e-mail: yablonsky@gsom.pu.ru

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Introduction

Multi-sided platforms as a research topic have gained increasing popularity in the academic literature (e.g., Rochet, Tirole, 2003; Evans, Schmalensee, 2007) and represent a popular subject area for both strategic and IT management. Multi-sided platforms (or MSPs) could be defined as organizations, which act as intermediaries between different groups of users (Evans, 2003, Haigu 2011). MSPs are used in business models of 60 out of 100 world leading companies and represent the new core of modern economy. Through such platforms, companies provide their partners access of various forms to their users base. This partners bring to the business model value, which supplements the offer of the company itself. In a sense, this partners can be viewed as another group of users of the platform as they bring additional income to the company by paying access fees or for extra features of the platform. Platforms that serve multiple groups of users in the last decade become leaders in various industries (Facebook, Google, Apple), especially in the Internet-based industries. The scientific basics behind MSPs has started to been analyzed very recently, as late as the last decade. The existing difficulty of describing and analysing MSPs and its various elements (e.g., network effects) is an evidence of that this research direction is merely emerging.

MSPs are considered to provide more value to customers by offering better benefits at a lesser cost. The product solutions of Facebook, Google, Apple and other successful examples of MSPs prove to be drastically different from what existed in the market, represent new product categories and create new needs, which they evoke through marketing and exploiting network effects. Based on this, we argue that MSPs are better than traditional firms at producing innovations that eventually overturn the market and redefine the rules of the game. An effective business model produces products that consumers value; MSPs, being an intermediary, should increase utility or reduce long chains of traditional intermediaries and transactional costs associated with them, in a way that allows to produce products with value that exceeds that of analogue products in the existing market. We suggest that disruptive potential could be considered as a quality of MSP's end product and used as a measure of the effectiveness of the platform.

The type of innovations described above are usually called disruptive, meaning such innovations, which change the bases of competition by changing the performance metrics along which firms compete (Danneels 2004). When introduced, they either create a new market among non-consumers or target a niche of customers who do not value the extra features and high performance of the existing product or simply cannot afford it (Bower and Christensen 1995). It is considered by the disruptive innovation theory that once customer perceived value of a disruptive innovation increases, that innovation gets the chance to gradually diffuse and grow into the market until it takes

over and disrupts the mainstream market of the old product (Christensen 2003). While there exists an overwhelming supply of literature, in which scholars suggest ways to make a firm more innovative and create various measures of the firm innovativeness, it is highly unclear how to identify an innovation prior its success in the market, i.e. the innovation potential of a product, service, technology or business model.

In this work, we investigate what constitutes a disruptive innovation potential of a product, service or a technology by analysing MSPs in terms of its ability to produce products with disruptive innovation potential. Particularly, we look at digital book publishing platforms and compare the utility they are able provide, the cost structure they possess to that of traditional book publishing. We suggest a mechanism for conducting performance and costs analysis in order to define the disruptive potential of the digital book.

In the empirical research along secondary data, information from primary sources is used. In the context of the work two empirical studies were conducted among Russian book consumers, a qualitative and a quantitative, which aim was to define and support crucial points in the research of digital books' new value proposition and reader experience cycle improvement capabilities.

We showed how it is possible to measure the disruptive potential of MSP's on the example of digital books and E-publishing industry and created a framework, which allows to repeat the analysis with different types of MSP in the future. This mechanism can be used to evaluate the effectiveness of MSPs and decision-making regarding the design of the value offering of a company.

1. Literature Review

1.1. Multi-sided platforms

In many industries there exist companies, which work like multi-sided platforms (MSPs). Multi-sided business models are based on automatization of actions between different groups of users, which are united by common business processes (Evans, 2003, Haigu 2011). In an MSP, one of the groups is usually paying for all the rest of the users as it gains the most value out of participating in the platform (e.g., advertisers). The rest of the groups are often content providers and serve for attracting the paying group of users, for which they get relevantly smaller utility and, hence, pay less cost (or none at all) for participating in the platform (Rochet and Tirole, 2004; Armstrong, 2006). In this way credit card systems unite card owners and retailers, operating systems – the hardware manufacturers; the software manufacturers and the users; game consoles producers – the game developers and the gamers (Evans, 2003).

According to a report by McKinsey, the interaction of different groups of users in an MSP creates products and services of greater value, than those that are created in traditional business interactions (buyer-seller) (2010). This is caused by cutting costs of conducting market research and the buyers and sellers looking for each other and using various chains of intermediaries. Moreover, the participation in MSPs often opens up opportunities of providing utility, which would be unavailable elsewhere due to gained through the platform access to information and the opening opportunities of connecting and working with desired agents, companies and communities. In the end of the day, the end users get better products and services at a lower price. For that reason the issues related to MSP management are currently gaining more and more interest from the business society as they rise brand new question regarding strategy and policy (Roson, 2005) and are considered by many as one of the most important new areas of research in management (Roson, 2005; Haigu 2011; Evans, 2003). This could also be explained by that the study of MSP encompasses a large range of industries and is especially an important topic for the IT industry.

The academic literature on the topic represents mostly studies on topics which relate to certain elements of MSPs, like network effects, pricing on two-sided markets, etc. Yet research, which holistically investigates MSPs as a phenomenon has emerged very recently and at first represented mostly spin-offs from literature on credit card systems and less – on intermediary platforms. During the last decade numerous studies had been published, which were dedicated to strategic questions related to creating and managing MSPs. They investigated issues relating to pricing (e.g., Rochet and Tirole, 2004; Armstrong, 2006), competition (e.g., Eisenmann et al., 2006; Wright, 2004; Hagiu, 2007), governmental regulation and anti-trust policies (e.g., Evans, 2003; Rysman, 2009). It was shown that traditionally discussed aspects of strategic management exhibit interesting peculiarities, when analyzed in the context of MSPs. Although this stream of research is currently being formed (Roson, 2005), there is a series of opened questions, which slow down its further development. These questions are defining mechanisms by which it would possible to distinguish an MSP, describing and measuring the added value, which is created due to such type of intermediaries, measuring and studying the nature of network effects, which often arise between and within different groups of MSP users.

Although network size may be the platform's strategic focus (Haigu 2011) before the number of platform users reaches a critical mass, other factors, such as innovation are increasingly important for platform growth (Lin, Li & Whinston, 2011). Past studies on MSPs typically take product development as given. However, platform growth is fundamen-

tally driven by continuous innovations that supplies products to the platform market. Discussion of innovation in the context of MSPs is currently limited, as most research continues in the direction of pure network externality. Boudreau (2007) is one of the few recent studies to examine the effects of innovation in the platform market. By analyzing a data set on the applications for handheld computers and PDAs (personal digital assistants), Boudreau identifies a negative effect of increasing developer network size on innovation incentives in a two-sided platform. Lin, Li and Whinston (2011) incorporated dynamic innovation by sellers into the interactions between the platform and the two sides of the market and discuss the effect of the platform's fees on sellers' innovation incentives. They show that the platform access fees on both sides affect seller's innovation incentives.

1.2. Disruptive innovations

The concept of disruptive technology aims at identifying radical technical change in the study of innovation by economists, and developing tools for its management. The term disruptive technology was first introduced by Clayton M. Christensen together with Joseph Bower in their 1995 article "Disruptive Technologies: Catching the Wave" and described further in "The Innovator's Dilemma" (Christensen 2003), "The Innovators Solution" (Christensen and Raynor 2003), "Seeing What's Next" (Anthony, Christensen, and Roth 2004) and other works.

Under the disruptive innovation framework Christensen differentiates sustaining innovations and disruptive innovations based on technological performance and market segmentation. *Sustaining innovation* – is an innovation, developed to help the company's growth in the existing or established market place to ensure market growth and domination. Sustaining innovations "tend to maintain a rate of improvement; that is, they give customers something more or better in the attributes they already value" (Bower and Christensen 1995, p.45).

Disruptive innovation could be defined as an innovation that changes the bases of competition by changing the performance metrics along which firms compete (Danneels 2004). Disruptive innovations "introduce a very different package of attributes from the one mainstream customers historically value and they often perform far worse along one or two dimensions that are particularly important to those customers. As a rule, mainstream customers are unwilling to use a disruptive product in applications they know and understand" (Bower and Christensen 1995, p.45).

Disruptive innovations can be of radical or breakthrough nature, but they do not have to be. The disruptive innovation when introduced typically underperforms with regard to the established products that are most ap-

preciated by the mainstream customers. But since these technologies are usually cheaper, simpler and frequently more convenient in usage, the new product is created at the low-end or entrepreneurial firms may open up a new market and perform better there. Then, over time, the disruptive innovation improves toward meeting the performance requirement of mainstream customers that initially ignored it. As soon as the mainstream customers switch from the existing products, such innovation would disrupt the established players and create a new dominant design. According to Christensen (2003) sustaining innovations are usually taken to market by the market leader, which therefore strengthen its position, while disruptive innovations are introduced by newcomers, which threaten the position of the established firm and lead to its failure.

Most other definitions of innovations deal with the product itself and not with the market to which it is supplied, while for disruptive/sustaining innovations the focus is on how the changes to the product or service affect its performance (i.e. whether the change introduces a new performance dimension or if it lowers the cost of the product) and on the effect on the market, giving no matter to what the actual change is (Lindqvist and Ghazi 2005). The initial work that presented the theory received large popularity among managers listed by Harvard Business School Publishing as one of the most popular articles for executive education (Druehl and Schmidt 2008). Christensen's message was that it is critical for managers to focus on creating a disruptive innovation when thinking of the firms long-term prospective and be able to recognize a disruptive innovation from a sustaining when they see one in order not to underestimate the risks and opportunities for their organization.

To successfully disrupt the market the value delivered by the innovation should be higher than the value delivered by existing products and services (Lindqvist and Ghazi 2005). Disruptive innovations introduce a new value proposition as they either create new markets or reshape existing markets and are distinguished as "low-end" or "new-market" disruptive innovations (Bower and Christensen 1995).

The *new-market disruptive innovation* usually brings consumption to "non-consumers" by targeting new consumers and proposing new contexts of use. These innovations usually offer good enough performance for a lower price (e-mail vs. postal service, mobile phones vs. fixed phones). The *low-end disruptive innovation* can occur when existing products or services are "too good" and hence overpriced relative to the value existing customers can use. (Dell computers, Ryan Air, discount stores). The definition of a disruptive innovation by Lindqvist and Ghazi (2005) includes that differentiation, emphasizing the new value proposition as a feature of disruptiveness.

Disruptive innovation is an innovation in the technology, or in the business model that increases customer perceived value in at least one of the following ways:

1. By introducing a new performance dimension to the product and therefore creating a new market among non-consumers.
2. By providing a less expensive solution – often in trade off for reduced performance – targeting customers who do not value the extra features/high performance of the existing product or simply cannot afford it.

In a recent article, Glen M. Schmidt and Cheryl T. Druehl (2008) argue that not every innovation that dramatically disrupts the current market is necessarily a disruptive innovation as Clayton Christensen defines this term. Focusing on the diffusion pattern of the new product they offer a complementary terminology to Christensen's work. Illustrating their idea by using the encroachment framework, they show that low price is not really a constant indicator of a disruptive innovation, naming cell phones and digital cameras as examples, but *low-end encroachment* is. *Low-end encroachment* takes place when the new product first displaces the old one in the low end of the old product market and then diffuses upward. *High-end encroachment* takes place when the new product first displaces the old product at the high end, followed later by diffusion down toward the low end. The low-end customers are the last to adopt the new product. In case, when the entrant introduces a new product that encroaches from the *high end*, the incumbent tends to defend its market quickly and vigorously, because the incumbent is losing its best customers (those with highest willingness to pay). Thus, the incumbent may be more likely to introduce its own new product to encroach from the high end, even if it means cannibalizing its own product as Intel does with a new generation of microprocessor.

Glen M. Schmidt and Cheryl T. Druehl (2008) claimed that although some innovations tend to look disruptive, if that new product first encroaches on the high end of the existing market diffusing downwards and the impact on the current market is immediate and striking – it is a mere indicator of a sustaining innovation that had just cannibalized another sustaining innovation that was before it. It is said that both new-market and low-end disruptions result in low-end encroachment diffusion process. The only difference is whether the encroachment starts immediately (as in the case of a low-end disruption) or after the new product has opened up a new market and subsequently improved enough to become attractive to the low-end customers of the older product (as in the case of a new-market disruption).

Christensen in his original work (2003) mentions that a product can sometimes take sales away from the old product (encroach) from the low end even if it starts up as expensive (cell phones relative to land line). Back then he called those situations as exceptions from the rule. Nicholas Carr (2005) as

well spoke of such disruptive innovations that outperform existing products, when they are introduced and sell for a premium price, rather than at a discount (CD relative to vinyl disk). These innovations are typically very costly to produce. The new expensive product is first purchased only by a small group of “power users”, who is able to justify their purchase. To be able to reach a mass market, these disruptions are dependent on economies of scale to lower the production costs and the prices. As suppliers get experience and scale and the prices of underling technologies drop, the production costs tend to go down. Meanwhile, the broader market becomes aware of the benefits of the new product and increasingly open to embracing it.

Table 1
Mapping of the type of innovation to the type of diffusion

Type of innovation	Type of diffusion to which it maps	Description
Sustaining Innovation	High-end encroachment	The new product first encroaches on the high end of the existing market and then diffuses downward.
Disruptive Innovation	Low-end encroachment	The new product first encroaches on the low end of the existing market and then diffuses upward. Low-end encroachment begins immediately upon introduction of the new product.
New-Market Disruption	Fringe-market low-end encroachment	Before encroachment begins, the new product opens up a fringe market (where customer needs are incrementally different from those of current low-end customers).
	Detached-market low-end encroachment	Before encroachment begins, the new product opens up a detached market (where customer needs are dramatically different from those of current low-end customers).

Source: Druehl and Schmidt (2008)

Cheryl T. Druehl and Glen M. Schmidt (2008) managed to explain this phenomenon by distinguishing two ways of new-market disruption. In the case that was spoken about above before encroachment began, the new products opened up a *detached market*, where customer needs were dramatically different from those of current low-end customers (cell phone relative to land line, FedEx relative to U.S. Postal service). “Preferences in this new market are so divergent (detached) from the current market that reducing the price of the current product a bit would not have enticed the detached market to buy it” (p.350). Alternately, a disruptive innovation can open up a new market on *the fringe of the old market*. “A new market is defined to be on the fringe of the old market if buyers in this new market

would have bought the current (old) product if only the old product were a little less expensive. In other words, the preferences of the new fringe market are only incrementally different from those on the low end of the current market” (p.351). Druehl and Schmidt (2008) stress that the point is not that high-end encroachment is necessarily a bad strategy and low-end encroachment a good strategy, but rather that both incumbents and entrants must be aware of and make use of the strategy that offer maximum benefit.

2. Analytical Framework

Christensen does not establish exact criteria for determining whether or not a given innovation is considered a “disruptive innovation” and the question of whether an innovation is disruptive only once it displaces incumbents that built their business on the prior technology or business model still stays open. In this study, we agree with Lindqvist and Ghazi (2005), who generalize that the disruptiveness of an innovation depends both on its *disruptive potential*, which is an intrinsic quality and on the actual capabilities and choices the firm and its competitors make – the *disruption process of that innovation*. In this section we suggest a framework for identifying the disruptiveness of an idea.

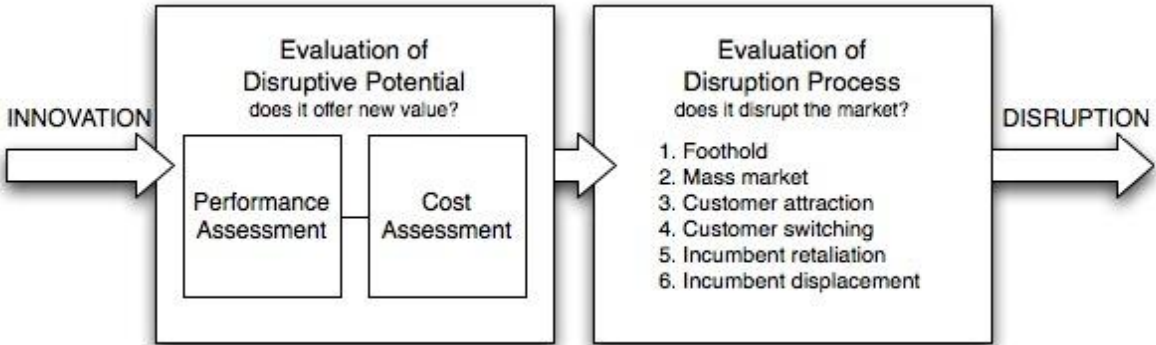


Fig. 1 The evaluation of the disruptiveness of an innovation

Since it is impossible *ex ante* to determine a disruptive technology, only its disruptive potential can be evaluated. Studies of disruptive potential concentrate on the *ex-ante* approach in an attempt to provide a scenario of future development of the innovation (Puumalainen and Sainio 2007).

The innovation’s ability to disrupt a chosen market is its *disruptive potential*. For a product of MSP to have disruptive potential there must be an underserved market with willing early adopters and for that to happen the value delivered by the product should be perceived higher, than the value delivered by existing competitors’ products. According to the disruptive innovation definition, this could be established either by (1) *offering*

brand new performance dimension or (2) a reduced traditional performance for a more attractable price.

2.1. Performance assessment

Disruptive innovations change the bases of competition because they introduce a dimension of performance along which products did not compete previously (Danneels 2004). These new dimensions of performance would attract the market segments from new products disrupting the market. As it is evident what is that the consumer expects to receive and values in the purchase, it becomes possible to say whether the product is inferior in terms of traditional value offering and if it actually offers anything new. If it turns out that it is inferior in terms of traditional performance, but offers valued performance of a new dimension, underserved customers and former non-consumers are likely to form a new market for the product.

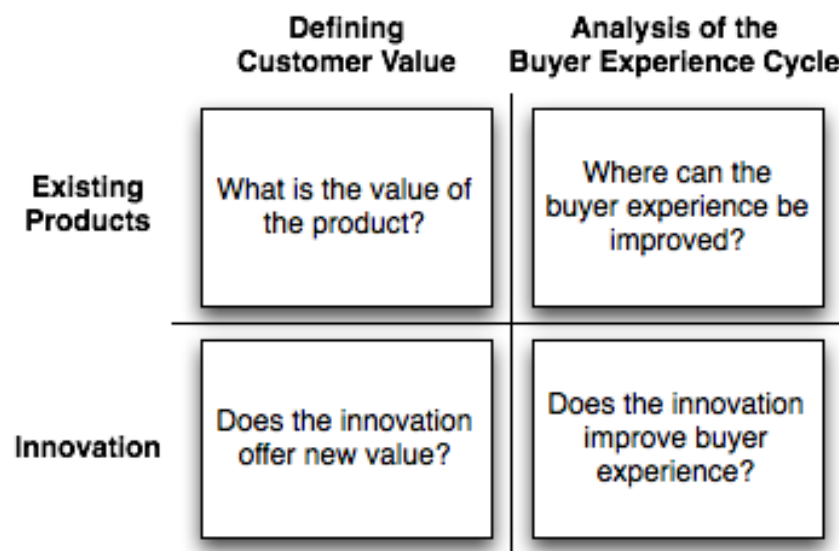


Fig. 2. The performance assessment

Traditional value analysis. By identifying what the customer will actually value about the product the foothold for the innovation can be identified (Christensen 2003). Sheth, Newman and Gross (1991) in the theory of Consumption Values and Market Choices argue that they have identified five values that drive all market choice. These five values — *functional value, social value, emotional value, epistemic value, and conditional value* — are categorized in order to distinguish between the functional dimensions and socio-psychological dimensions of value.

- *Functional value* could be defined as the perceived utility acquired from a product's capacity for functional, utilitarian or physical performance (Sheth, Newman and Gross 1991, p.161).

- *Emotional Value* is the perceived utility acquired from the ability of the product or service to arouse feelings or affective states (p.161).
- *Social Value* is the perceived utility acquired from product's association with one or more specific social groups (p.161).
- *Epistemic Value* is the perceived utility acquired from the product's ability to arouse curiosity, provide novelty and/or satisfy a desire for knowledge (p.162).
- *Conditional Value* could be defined as the perceived utility acquired by the presence of extreme physical or social situations when the customer choice is made, in which the functional or social value of the good is emphasized (p.162).

Any or all of the five consumption values, depending on the situation, may influence a consumption experience. Yet the market choice is a function of multiple consumption values and these consumption values are independent and make differential contributions in any given choice situation (Sheth Newman and Gross 1991).

Since customer value is measured, a qualitative research design is considered the most appropriate given the nature of the information that is desired (Woodruff and Gardial 1996). It is important that all of the possible value types are taken into consideration.

Analysis of the buyer experience cycle. Once it is known what the consumers value, the next step is to investigate where and how they receive that value. According to the buyer experience cycle model, a customer's experience when buying a product is not only the result of using the product – there are normally five other stages: *purchase, delivery, supplements, maintenance and disposal* (Kim and Mauborgne 2000). Each stage encompasses a wide variety of specific experiences.

In order to understand if the proposed innovation exploits the potential for performance improvement in the different stages, the appropriate questions should be answered (Kim and Mauborgne 2000).

1. **Purchase** – how easy it is to find the product, how attractive and accessible is the store, what is the level of comfort and speed of making the purchase.
2. **Delivery** – how fast and convenient is the product delivery.
3. **Use** – what training or expert assistance is required while using the product, how effective are the product's features and functions.
4. **Supplements** – what are other accessories that need to be used with the product.
5. **Maintenance** – how easy it is to maintain the product.
6. **Disposal** – whether the use of the product creates waste items and how easy it is to dispose of the product.

There are six different ways for innovating and creating value in these stages, which are defined by levers of utility (Kim and Mauborgne 2000). Those are the ways in which companies unlock utility for their customers.

1. **Customer productivity** – the innovation helps customers do things better, faster or in a different way.
2. **Simplicity** – the innovation offers enhanced ease-of-use.
3. **Convenience** – the innovation makes a desired activity easier to perform.
4. **Risks** –the innovation minimizes customers’ financial or physical risks.
5. **Fun and image** – the innovation delights customers.
6. **Environment friendliness** – the innovation facilitates recycling and other environmentally sensitive practices.

The benefits and drawbacks of the product can be evaluated by using the utility map (Kim and Mauborgne 2000). Filling in an innovation’s utility map makes it possible to observe what utility levers the product involves in and if it actually improves buyer experience. An innovation has the potential to become a new-market innovation if it introduces a new benefit in the same stage of buyer experience cycle or introduces a new benefit in a new stage.

Product value determinants that should have been discovered beforehand through the pilot testing are to be used in a quantitative research aimed at measuring the level of reader dissatisfaction with the attributes of the current product. A high level of dissatisfaction in a buyer experience cycle stage would indicate where there is currently a room for innovations. Filling the utility map would show whether the innovation improves experience that needs to be improved or overserves the customers by providing extra utility that would not be valued.

Yet it is important to know innovations in which experience stage the buyer will value more, since it is clear that in different cases different stages might be of greater importance than others. So by additionally measuring the perceived importance of each stage it would be possible to say innovation is which stage would lead to a more efficient increase in perceived value.

Studying perceived importance of new utility. A new utility only increases value if the customer appreciates this utility. So in order to measure the value contribution more correctly it is necessary to estimate the need in innovations in each buyer experience stage by:

1. Estimating consumer dissatisfaction with factors that affect utility at each stage.
2. Measuring the relative perceived importance of each stage to the reader.
3. Finding out an increase of what utility will generate the most value.

	Purchase	Delivery	Use	Supplements	Maintenance	Disposal
Customer Productivity						
Simplicity						
Convenience						
Risk						
Fun and Image						
Environmental Friendliness						

Fig. 3. The utility map
Source: Kim and Mauborgne (2000)

Bower and Christensen (1995) pointed out that established firms are held captive by their customers and therefore miss the disruptive technologies. Danneels (2004) interprets Christensen’s findings saying that this happens because those firms are focused narrowly on serving current customers and should not allocate all their resources to serving just them.

Since the focus of disruptive innovations is on non-consumers and less active consumers in the low end of the market and the studied object does not feat to traditional performance expectations, estimating customers’ willingness to go for an innovation is a challenge.

This study proposes to try to feel for a need for an innovation in the market by measuring the level of customer dissatisfaction with the attributes of the current product. From changing the question from “where the buyer experience can be improved?” to “where *it needs* to be improved?” it would be possible to say innovation is which stage would lead to a more efficient increase in perceived value. That way a single utility improvement that the customer perceives as important would lead to a more efficient increase in a new product’s value than multiple improvements in utility that is valued less. If it turns out that the innovation drastically improves utility that is most valued and used, underserved consumers and former non-consumers are likely to form a new market for the innovation. In a situation, where there are no unsatisfied needs, which the innovation could focus on to stimulate a new market isolation and if the innovation only offers new utility levers, that are not really valued or used, there is a small chance for the innovation to disrupt the market. In that case, we say that the innovation has no disruptive potential.

2.2. Cost assessment

A customer perceived cost of a product is decreased either by reducing the price of the product via innovations in the industry supply chain or by reducing the customer cost of using the product via offering enhanced simplicity, convenience, productivity, smaller risks, etc. The second case is equivalent to innovation's proposing of a new utility lever and thus is instead reviewed in the context of performance assessment.

Value has also a meaning in the context of trading relationships. Since value is derived from customer needs, those activities that do not contribute to meeting these needs are “non-value-added” waste, or “muda” in the language of lean thinking (Feller, Shunk and Callarman 2006). By streamlining the processes that generate the goods and services that customers value, fewer resources need to be expended, and thus the margin between customer value and the cost of delivery increases, providing opportunities for price reduction (Feller, Shunk and Callarman 2006).

Our focus in this section is to understand how the various participants in publishing industry's supply chain add value and affect the final price of the product. Supply chain is a term “now commonly used internationally – to encompass every effort involved in producing and delivering a final product or service, from the supplier's supplier to the customer's customer” (Supply-Chain Council 2005). The primary focus in supply chains is on the costs and efficiencies of supply, and the flow of materials from their various sources to their final destinations (Feller, Shunk and Callarman 2006). Efficient supply chains reduce costs.

Each member in the supply chain receives “input” from the previous member, “adds value” to this input through its internal activities/processes and passes on the “output” to the next member in the chain (Feller, Shunk and Callarman 2006). This process is often depicted via value chains. Value chains link raw material suppliers, manufacturers to distribution channels and end customers by defining the locus of value creating process. They generally include three or more of the following actors: producers, processors, distributors, wholesalers, retailers and consumers, who work together to identify objectives, share risks and benefits and invest time, energy and resources to make the relationship work (Powazek).

A consideration of the tasks and functions that occur in the industry is needed to uncover whether the product reduces or eliminates considerable muda via process improvement activities. This could be done by:

1. Defining the value contributions of the actors of a value chain before and after the potentially disruptive innovation.
2. Finding the changes in value contribution in the trading process.

3. Finding how the value offerings in a value chain affect the price.

While a sustaining innovation improves or maintains profit margins by exploiting existing processes, disruptive innovations often involve changing the business model (Lindqvist and Ghazi 2005). *Low-end disruptive innovations* require a new financial or operational model that would help earn attractive returns at low prices and *new-market disruptive innovations* are built on new business models often with lower price points, new revenue model and new distribution channels.

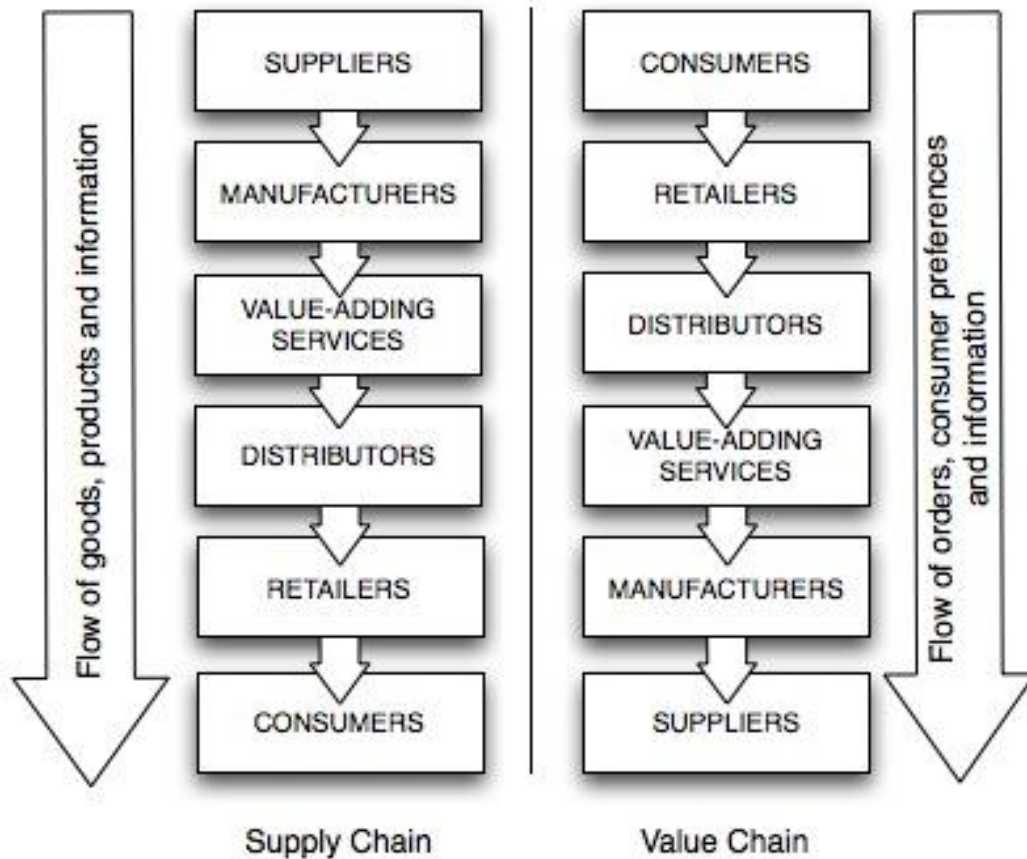


Fig.4. Typical supply chain / value chain

Figure 5 illustrates the graphical representation for evaluating the disruptive potential of an innovation, based on the definitions, classifications and analysis logic described above.

3. Research methodology

In evaluating the disruptive innovation potential of an MSP product, both qualitative and quantitative techniques are required. This includes performing qualitative and quantitative interviews in order to test the viability of framework.

The first research is a pilot testing – an attempt to explore the determinants of reader buying experience and the new value digital books offer. The research is exploratory and a *qualitative research design* was considered the most appropriate, given the nature of the information that was desired. As Woodruff and Gardial (1996) noted, “measuring customer value is rooted in the use of qualitative data-gathering techniques”. In-depth type of interviews was considered as the most appropriate method, since it was necessary to reveal the hidden motives, considerations and attitudes of the respondents towards a particular topic. 30 in-depth interviews were conducted in total.

During the exploratory and descriptive phases of the work secondary sources are mainly used. These are books, scientific and other articles in journals, also articles and other information on the Internet. The credibility of these sources is generally high. The books and articles have either been recommended by the supervisors or collected using databases, e.g. Emerald Insight and EBSCO. During the descriptive and evaluative phases of the work, use of primary sources has also been considered. The primary sources are mainly ordinary book consumers, not coming from or deliberately connected with Publishing, libraries and book retailing. The primary sources are used when the draft of the framework is applied on the digital book. After the framework had been applied on digital books, the results enable an evaluation of the appropriateness of the framework. Required modifications are identified and a refined framework is proposed.

The main research, on the other hand, aimed at measuring the level of consumer dissatisfaction with the attributes of the traditional product required the use of *quantitative techniques*. The questions in the on-line survey, in which 100 participants took part, were conducted using Likert’s scaling and the results were summed up to show the book attributes that caused a sufficient level of reader dissatisfaction. Likert’s scaling was considered the most appropriate, because the participants were not asked to evaluate the whole product as such with competitors’ products, but only to evaluate separate product features.

The evaluation logic illustrated via a block scheme (figure 6) presents a tool for distinguishing disruptive innovations and the types of disruptive potential. The classification of disruptive innovations might also prove helpful with analysis of any other product when working with Christensen’s (2003) original model.

The object of this study is e-publishing, an establishing type of MSP, on which we have chosen to illustrate are model. Next, we will mention the main definitions of termed used in the analysis and discuss the ecology of E-publishing.

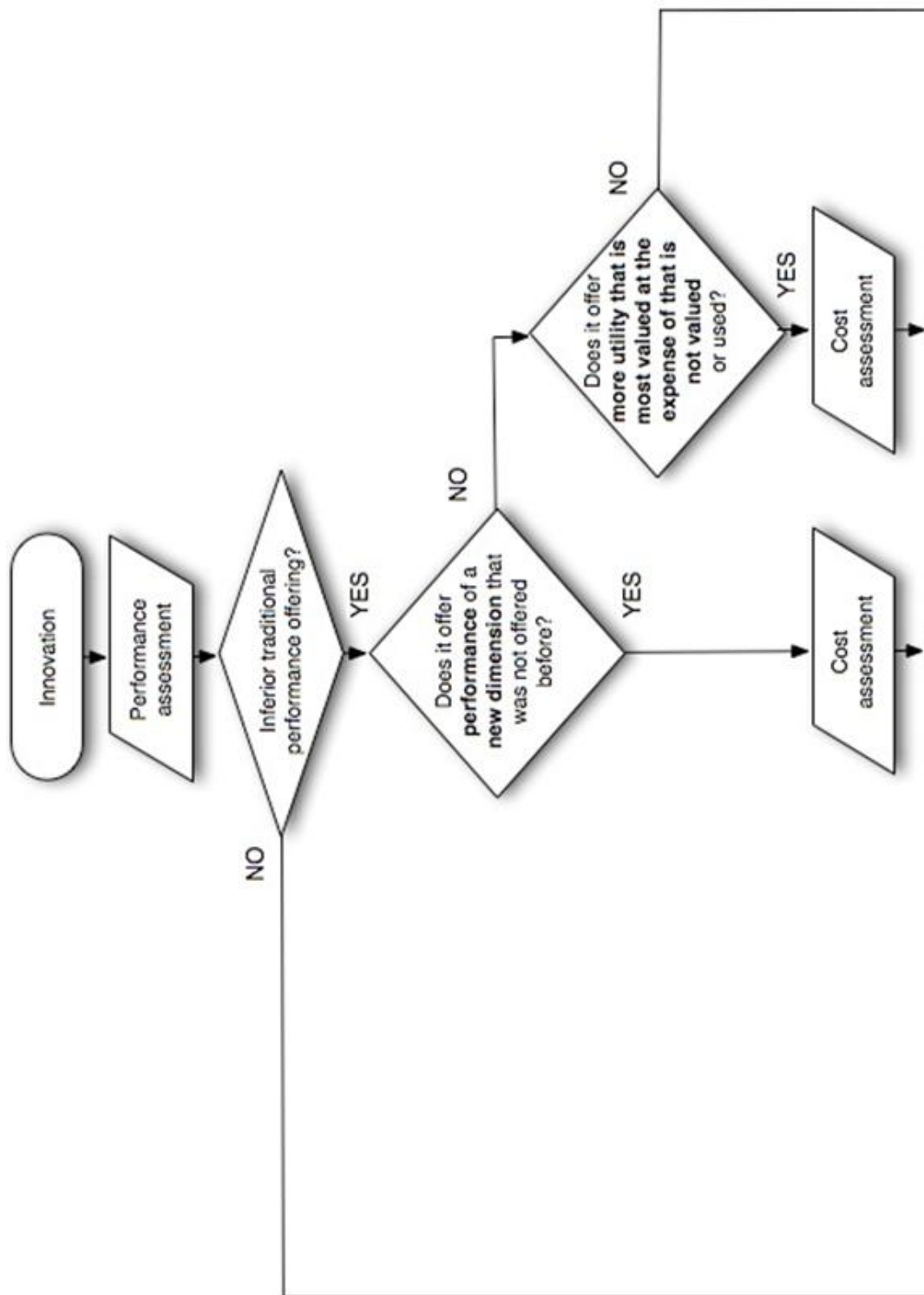


Fig.5. Evaluating disruptive potential (part 1)

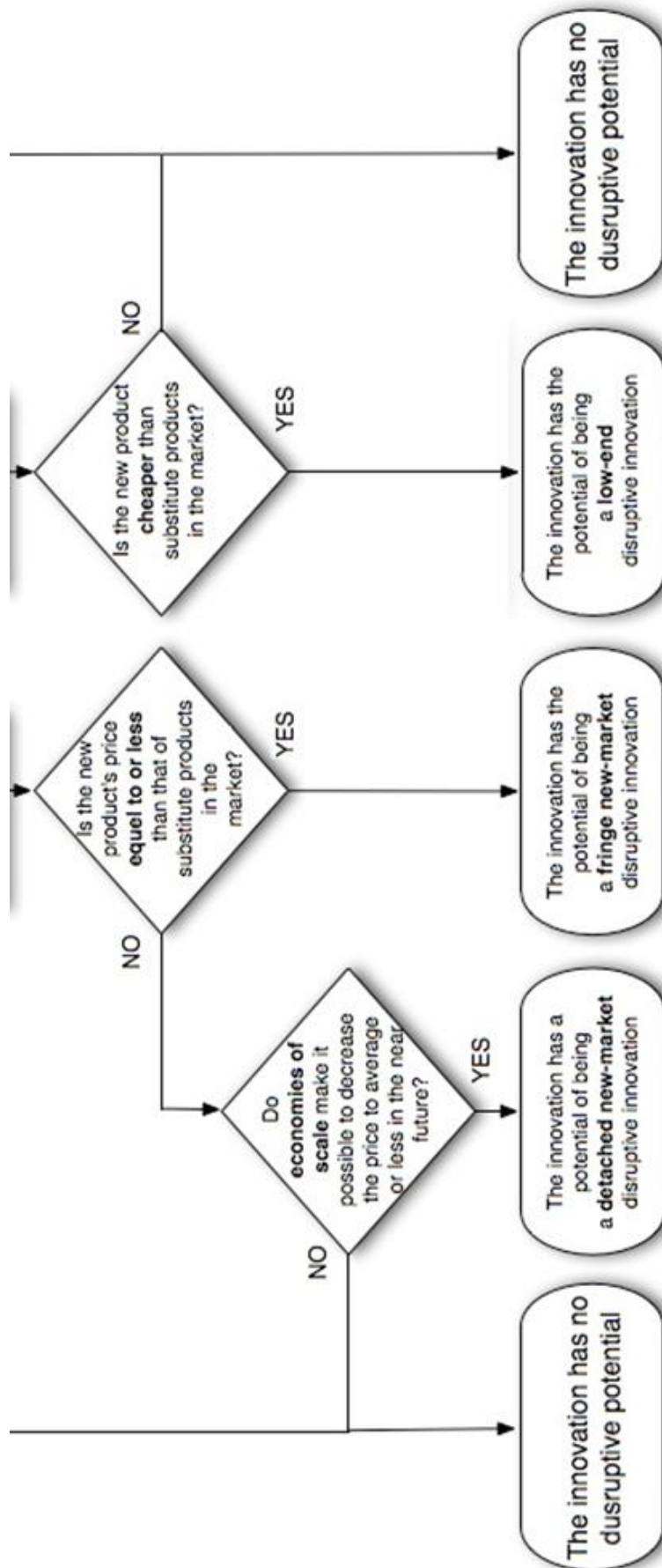


Fig. 5. Evaluating disruptive potential (part 2)

The E-publishing ecology. The Open eBook Forum, the trade and standards association for the digital publishing industry that in 2005 was renamed to International Digital Publishing Forum (IDPF), back in 2000 published a document, suggesting the framework for E-publishing ecology. The document embodies various deliverables (glossary, reference models, stakeholder profiles, etc.) that its' working group have produced for the Public Comment Draft. The paper defines e-publications as follows:

Electronic Publication – is a Literary Work disseminated in the form of a Digital Object and accessed electronically, where...

Digital Object – is a sequence of bits that incorporates unique naming, Metadata, and Content. It may be recursive, enabling management of objects at multiple levels of granularity (the whole document, a paragraph, graph, etc.) in any medium (text, audio, video, image, etc.) and...

Literary Works – are works, other than audiovisual works, expressed in words, numbers or other verbal or numerical symbols or indicia, regardless of the nature of the material objects, such as books, periodicals, manuscripts, phonorecords, film, tapes, disks, or cards, in which they are embodied (U.S. Copyright Act 1976, cited in OEBF 2000).

E-publishing is then defined as the act of disseminating Literary Works in digital form. E-publication could be read on hardware devices known as e-book readers.

E-book (digital book) Reader, also called an e-book device or e-reader – is an electronic device that could be used for reading digital books and periodicals. Any PC, laptop, cell phone or Personal Digital Assistant (PDA) capable of displaying text on a screen is also capable of being an e-book reader.

Dedicated E-readers – are devices designed primarily for the purpose of reading e-books. Most modern dedicated e-readers use e-ink technology to display content. The main advantages of these devices are portability, readability of their screens in bright sunlight, and long battery life.

In September 2007 the International Digital Publishing Forum (IDPF, former OEBF) announced EPUB to be the official E-publishing standard, superseding the older Open eBook standard. EPUB (also referred to as “e-pub”) is free and open, and designed for reflowable e-publications, meaning that the text display can be optimized for the particular display device. It is composed of three open standards:

- Open Publication Structure (OPS) 2.0, contains the formatting of its content;
- Open Packaging Format (OPF) 2.0, describes the structure of .epub file in XML;
- OEBPS Container Format (OCF) 1.0, collects all files as a ZIP archive.

XHTML or DTBook (an XML standard provided by the DAISY Consortium) are used to represent the text and structure of the content document, XML - for descriptions, a subset of CSS - to provide layout and formatting and a re-named “zip” file to hold it all in. Extension “.epub” is the file extension for EPUB reflowable e-publications. The format is meant to function as a single format so that publishers can produce and send a single e-publication file through distribution. EPUB also offers consumers interoperability between software/hardware for unencrypted reflowable digital books and other e-publications (Conboy 2009). Unlike PDF, which is a print-oriented, fixed-layout format that makes it hard to change the layout of documents when, for example, changing the page size, but keeping the font size the same, EPUB is a display-oriented, reflowable format. Using the EPUB format makes it easy to produce a document, which would display well on different display sizes and with many various font sizes.

Next, the term “*digital book*” will be later on used to describe a new format for reading that is the digital media equivalent of a conventional printed book. Moreover it will be also applied as a word to unite *digitalized*, *multimedia* and *hypertext* books. “*E-book*”, on the other hand, is used to refer to a product category (contrary to *e-newspapers* and *e-journals*) under the umbrella of non-periodical digital books.

4. Analysis

In this part, the empirical findings based on the analytical framework are introduced. These findings include an evaluation of the disruptive potential of the digital book in the book publishing market.

4.1. Performance Assessment

The performance assessment aims at investigating what performance-related benefits the digital book has to offer. New performance dimensions suggested by the new book format may attract former non-consumers and facilitate the formation of a new market. The offering of a better price for the cost of inferior performance, on the other hand, if reconsidered so to best satisfy the needs of an existing reader, may attract a low-end segment from where the digital book would start disrupting the market.

First the reader perceived value of the book is determined: what types they are, at what stages of consumption each value is accumulated and what are some of the peculiarities of the consumer perceived value when it comes to books. A qualitative research conducted from 30 respondents, who are book consumers is made to support these findings.

Then, a formulation of new market needs is presented and the digital book is reviewed in terms of capability to satisfy these needs.

Then based on a quantitative research of 100 book consumers the dissatisfaction with different product performances in each reader experience stage is measured and a utility map summarizes whether digital books improve reader experience in a way that could be valued by the market.

Traditional performance assessment

I. **The functional value** of a book refers to the book's information media capabilities. The more readable and preservable the book is, the higher its functional value is.

Readability of a book depends on print and paper quality: the pages' background should contrast the text and the printed text and pictures are to be sharp. In poor quality print the paper is gray and transparent showing through text from the back of the page and the text and pictures are blurry, causing tension to the eyes, when read.

Preservability of a book depends from the time and frequency of using the book: as the book grows older, the easier it gets to accidentally tear a page and the more dirt and stains the book gathers if often used, making rereading the text more difficult.

II. **The emotional value** of a book is the value that is created through associating the book with special feelings and memories. The higher is the book's capability to arouse feelings and affective reactions in the reader, the higher the emotional value of the book is.

III. **The social value** of a book is the perceived association of a book with a certain social group or groups. Books generate social value when they are associated with positive or negative stereotypes of demographic (age, sex, religion), socioeconomic (income, occupation), cultural/ethnic (race, lifestyle), or political, ideological segments of society.

When the information about books one reads and have read is available for others to see, allowing associating the reader with a certain social group, the book could be said to generate social value. This happens when, for instance, a reader puts a list of his favorite authors and titles on his web profile of a social network or even just by reading a book in a place where others can identify the title or genre of the book, or also the mere fact of a book being read.

This also works the other way around, when not the associated social community is aware of the reader, but the reader is aware of that community. In this case the reader relating himself to this community via reading generates the social value of the book.

IV. **The epistemic value** of a book is its ability to arouse curiosity, create novelty or satisfy an aspiration for knowledge. A book generates epistemic value when it is capable to supply something new or different from what is already known.

Novels when reread usually do not provide as much epistemic value as the first time when they were read, since its end and plot turns are known in advance.

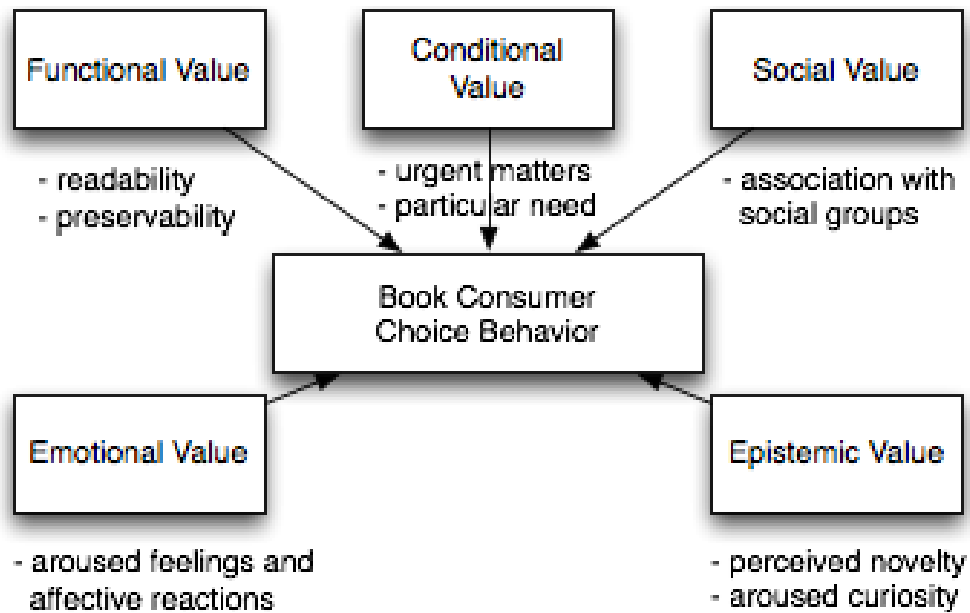


Fig. 6. The five values influencing book consumer choice

Source: Sheth, Newman and Gross (1991)

V. **The conditional value** of a book is the value that is determined by the conditions of the specific situation, in which the reader makes a buying choice. A book generates conditional value when there are urgent matters that accentuate the functional or social value of that book.

For example a book from an obligatory class reading list could possess a huge conditional value for a student during the exams session, while have possessed none a few years earlier.

In a book dedicated to digital book peculiarities Stork (2000) notices that the sets of advances in technology are not yet mature and some of the advantages brought their own inherent problems: resistance to change, font issues, lack of a standard format, digital rights management, reproduction of graphics and reader hardware.

In a report by O’Hara (O’Hara and Sellen 1997) dedicated to the comparison of reading paper and on-line documents the authors conduct a laboratory study in order to give an understanding of why economists at the IMF always mark up and review their colleagues’ documents on paper and choose to read important documents from paper rather than computer screens. The research pointed out the following observations (O’Hara and Sellen 1997):

- It was found that the ability to annotate while reading was important in enforcing an understanding of the source document, and helped in planning for writing.

- It was found that movement through documents was important for information organization, for reference, and for checking understanding.
- Laying out pages in space was found important for gaining an overall sense of the structure of a document, for referring to other documents, and for integrating reading with writing.

Concluding, the aspects that a consumer traditionally values in books were defined and arranged according to Sheth-Newman-Gross's classification (1991). Secondary data collected from researches on reading behavior and digital book traits illustrates that digital books clearly loose in terms of traditional performance to paper books:

- Switching to digital books requires changing core habits, since they have no physical representation;
- The lack of a standard format and the digital text being reflowable lead to the loss of the message put in the page design and text positioning of the book;
- Digital books offer small flexibility and control over spatial layout;
- Full color graphics, complex tables and figures are not easily reproducible on small screens;
- Annotation in digital books ceases to be an integral part of reading;
- Slow book navigation techniques require additional efforts from the user;
- Digital books require expensive hardware, which is not always compatible with every digital book format.

New performance assessment. Even taking into consideration the disadvantages of the digital book Stork (2000) mentioned, he demonstrates absolute confidence in that digital books are here to stay and would be a major part of the Publishing industry in the new millennium. He broke the advantages of digital book publishing into six characteristics: readability, usability, changeability, portability, multimedia capability, and availability.

Robert Stein, founder of the first commercial multimedia CD-ROM publisher and director of the Institute for the Future of the Book, has been exploring the potential of “new media” for nearly thirty years. One of this Institute's stated principal activities - building high-end tools for making complex electronic documents (www.futureofthebook.org 2006) – is of big importance for this study. Of particular interest is the 2008 piece, in which Bob summarized his views in a conceptual model he called “a unified field theory of publishing in the networked era”.

Stein in the unified field theory of publishing in the networked era (2008) accuses the Publishing industry to have turned a blind eye on the fact that reading and writing have always been social activities. Publishers, retailers and even authors tend to forget about the active reader by not car-

ing to interact with or support the communities of readers - the relationship which may benefit both parties: extending reading experience for the consumers and receiving useful feedback and suggestion for the producer.

Today social interaction comes forward transforming the image of the reader and reading as such from a solitary experience to a social activity: you take a book, go to a forum, read messages, leave messages, leave comments on the book at the online shop and google the questions that rise up while reading (Stein 2008).

In the Institute for the Future of the Book (www.futureofthebook.org, 2006) they discovered that used books in libraries sometimes have very interesting marks in the margins: thoughts, remarks and even readers' conversations. Realizing the value of such practice for the reader experience they started experimenting on efficient ways to include it in a book, the way readers could use the maximum from it. Experimentation on writer's blogs, CommentPress platform and via Sophie software proved that there is a great potential and need in including user-generated content into books.

Speaking on the same topic, but in the context of textbooks Parker Rossman (2005) presents a similar opinion, saying that the Electronic Learning Tutorial Instrument System of the future should become a teacher-guided technology tailored to the individual via an automated tutor and incorporate other media and technologies, including the feature of commenting and online discussions.

He also stresses the importance of personification of the reading experience of a textbook consumer, meaning that the same e-textbook through special software should be able to change the pace of reading and regulate the difficulty of the study materials according to the reader's needs or offer further readings for those who are interested in the subject in a deeper level. The feature of customization might prove as useful also in the electronic trade book market, helping to create a personalized citations library.

Another clear trend of digital media and high-tech leisure products is applying interactiveness and user customization possibilities wherever it is possible. Literally letting the reader lead the reading process by allowing him to customize the way he wants to read it or even letting him to engage in the plot, if we talk about fiction, choosing variants to solve quests or performing an action in the story. With the author laying "Easter eggs" across the story, just as there are often "hidden tracks" on CDs and bonuses and deleted scenes on DVDs, the reading process could be so much more involving and personalized – the trait the book seemed to lose as other medium have appeared.

Analysis of reader experience cycle. According to Kim and Mauborgne (2000) the perceived value of "consuming" a book would not

be something the readers get at once as they finish the book, but something they would receive peace by peace during the whole process of book consumption that can be divided to the following steps:

1. Buying the book (*from searching for the needed book to the act of purchasing*),
2. Delivering the book (*from the act of purchasing to the act of using the book*),
3. Reading the book (*from preparing for reading to the reading process itself*),
4. Keeping the book (*from after the book had been read*).

The more convenient is every step of the consumption process, the less costs they suffer and the higher the value of the product is.

In-depth interviews with 30 book consumers of different ages and backgrounds allowed formulating the following generalization: an average reader values a book more...

(I. Buying the book)

...the higher the availability of the book is;

...the reachable the place of purchasing is;

...the faster the buying transaction is;

...the more secure the transaction is;

(II. Delivering the book)

...the faster the delivery of the book is;

...the lighter the book's weight is;

(III. Reading the book)

...the less efforts it requires to read the font;

...the simpler the navigation in the content is;

(IV. Keeping the book)

...the less accommodations for keeping the book requires;

...the less maintenance efforts keeping the book requires;

...the more preservable the book is.

In the qualitative research 30 people were asked about the things that could decrease the cost of reading and buying a paper book in each stage of the buyer experience cycle. Specific sub-questions were formulated in advance to be able to enhance the understanding of the questions by the respondents. In order not to lose any essential information about consumer behavior that is closely dependent on the age of the respondent, the study used stratified sampling by age. There were 10 age groups and each consisted of three respondents with an age difference of maximum 4 years, with the oldest respondent being 65 years old and the youngest – 15 years old – all consider themselves book consumers. About one third of the respondents were men.

The purpose of the pilot testing was to collect information about value at all stages of a book consumption experience as in-depth interviews are very useful at uncovering hidden issues and in providing with very rich depth of information (Wikipedia). The results of the study are also used in the development of the quantitative survey items.

Finding the right book. During the initial interview every respondent argued that the main determinant of a book's value is its relevance to the buyer expectations of the product prior to using: whether the book was in practice what it was expected to be in theory.

The received answers allowed summarizing the perceived indicators of the product relevance to the readers' needs:

1. Book's cover design,
2. Quotes from media: recommendations, short reviews on the cover,
3. Annotation inside and on the back of the book,
4. Books location in a place for certain book category in the bookshop/e-bookshop/ library,
5. Recommendation from the shop assistant/ librarian,
6. Automatically generated recommendation on e-bookshops,
7. Buyers' comments on e-bookshop website,
8. Printed reviews,
9. TV reviews and advertising,
10. Outdoor advertising,
11. Internet media reviews and advertising,
12. Book reviews on blogs, forums and personal websites,
13. Online reference databases,
14. Printed reference books.

All of the respondents said that when possible they apply to several such indicators before buying a book and that the more sources are used in the process of decision making, the better is the result. Its possible to say that in a market overflowed with products finding the right book becomes a big challenge and introduces new costs for the book consumer. And for that reason new mechanisms for determining the relevance of a book to ones needs become of great value for the book consumer.

Book disposal barriers. There is yet another issue related to the perceived reader value that is less obvious – the attitude towards a book that the buyer doesn't need anymore. The respondents' answers to the question "what do you do with books you don't need anymore?" showed that the mere thought of throwing away a book triggers barriers of various characters, that could be classified as: *emotional, functional and social* (table 2).

The *emotional barrier* appears from treating books as friends and memorabilia, what stimulates maximally long book maintaining. The long-

er such a book is kept, the more emotional value it generates and the harder it is to part with the book.

The *functional barrier*, in contrary, rises in response to looking at books as paid for goods that can still generate value somewhere in the future or be reused by others. That leads to selling, lending or bequeathing used books.

Last, the *social barrier* reminds the book consumers of their responsibility towards nature and society, which often makes them want to recycle or donate the book to a library.

Table 2
Common book disposal psychological barriers

Emotional barrier	<p><i>... A good book is like a friend. I will feel bad to throw it away.</i></p> <p><i>... It would be insensible to through away something that describes me and reminds me of my life path.</i></p>
Functional barrier	<p><i>... At some point in the future I might want to reread it.</i></p> <p><i>... It is not reasonable to throw away what someone else can still use.</i></p> <p><i>... It is wrong to throw away something that could last for a 100 year.</i></p>
Social barrier	<p><i>... Throwing away books is a socially irresponsible deed.</i></p> <p><i>... Throwing away books is an eco-hostile action.</i></p>

These barriers constitute that the perceived consumer value of the book generated in the process of “using” the product does not disappear as the book had been read. The mere act of consideration of a book disposal leads to reconsidering and, sometimes, the increase of the perceived value of the book at the moment the decision needs to be made whether to keep it or throw away.

It could be concluded from the observation that as the epistemic and conditional values are no longer relevant, the barriers generated by the perceived emotional, functional and social values push the consumer to pay extra costs for book keeping or facilitate a new consumption chain for the used book:

1. Due to a strong emotional attachment, the time of single book preservation is significantly extended, what leads in time to a limited increase of the emotional perceived value at the expense of decreasing functional, conditional and epistemic value and high cost of keeping and maintaining the book.
2. Reselling, lending and bequeathing of books lead to a loss in epistemic and conditional perceived value of the book (as the book wares out and the content does not get upgraded by new editions) and causes the weakening of producer’s control over the product, lost revenues and eventually – higher price of books.

3. Recycling and donating books boosts the perceived social value of the consumption by engaging the book into a new consumption chain if the used book is qualified for such purposes or, in the opposite case, delegating the act of disposal to the library or the recycling company. It should be mentioned that in each case the consumer suffers a cost of preparing and delivering the book to the transfer.

That way the definition of the reader perceived value could be formulated is *the relationship between the reader's perceived functional, emotional, social, epistemic and conditional value of the book consumption and the inconveniences associated with buying, delivering, keeping, reading and disposing of that book.*

Utility Map Analysis

Stages of the Buyer Experience Cycle:

- S-I. The digital book allows fast and secure book purchasing in any time of the day and night with an infinite amount of copies available from the seller, limited only by an Internet access or a receiving range of a wireless network.
- S-II. The delivery period is reduced to seconds or minutes, depending on the device Internet speed or to the time of information transfer through a USB drive to the reading device. The book consumer does not require the physical delivery of the purchase and the delivery capacity is not limited to the books sizes anymore, but just to the storage space of the device used.
- S-III. The technology allows readability, text search, cross-referencing and integration of dictionaries to seize to be an important issue due to the usage of hyper-text and CSS programming languages, that allow total customizing and effective full-text search. Yet digital books make reading less intuitive (turning pages, navigating), reducing the perceived simplicity of the product.
- S-IV. Light and sight enhancement requirements are needed at a minimum extant, since most reading devices possess build in screen illuminating features and electronic ink technology that simulates reading from paper books and is not tiring for the eyes. Due to a design standard that supports flexibility, fonts could be enlarged without a decrease in quality. External text marking and page marking tools are also replaced by relevant reading device applications. Yet the requirements to always have a reading device nearby to read a book reduced perceived simplicity of the product.

Utility Levers:

- L-I. The digital book enhances consumer productivity by offering a faster and more secure way of purchasing directly from the publisher.

The new technology offers the reader to reconsider book maintenance and disposal by suggesting a cost free efficient way for book keeping that diminishes the need to ever dispose of the product.

- L-II. Until now, digital book readers' focus was rather on convenience, that on simplicity. Reading a digital book in comparison with reading a paper book is different, yet it does not offer enhanced ease-of-use.
- L-III. The main advantage of digital books is that they make each desired consumption activity easier to perform.
- L-IV. The innovation minimizes customers' financial risk of being cheated or underserved by allowing buying the exact same copy of a digital book that everybody else is purchasing and do it directly from the publisher or reading device retailer, skipping chains of intermediaries.
- L-V. Perhaps because digital book publishers and reading device manufacturing do not know how or perhaps do not find this important there still had been no successful attempt to position digital book reading as a fun, fashionable and entertaining activity.
- L-VI. The most definite new utility offered by the digital book is environmental friendliness. This utility lever appears in every stage of consumer experience and currently is one the main focuses of the product positioning.

	PURCHASE	DELIVERY	USE	SUPPLEMENTS	MAINTENANCE	DISPOSAL
CUSTOMER PRODUCTIVITY	+	+			+	+
SIMPLICITY			-	-		
CONVENIENCE	+	+	+	+	+	+
RISK	+	+			-	
FUN AND IMAGE						
FRIENDLINESS	+	+	+	+	+	+

Fig.7. The buyer utility map for digital books

Studying perceived importance of new utility. It is important that the book consumer appreciates the new utility that is offered by the innovation or else it may prove to be almost of no value to him at all. In order to measure the value contribution more correctly it is necessary to estimate the need in innovations in each buyer experience stage by: (1) estimating reader dissatisfaction with factors that affect utility in each stage; (2) measuring the relative perceived importance of each stage to the reader, and (3) finding out an increase of which utility is likely to generate the most value. Measuring the dissatisfaction in each stage of the chain is aimed at giving an answer to the question: where does the reader experience need to be improved?

According to the findings from the pilot testing, three main factors that might negatively affect a book's value were summarized for each buyer experience cycle stage. The questions about each were formulated so that respondents would evaluate their dissatisfaction with each book consumption feature. All of them were formulated with a negative connotation (e.g. "book delivery takes much time", "large sizes of a book affect your choice of not buying a book").

One might disagree that some of the factors mentioned in the survey actually cause dissatisfaction, since many people enjoy lending books or having vast bookshelves and book closets in their homes. Yet in this research we assume that everything that creates *additional costs* is a source of dissatisfaction.

100 book consumers of various age and gender, all living in St. Petersburg, Russia, were asked to complete an on-line survey, distributed by e-mail that consisted of 19 questions. The responses were measured by Likert's scaling. After the questionnaire was completed, instead of each item being analyzed separately, the responses were summed to create a score for a 6 groups of items. The group with the highest score, according to the proposed framework showed the biggest locus of dissatisfaction and thus it is the buyer experience cycle stage, where the need in innovations is the highest. To illustrate the findings, the points for each answer about dissatisfaction with factors of every buyer experience cycle were multiplied according to the degree of dissatisfaction (*-2 for "strongly disagree", *-1 for "disagree", *0 for "neither agree nor disagree", *1 for "agree", *2 for "completely agree") and then summarized to form a single measurement for each stage. The maximum score is thus 600 ($100 \cdot 3 \cdot 2$) and the minimum is -600 ($100 \cdot 3 \cdot (-2)$). That way 0 indicates indifference and negative numbers – the fact that for the reader those factors are actually a source of additional satisfaction when consuming books, rather than a factor of dissatisfaction.

The results summarized in figure 9 demonstrate the stages of the buyer's experience cycle that are the main origins of dissatisfaction with the

performance of book products and features of the business models commonly used in the market.

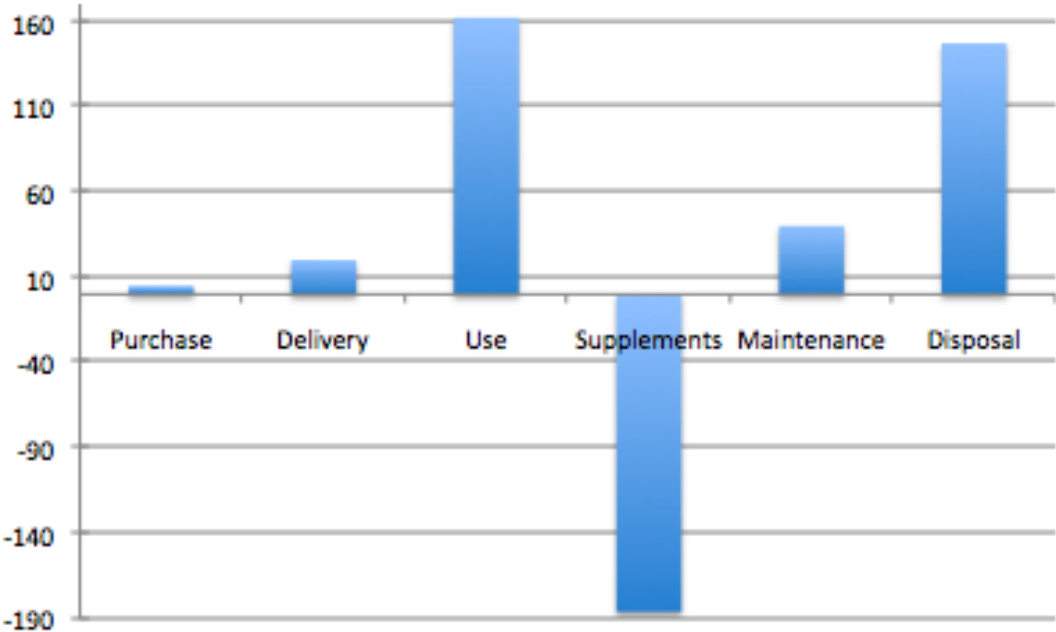


Fig.8. Where the buyer experience can be improved

The numbers in the diagram show that the peak of dissatisfaction was with “Use” factors and it reached only 160 points from the possible 600. That means that the respondents do not consider the mentioned factors as major sources of dissatisfaction, yet the results indicate that in all of the cases (with “supplement” factor in a minor extent) the participants agree that there is room for efficient improvement in every stage of the buyer experience cycle.

If to take 0 points as the point of indifference, every score that is larger – as an indicator of respondent’s general dissatisfaction with the traditional book product and every score that is lower than zero as an indicator of respondent’s general satisfaction with the traditional book, it is possible to say that most respondents were generally satisfied with the book (62%).

Disruptive innovations target niches and low end of markets, since the majority being used to the traditional product, usually do not see the necessity of improvement or changes. So was the majority of respondents interviewed. Still taking into consideration that the sampling was random, 38% respondents generally dissatisfied in the traditional product is a rather high number.

Measuring the level of dissatisfaction of the product performance requires also distinguishing which factors the reader finds most important. For that purpose the respondents were asked to evaluate each stage in terms of perceived importance.

After the six groups of questions had been answered, the respondent is asked to rate the buyer experience stages according to his perceived im-

portance of each one. Though the formulation of the question appeared vague at first, all of the respondents eventually were able to understand it and give an answer, according to their opinion.

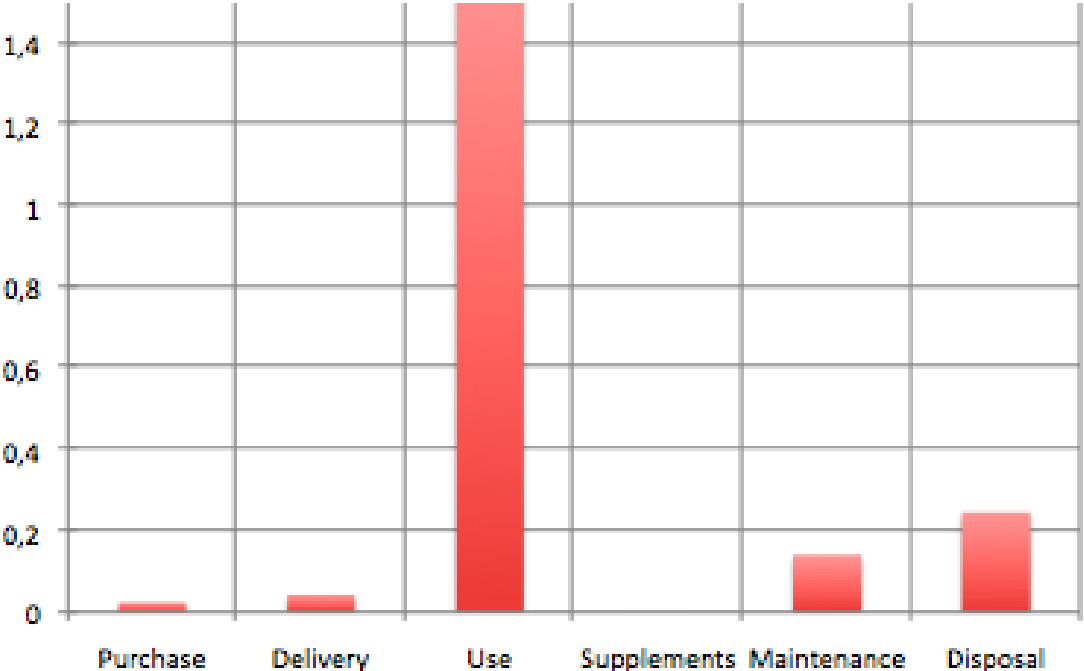


Fig.9. Where the buyer experience needs to be improved

Scoring of those results followed logic similar to the previous one. Each answer have been multiplied by the number of its place in the perceived hierarchy: the most important stage was multiplied by 1 and the least – by 6. The higher was the score of a stage, the less important it had been perceived in total. The relative importance of the stages of the buyer experience cycle is then confronted against the size of the dissatisfaction associated with those stages to determine where the biggest need for innovation exists. The points from the first set of questions are divided to the points that represented the importance.

The group of factors with the highest score, according to the proposed framework showed the biggest locus of dissatisfaction and thus “use” is the buyer experience cycle stage where the need in innovations is the highest.

In summary, the results of the performance analysis show that:

- Digital books loose in terms of traditional performance to paper books since they have no physical representation, offer small flexibility and control in spatial layout and require expensive hardware, which is not always compatible with every digital book format;
- Digital books offer brand new value, which is effective book search by tags and interests, customization, interactiveness and networking features. This new proposed value could be able to attract former non-

consumers with needs different from traditional and eventually open up a detached new market;

- The digital book offers sufficient utility increase in the purchase and delivery stages, which are valued enough to allow digital book to differentiate among competitors and opening of a fringe new market;
- Use is the buyer experience cycle stage, where innovations are valued the most in the traditional market. While digital books decrease simplicity and increase costs of using supplements, they will probably not be able to penetrate the mass market. A successful penetration might be achieved by a support of quicker, more effortless navigation techniques and flexibility and control in spatial layout (O’Hara and Sellen 1997);
- The innovation also offers an increase of utility in book maintenance and disposal stages, which are valued much less by the traditional market, but are valued still. In combination with low price for the product this might suit for opening a low-end market that would target, for instance, libraries or consumers that do not like to keep books;
- Digital books introduce a new utility lever to every consumption stage, which is environmental friendliness that could also be used to differentiate from competitors and in creating a new market.

4.2. Cost Assessment

Eight categories of value network components could be distinguished with a financial, economic or moral interest in a publication or the performance of one or more functions in the publishing ecology, also referred to as stakeholders (see Table 3).

Table 3
Publishing stakeholder categorization

	Core activities	Value providers
Originator	an entity that conceives, creates or brings into being the content of a publication	Authors, translators, illustrators
Rights Holder	an entity that owns or has been licensed the rights in or to a Literary Work	Authors, publishers, translators, book clubs, schools, foundations, museums
Publisher	an entity that elicits the creation of Literary Works and prepares, promotes, and distributes them to wholesalers, retailers, or end users	Trade/ text book/ self/ reference/ periodical/ legal/ medical publishers/ newspapers and journals
Technology provider	an entity that provides software or hardware that enables to operate and secure distribution of content	Printing houses, software developers of digital rights management trusted platforms, file formats, usage rights languages, media viewers

	Core activities	Value providers
Service Provider	an entity that provides an ancillary service such as assisting in the creation, distribution or protection of publications or the collection and distribution of consumer information	Editors, agents, artists and illustrators, consultants/integrators, transaction services, financial clearinghouses, rights clearinghouses, consumer information databases, customer service providers, industry organizations
Seller	an entity that attracts end-users, enables them to browse and search books and ultimately sells the publication to the end user	Retailers (brick and mortar), book clubs, individual consumers, industry organizations, government agencies, schools, businesses, publishers, newspapers and journals
Distributor	an entity that provides the publication directly to an end user or another distributor through a protected transaction	Publishers, newspapers and journals, retailers (brick and mortar), private and public key managers, library (online or physical; granting usage to an end user for a limited period of time)
End User	an entity for whom a publication is produced. Usually someone who buys or borrows and reads a publication	Individuals, students, teachers, businesses, schools, libraries, government agencies, consumers with disabilities, industry organizations, agencies

Source: OEBF (2000)

Thus, the supply / value chain of E-publishing could be illustrated the following way:

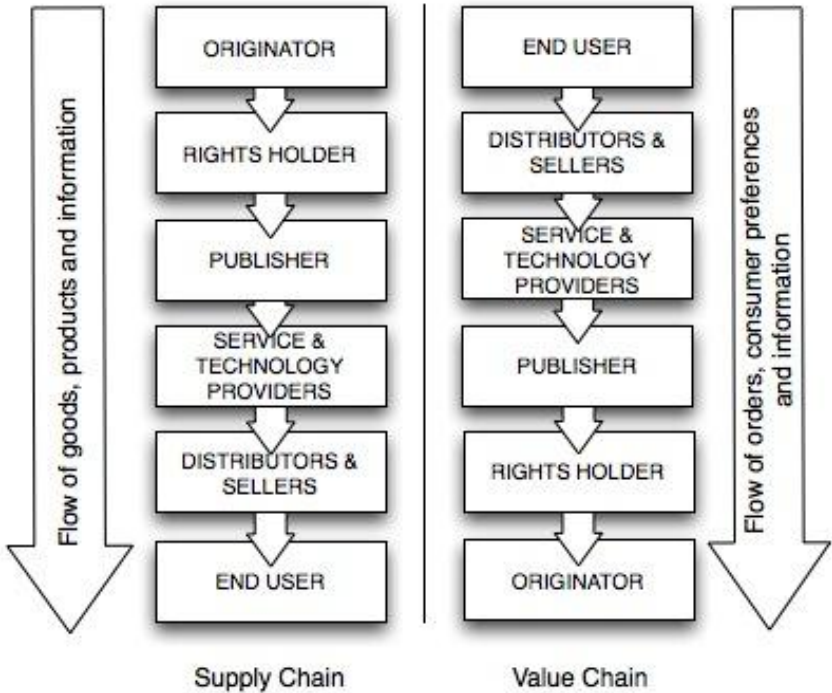


Fig.9. Publishing supply and value chain

Distribution of costs across the publishing supply chain

The cost of producing a book has many different components; some are constant and others vary, according to the choice of supply chain structure (see figure 10):

- I. In most cases the originator in the value chain is the author, who wrote a piece of literature that he assumes other people would find interesting to read. Once the author has the ready manuscript, he searches a publisher willing to buy it. Sometimes authors start looking for interested publishers when the manuscript is not yet finished or even is on a very early stage of writing. Often the search is done manually by the author's sending a part of the manuscript to various Publishing houses and afterwards appointing meetings with those editors, who liked the piece. In some situations the author might apply to the services of an agent, who does that work for him. In this case the costs of hiring an agent might or might not inflict the royalties¹, the author would expect to receive for his work.
- II. Pre-production costs include the costs of writing, editing and reviewing manuscripts. The editor, who is in charge of a particular manuscript is assigned to work with its author on corrections and editing. In most cases, editors, who bend and change the original manuscripts so to fit the Publishing house profile and expectations have a large influence on the book seen in result. Those costs also include the cost of maintaining a staff of editors, proofreaders, book designers, publicists, sales representatives and so on
- III. Marketing and promoting the book is sometimes done by the retailer, but most often is accomplished at the expense of the publisher. Bringing a book to the market may include costs for printing catalogs, media and print campaigns, sending out review copies to critics, arranging a promotion tour with the author and trade promotions for retailers.
- IV. Printing is mostly done in typographies. The printing costs include the cost of physical paper, artwork and binding the book and varies depending on book size, number of pages, and illustrations used (Hubli 2010). Printing costs per book are the smaller, the bigger is the number of printed copies. This often leads to the

¹ Royalties are usage-based payments made by the publisher to the rights holder for ongoing use of book contents and ideas, protected by intellectual property (IP) right. Royalties are usually a percentage of gross or net sales derived from use of an asset or a fixed price per unit sold of an item (Wikipedia). Typically, the publisher dictates an author's royalty rate. In most cases, the publisher advances an amount (part of the royalty), which can constitute the bulk of the author's total income (Wikipedia).

need of renting vast storage spaces to keep the produced books until they are sold, which creates considerable storage expenses.

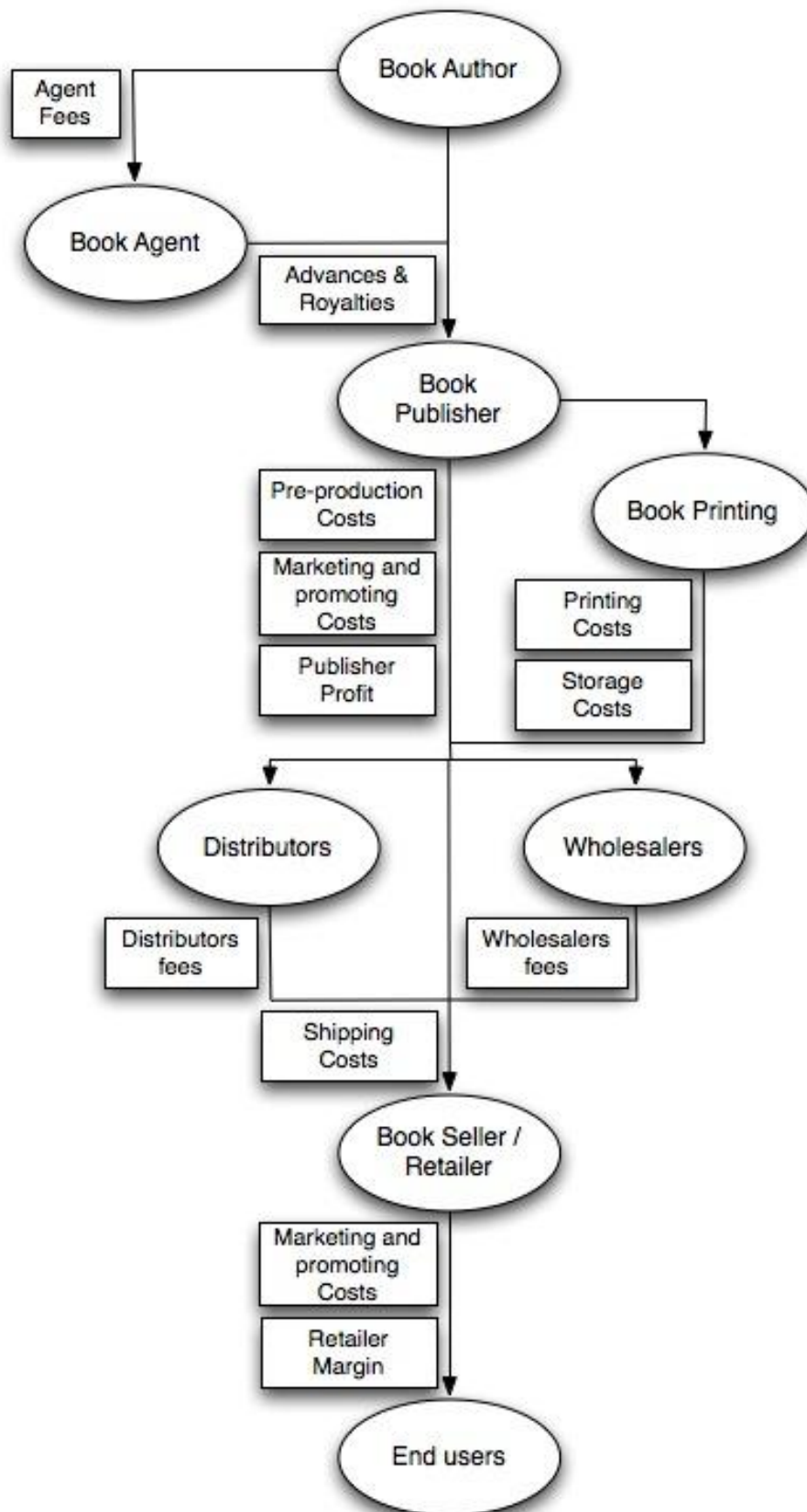


Fig.10. Distribution of costs across the publishing / E-publishing industry supply chain

- V. Distributors and wholesalers add their fee to the final cost, which will highly depend the expanses on shipping the products and for retailers there is additional cost of operating and staffing the store, allocating shelf space, stocking the book, maintaining inventory and servicing customers (Hubli 2010).

The price components of a typical book sold in the US is illustrated in figure 11.

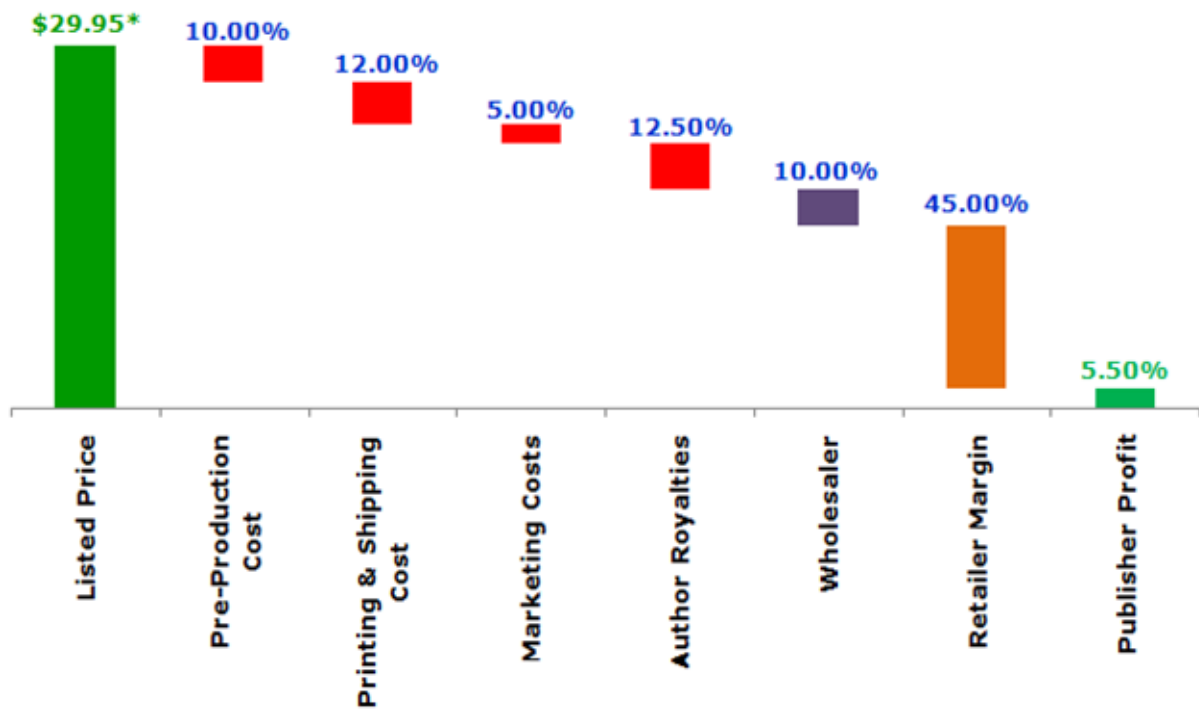


Fig.11. Book price components
Source: Hubli (2010)²

Distribution of value across the Publishing value chain

A review of the value-adding activities and value contributions that occur in the Publishing industry value chain is needed to uncover if the digital book reduces costs and introduces process improvement (table 4).

The E-publishing value chain

Bob Stein in his unified field theory (2008) tries to explain the role of and the relationship between the publisher, the author, the reader and the editor in the digital book era. He does not give exact solutions to the problems that he raises. Instead he proposes new dimensions and ways to view those questions, which could be summarized as the following:

² The figure assumes a hardcover book with a retail selling price of \$29.95 (Hubli 2010).

Table 4

Distribution of value across the Publishing value chain

Value chain component	Core value-adding activities / competencies	Value contribution
Book Author	Supplies the manuscript, owns the rights for the Intellectual property;	Intellectual property;
Book Agent	Searches for publishers ready to take up the manuscript; exploits personal contacts with publishers and reputation to promote the manuscript; supplies expert knowledge about the publishers market;	Access to mass publishers base; marketing expertise; efficient network/ infrastructure; relationship with facilitators;
Book Publisher	Support/ enhance the operations and marketing of the book; exploits personal contacts with retailers and it's reputation among book consumers, distributors and wholesalers to promote the book; suppliers expert knowledge about the consumer market;	Consumer knowledge; brand management expertise; cost management; access to distributors; reputation; Technology know-how; creative use of information;
Book Printing	Manufacturing the book from ready components;	Technology know-how. Access to mass suppliers base;
Distributors, Wholesalers and Retailers	Provide infrastructure and/ or manage access to/ delivery of the book;	Access to mass consumer base; seamless, efficient network/ infrastructure; relationship with facilitators;
End Users	Forms the demand for the product and performance, quality, price expectations;	Orders and requirements.

1. The access to source documents must become more extensive free of the size, space and copyright constraints.
2. The text should be constantly evolving, through constant updates or “conversations in the margins”.
3. The role of an author of such networked book should be thought of as of a leader of a group effort, similar in many respects to the role of a professor in a seminar.
4. A new formulation of publisher and editor roles should be defined. It might be that publishers and editors contribute to building a community that involves an author and a group of readers who are exploring a subject.
5. Once there are roles for author/reader/editor/publisher, it is possible to begin to assess who adds what kind of value, and when. From there a business model can begin to be developed.

That way, with the new reading paradigm the role of end users in the value chains is going to drastically increase and book consumers are going to find themselves involved in the process of book producing, that will keep evolving and gain in value the more consumers it is able to attract.

The publisher role would change also, as the focus will move from providing technical value to core competencies, which are consumer knowledge, brand management etc.

The most powerful group, who stands to lose the most with any disruption in the status quo are the book retailers. The contribution of wholesalers, distributors and retailers, which is the highest share of the book total price, will stop be needed in the value chain. To their place such e-retailers like Amazon will come, offering much more attractive and mudaelminating solutions.

In fact, this year (2010) Amazon announced details of a new program in which it provides a new 70% royalty option for the Kindle e-reader, meaning authors and publishers can earn more royalties from every Kindle book that is sold. Under this new option, authors would get 70% of the list price, net of delivery costs.

Before that was the option of the DTP standard, when authors often receive royalties in the range of 7 to 15 percent of the list price that publishers set for their physical books, or 25 percent of the net that publishers receive from retailers for their digital books.

So publishers and authors, who chose the standard royalty option, would only make about US\$3.15 from every sale of an digital book that sells for US\$8.99. Now, with the 70% option, these publishers would make US\$6.25 (Crum 2010).

What concerns the price of the digital book, currently large debates are ongoing between major e-retailers (Apple and Amazon) about how much a digital book should cost. At this moment digital book at a very big price range can be found: from US\$9.99, to the average US\$12-20 and over US\$20, what makes it possible to conclude that digital books are not sufficiently cheaper than paper books. So the price of digital books is still an open question.

Another major issue in the digital book cost assessment is it's close correlation with the market of e-readers. The necessity for acquiring a hardware device at the average price of US\$200 if the consumer is mobile and needs his books constantly available also negatively affects the digital book market and drastically increases perceived cost of using the new product.

In summary, the results of the cost analysis showed the following:

- The price of digital books is formally smaller than that of competitors. Yet constant reading of digital books would require an e-book

reader applied with e-ink technology. That creates high switching costs for the traditional book consumer. As the digital book will develop to being more sophisticated and multimedia enhanced, its price will grow;

- Book retailers create the largest part of total book price. When it comes to digital books, the traditional retailers', distributors' and wholesalers' contribution is not valued any longer;
- The main value contributors in the new value chain are publishers and authors. Unlike the traditional one, the new business model allows to distribute the profits equivalently to the actual value offering. In the future major reconsideration of their roles is required (Stein 2008);
- The questions on the optimal price on digital books and the look of the new business model are still open and discussed by major market players.

5. Discussion

The analysis of reader's perceived value of various stages of a book consumption process shows that the consumer is underserved: the general level of dissatisfaction is relatively high and includes almost all stages of the buyer experience cycle. According to the conducted interviews, those factors with the highest dissatisfaction indicators were of the biggest relevance to the reader (with exception of disposal). It could be concluded that the inconveniences and complexity associated with "use" in the studied respondents group created high consumption costs and led to smaller book consumption rates.

Moreover, it was found that in the market there are needs ignored by the current product, which are convenient book relevance determination mechanism and a platform for social interaction integrated with book consumption process. Digital books have the capacity to provide that value in a most efficient way.

The results of the performance analysis showed that the digital book offers sufficient utility increase in the purchase and delivery stages, which are valued enough to allow digital book to differentiate among competitors and open a fringe new market.

At the same time digital books still loose in the most valued stage of buyer experience cycle - use. The innovation decreases simplicity and has high switching costs for the mass and "power" readers, because reading digital books would require e-readers. Until these issues are solved, digital books will not be able to take over the mass market.

Taking all of this into consideration it is possible to say that digital books have the competency for becoming any of the two new-market disruptive innovation types: detached and fringe new-market innovation.

At the moment the price of digital books is smaller or equal to its competitors and thus a fringe new-market innovation's diffusion pattern is best to describe the technology. In the future, however as digital books start exploiting the new performance potential of its technology the pricing model might change to look more like that of detached new-market innovations.

The analysis of the disruption process shows that digital books have recently started disrupting the market. At the moment of writing this research more and more famous researchers finally feel free to admit that digital books do have a future and that future is massive.

In the nearest future it is expected that book consumers are going to switch to digital books and e-readers alike as the entrants manage to attract new consumers, penetrating the e-textbook and serial digital publications markets.

Observations during the work

According to the traditional disruptive innovations theory point of view an innovation is closely dependent on the way it is implemented in the market: whether the early adopters are non-consumers or low-end consumers. This consideration leads to a variety of contradicting definitions and prospective of disruptive innovations that are based on pricing policies and exact penetration patterns.

The example of digital books shows that some innovations possess very high disruptive potential by having capability to offer new performance dimensions, decrease price by reconsidering traditional utility perceived and drastically improve industry business models. The performance and costs analysis of the innovation proved that digital books can disrupt the market from all sides: detached new-market disruption and fringe new-market disruption – depending on the strategy the industry as a whole is going to choose.

The third possibility – low-end disruption is also possible if E-publishing decides to go a step back and offer low priced digitalized versions of paper books that will not offer any new dimensions of value.

The existence of such industry-level “super” disruptive innovations means that there is much room for improvements in the classification of disruptive innovations and that the framework for identifying disruptive innovations must offer more flexibility.

Another issue is measuring disruptiveness. Today they are no techniques to find the relative disruptiveness of an innovation. Yet to fully understand the pattern of market behavior of a disruptive innovation there should be a tool to distinguish such “super” disruptive innovations.

Conclusion

The aim of this study was to establish a mechanism by which to evaluate the disruptive potential of MSPs. Had analysed the example of digital books and E-publishing we concluded that in order for the MSP to become a disruptive innovation it must introduce a new performance dimension or lower the cost of the product by a cost-performance trade-off. The trade-off should offer enough traditional performance to be valued by at least some of the consumers and occupy a low-end segment of a market consisted of the least demanding consumers. Otherwise, the new dimension of performance should be appreciated enough to form a new market on the edge of the old one, where consumer needs are different from mass consumer's and many of which have been previously non-consumers in regard to the main market. As the company reinvents the product to make a good feat for the mass market in terms of price and performance, the innovation spreads from early adopters upward, disrupting through competitors.

The viewpoint on innovations and, more precisely, the classification of new-market disruptive innovations, inspired by Druehl and Schmidt (2008) and Carr (2005) might also prove helpful when working with Christensen's (2003) original model. It allows to explain why disruptive innovations sometimes start more expensive, than competitors' products and how this feats to the disruptive innovation concept. The framework created in this work itself is based on Lindqvist and Ghazi work on the topic of evaluating disruptive innovation (2005). Yet the frameworks differ much, since the original authors bared a firm-side prospective in mind and concentrated rather on how a firm can come up with a disruptive idea and understand that it is good.

The evaluation logic, illustrated via a block scheme (figure 6) presents a tool for identifying disruptive innovations and distinguishing the types of disruptive potential. Since the framework have been specifically designed for evaluating the disruptive potential of MSP's products, it might prove convenient for analyzing other types of MSP's.

Test-pressurization of the framework illustrated that there is much room for further discussion. Techniques of measuring relative disruptive potential are needed to create a more correct pattern of innovation's market behavior. The digital book analysis shows that current disruptive innovations classifications are rather narrow and lack flexibility. Also, perhaps, a new term is needed to describe such "super" innovations that have at the same time the disruptive potential of becoming both a low-end and a new-market innovation.

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Л. С. Серова,
Е. Г. Серова,
Е. А. Руденко | Индикаторы мониторинга информационно-технологических ресурсов регионов России |
| № 34 (R)–2006 | Т. Е. Андреева,
Е. Е. Юртайкин,
Т. А. Солтицкая | Практики развития персонала как инструмент привлечения, мотивации и удержания интеллектуальных работников |
| # 35 (E)–2006 | T. Andreeva,
E. Yurtaikin,
T. Soltitskaya | Human resources development practices as a key tool to attract, motivate and retain knowledge workers |
| № 36 (R)–2006 | А. В. Бухвалов,
В. Л. Окулов. | Классические модели ценообразования на капитальные активы и российский финансовый рынок. Часть 1. Эмпирическая проверка модели CAPM. Часть 2. Возможность применения вариантов модели CAPM |
| № 37 (R)–2006 | Е. Л. Шекова | Развитие корпоративной социальной ответственности в России: позиция бизнеса (на примере благотворительной деятельности компаний Северо-Западного региона) |
| № 38 (R)–2006 | Н. А. Зенкевич,
Л. А. Петросян | Дифференциальные игры в менеджменте |

№ 39 (R)–2006	В. Г. Беляков, О. Р. Верховская, В. К. Дерманов, М. Н. Румянцева	Глобальный мониторинг предпринимательской активности Россия: итоги 2006 года
№ 40 (R)–2006	В. А. Чайка, А. В. Куликов	Динамические способности компании: введение в проблему
№ 41 (R)–2006	Ю. Е. Благов	Институционализация менеджмента заинтересованных сторон в российских компаниях: проблемы и перспективы использования модели «Арктурус»
№ 42 (R)–2006	И. С. Меркурьева, Е. Н. Парамонова, Ю. М. Битина, В. Л. Гильченко	Экономический анализ на основе связанных данных по занятым и работодателям: методология сбора и использования данных
# 43 (E)–2006	I. Merkuryeva, E. Paramonova, J. Bitina, V. Gilchenok	Economic Analysis Based on Matched Employer-Employee Data: Methodology of Data Collection and Research
№ 44 (R)–2006	Н. П. Дроздова	Российская «артельность» — мифологема или реальность' (Артельные формы хозяйства в России в XIX — начале XX в.: историко-институциональный анализ)
№ 1 (R)–2007	Е. В. Соколова	Бенчмаркинг в инфраструктурных отраслях: анализ методологии и практики применения (на примере электроэнергетики)
№ 2 (R)–2007	С. П. Куш, М. М. Смирнова	Управление поставками в российских компаниях: стратегия или тактика
№ 3 (R)–2007	Т. М. Скляр	Проблема ленивой монополии в российском здравоохранении
№ 4 (R)–2007	Т. Е. Андреева	Индивидуальные предпочтения работников к созданию и обмену знаниями: первые результаты исследования
№ 5 (R)–2007	А. А. Голубева	Оценка порталов органов государственного управления на основе концепции общественной ценности
№ 6 (R)–2007	С. П. Куш, М. М. Смирнова	Механизм координации процессов управления взаимоотношениями компании с партнерами
# 7 (E)–2007	D. Volkov, I. Berezinets	Accounting-based valuations and market prices of equity: case of Russian market

№ 8 (R)–2007	М. Н. Барышников	Баланс интересов в структуре собственности и управления российской фирмы в XIX – начале XX века
# 9 (E)–2007	D. Volkov, T. Garanina	Intellectual capital valuation: case of Russian companies
№ 10 (R)–2007	К. В. Кротов	Управление цепями поставок: изучение концепции в контексте теории стратегического управления и маркетинга.
№ 11 (R)–2007	Г. В. Широкова, А. И. Шаталов	Характеристики компаний на ранних стадиях жизненного цикла: анализ факторов, влияющих на показатели результативности их деятельности
№ 12 (R)–2007	А. Е. Иванов	Размещение государственного заказа как задача разработки и принятия управленческого решения
№ 13 (R)-2007	О. М. Удовиченко	Понятие, классификация, измерение и оценка нематериальных активов (объектов) компании: подходы к проблеме
№ 14 (R)–2007	Г. В. Широкова, Д. М. Кнатько	Влияние основателя на развитие организации: сравнительный анализ компаний управляемых основателями и наемными менеджерами
# 15 (E)–2007	G. Shirokova, A. Shatalov	Characteristics of companies at the early stages of the lifecycle: analysis of factors influencing new venture performance in Russia
# 16 (E)–2007	N. Drozdova	Russian “Artel’nost” — Myth or Reality? Artel’ as an Organizational Form in the XIX — Early XX Century Russian Economy: Comparative and Historical Institutional Analysis
# 1 (E)–2008	S. Commander, J. Svejnar, K. Tinn	Explaining the Performance of Firms and Countries: What Does the Business Environment Play'
№ 1 (R)–2008	Г. В. Широкова, В. А. Сарычева, Е. Ю. Благоев, А. В. Куликов	Внутрифирменное предпринимательство: подходы к изучению вопроса
№ 1A(R)–2008	Г. В. Широкова, А. И. Шаталов, Д. М. Кнатько	Факторы, влияющие на принятие решения основателем компании о передаче полномочий профессиональному менеджеру: опыт стран СНГ и Центральной и Восточной Европы

№ 2 (R)–2008	Г. В. Широкова, А. И. Шаталов	Факторы роста российских предпринимательских фирм: результаты эмпирического анализа
№ 1 (R)–2009	Н. А. Зенкевич	Моделирование устойчивого совместного предприятия
№ 2 (R)–2009	Г. В. Широкова, И. В. Березинец, А. И. Шаталов	Влияние организационных изменений на рост фирмы
№ 3 (R)–2009	Г. В. Широкова, М. Ю. Молодцова, М. А. Арепьева	Влияние социальных сетей на разных этапах развития предпринимательской фирмы: результаты анализа данных Глобального мониторинга предпринимательства в России
# 4 (E)–2009	N. Drozdova	Russian Artel Revisited through the Lens of the New Institutional Economics
№ 5 (R)–2009	Л. Е. Шепелёв	Проблемы организации нефтяного производства в дореволюционной России
№ 6 (R)–2009	Е. В. Соколова	Влияние государственной политики на инновационность рынков: постановка проблемы
№ 7 (R)–2009	А. А. Голубева, Е. В. Соколова	Инновации в общественном секторе: введение в проблему
# 8 (E)–2009	A. Damodaran	Climate Financing Approaches and Systems: An Emerging Country Perspective
№ 1 (R)–2010	И. Н. Баранов	Конкуренция в сфере здравоохранения
№ 2 (R)–2010	Т. А. Пустовалова	Построение модели оценки кредитного риска кредитного портфеля коммерческого банка (на основе методологии VAR)
№ 3 (R)–2010	Ю. В. Лаптев	Влияние кризиса на стратегии развития российских МНК
№ 4 (R)–2010	А. В. Куликов, Г. В. Широкова	Внутрифирменные ориентации и их влияние на рост: опыт российских малых и средних предприятий
# 5 (E)–2010	M. Storchevoy	A General Theory of the Firm: From Knight to Relationship Marketing
№ 6 (R)–2010	А. А. Семенов	Появление систем научного менеджмента в России
# 7 (E)–2010	D. Ivanov	An optimal-control based integrated model of supply chain scheduling
№ 8 (R)–2010	Н. П. Дроздова, И. Г. Кормилицына	Экономическая политика государства и формирование инвестиционного климата: опыт России конца XIX — начала XX вв.

№ 9 (R)–2010	Д. В. Овсянко	Направления применения компонентов менеджмента качества в стратегическом управлении компаниями
# 10 (E)–2010	V. Cherenkov	Toward the General Theory of Marketing: The State of the Art and One More Approach
№ 11 (R)–2010	В. Н. Тишков	Экономические реформы и деловая среда: опыт Китая
№ 12 (R)–2010	Т. Н. Клёмина	Исследовательские школы в организационной теории: факторы формирования и развития
№ 13 (R)–2010	И. Я. Чуракова	Направления использования методик выявления аномальных наблюдений при решении задач операционного менеджмента
№ 14 (R)–2010	К. В. Кротов	Направления развития концепции управления цепями поставок
№ 15 (R)–2010	А. Г. Медведев	Стратегические роли дочерних предприятий многонациональных корпораций в России
№ 16 (R)–2010	А. Н. Андреева	Влияние печатной рекламы на восприятие бренда Shalimar (1925 – 2010)
№ 17 (R)–2010	В. Л. Окулов	Ценность хеджирования для корпорации и рыночные ожидания
№ 1 (R)–2011	А. А. Муравьев	О российской экономической науке сквозь призму публикаций российских ученых в отечественных и зарубежных журналах за 2000–2009 гг.
№ 2 (R)–2011	С. И. Кирюков	Становление и развитие теории управления маркетинговыми каналами
№ 3 (R)–2011	Д. И. Баркан	Общая теория продаж в контексте дихотомии «развитие – рост»
# 4 (E)–2011	К. V. Krotov, R. N. Germain	A Contingency Perspective on Centralization of Supply Chain Decision-making and its Role in the Transformation of Process R&D into Financial Performance
№ 5 (R)–2011	А. В. Зятчин	Сильные равновесия в теоретико-игровых моделях и их приложения
№ 6 (R)–2011	В. А. Ребязина	Формирование портфеля взаимоотношений компании с партнерами на промышленных рынках
№ 1 (R)–2012	А. Л. Замулин	Лидерство в эпоху знаний

# 2 (E)–2012	I. N. Baranov	Quality of Secondary Education in Russia: Between Soviet Legacy and Challenges of Global Competitiveness
№ 3 (R)–2012	Л. С. Серова	Микро-предприятия в экономике России: состояние и тенденции развития
# 4 (E)–2012	G. V. Shirokova, D. M. Knatko, G. Vega	Separation of Management and Control in SMEs from Emerging Markets: The Role of Institutions
№ 5 (R)–2012	Г. В. Широкова, М. А. Сторчевой	Влияние социальных сетей на выход на зарубежные рынки: из опыта трех российских предпринимательских фирм
№ 6 (R)–2012	А. К. Казанцев	Инновационное развитие университетов: аналитический обзор ведущих российских вузов
№ 7 (R)–2012	Д. В. Муравский, М. М. Смирнова, О. Н. Алканова	Капитал бренда в современной теории маркетинга
# 8 (E)–2012	E. B. Samuylova, D. V. Muravskii, M. M. Smirnova, O. N. Alkanova	The role of brand characteristics in brand alliance engagement with different types of partners: an exploratory study
№ 9 (R)–2012	Е. Ю. Благов	Факторы ценообразования многосторонних платформ: современное состояние и перспективы исследований
# 10 (E)–2012	E. K. Zavyalova, S. V. Kosheleva	Assessing the efficiency of HRD technologies in knowledge-intensive firms
# 11 (E)–2012	E. K. Zavyalova, S. V. Kosheleva	Human potential as a factor of developing national competitiveness of Brazil, Russia, India and China