

ESPRESSO BOOK MACHINE

An exploratory study of the Espresso Book Machine

Master Thesis

Radvile Gintauskaite

MSocSc in Management of Creative Business Processes
Copenhagen Business School, 2000 Frederiksberg, Denmark
radvile_gintauskaite@yahoo.com

Summary

Espresso Book Machine (EBM), which automatically prints, binds and trims paperback books in several minutes at a point of sale, was introduced to the public less than 10 years ago and was promising to change the publishing industry radically (Epstein, 2001; Xerox, 2010). However, despite active discussion in online media and sporadic articles in academic literature, there is a limited amount of studies conducted on this subject in particular.

By applying the inductive exploratory case study research approach, this paper has sought to investigate the current and potential implications of the Espresso Book Machine for the publishing industry. Moreover, with the reference to the Long Tail Theory and Makers Movement, the study has aimed to contribute to the scarce academic literature on a subject in order to induce further research.

The empirical data obtained from the interviews with the owners of the Espresso Book Machine and participants of the publishing industry revealed that EBM can be a valuable proposition for publishers, who can benefit from the machine in terms of an efficient distribution, hereby addressing the problem of expensive transportation and remainders. Retailers can benefit from the digital EBM catalog offering millions of titles accessible on a spot and solving limited retail space and limited variety problems. Finally, the authors can utilize the EBM as a tool for a fast and easy production of the books, as a wide reaching distribution channel, and as a way to increase the quality of their works due to the newly established programs for the authors.

This paper also suggests, that despite the benefits of the machine, certain technical issues such as poorly developed cataloging system or primitive printing techniques, and broader issues related to the increased competition and the quality of the content must be addressed and dealt with in order to utilize the full capacity of the Espresso Book Machine.

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“Enter the Espresso Book Machine. This machine is capable of producing a perfectly bound, library-quality book in less time than it takes to brew a cup of that deep, black substance it’s named for”.¹

1. Introduction

From the first hand written paper to the modern e-book on Kindle reader, books and reading is deeply rooted in our society. It has been, and still is, a way to “exalt the word” and fix it into permanence. Moreover, it is also considered as a channel of spreading new ideas and knowledge, a medium through which values and culture of the society is portrayed (Birkerts, 1994, p. 2).

Throughout the years of the existence of books they have been discussed and analyzed in both popular and academic literature taking different points of departure and different perspectives. Despite being an old and established industry, publishing is facing tremendous changes and undergoing vast transformations these days (Colin, 2000; Epstein, 2001; Kulesz, 2011; Ziv, 2002). The advent of the Internet, technological developments, and changing consumers’ habits have forced all the participants in the industry to reconsider their current roles and adapt to these changes accordingly.

Although the emergence of e-books evoked many discussions among scholars, publishers and other book business participants who envisaged and predicted the death of paper books (Gomez, 2008), the existence of bookstores, libraries and a new title being published every 30 seconds (Zaid, 2003) prove the endurance of a traditional printed book.

One of the recent technologies serving the traditional printed book proponents is the Espresso Book Machine (EBM) which can print and bind a paperback in several minutes at the point of sale. Thus, this research seeks to explore and contribute to an understanding of the role of the Espresso Book Machine for the publishing industry.

1.1. The Context

The emergence of new technologies which change the ways goods are created, produced, distributed and consumed urges publishers to react to these changes and to harness new ways of doing business. Over a span of several decades, different forms of books and reading devices entered the market – CD’s, audio books, e-books, portable readers, and the discussion about the future of the book has been going for a while.

Due to the fast technological improvements and its effects, the physical printed book also receives a lot of attention. There are two main different opinions on physical books. The first one states that the physical book will lose its importance in the near future (Gomez,

¹ Perry, S. (2014). How a self-publishing lab created a new literary community. *Library Hi Tech*, 31(8).

2008) while the second one declares that the printed book is a part of every culture and will remain as one of the most important cultural products (Birkerts, 1994; Colin, 2000; Liu, 2005; University College London (UCL) CIBER group, 2008; Velde & Ernst, 2009). The authors supporting the former one, strongly envision the future without the printed book – not only due to the new modern forms of books, but also because the activity of reading itself has been challenged by modern world. People do not have time to read or interest in the written word, which leaves no space for the printed book in the lives of modern consumers (Nicholas & Clark, 2012). Other authors, however, argue that books have been and still are the transmitters of culture, knowledge and values, and reading of a printed book creates a different experience compared to the one attained by reading an e-book. They have been challenged by the TV, radio, etc., but the fact that they are still here and the amount of people writing books themselves are even increasing, implies that they are not going to disappear so fast (Ray, 1966).

In between the aforementioned extremities, there lies another opinion, i.e. the view that these two perspectives should not be contradictory. It is obvious, that there are supporters of one side or another, meaning that there will always be people who prefer physical books, and people choosing e-books. Both offerings have certain advantages and disadvantages depending from the chosen approach. There is no reason, therefore, to determine which side is right or wrong. However, the study of different perspectives and various technological applications can be fruitful for the participants of the publishing industry in order to address the existing challenges adequately and utilize the emerging opportunities.

In this context, the Espresso Book Machine is referred as creating both threats and opportunities (Bergsma, n.d.). It is a threat, because it has an impact on the traditional publishing houses, and it is an opportunity, because it offers certain benefits. More generally, the Espresso Book Machine stands for innovation and change in the distribution and production of an information goods. Certain similarities can be noticed between books and other creative products, such as music or films. Several years ago, “money and specialized professionals were required even for basic production; distribution was limited to the streets and after-shows” (Bernardo & Martins, 2014, p. 10). However, the emerged digital technologies and digital revolution developments have forced music industry and other media companies to address these developments by adopting their business models, looking for new ways to satisfy their customers, and harnessing all “revenue-generating opportunities“ (Aris & Bughin, 2005, p. 33) at the same time. And although publishing industry has witnessed quite a few developments and reacted adequately, the question, whether the participants of the publishing industry are willing to be open to innovation and disruptive change, still needs to be answered.

1.2. The Espresso Book Machine

In 1999 Jason Epstein presented his vision for a new print-on-demand technology: a fully automatic machine that could be placed in coffee shops, libraries, bookstores, etc. for

printing books on a spot. The prototype of such a machine, however, was already invented by engineer Jeff Marsh, therefore, in 2003 J. Epstein and his partner D. Neller founded On Demand Books to further develop the existing machine together with the engineer. In 2007 the first Espresso Book Machine was installed in Washington. The same year On Demand Books installed a second machine in Egypt to print books in Arabic. Since then the company sells, leases and services Espresso Book Machines worldwide (Rosen, 2006).

The Espresso Book Machine is a device that “automatically prints, binds and trims – on demand, at point of sale – perfect bound, library quality paperback books” (Xerox, 2010, p. 2). The EBM technology comprises of a physical machine and EspressoNet digital catalog, which is a network of titles that are out of copyright or in copyright, and books with associated royalty fees. On Demand Books is expanding its catalog offerings by establishing new relationships and providing content from sources such as Lightning Source, Google Books, Internet Archive, and other major publishers², thereby promising “to make the machine ubiquitous” (Arlitsch, 2011).

Thus, the Espresso Book Machine can be attributed to both the physical book field, because it allows customers to get a printed book outright, and the digital field, for its online catalog and content database. The EBM combination of digital files (EspressoNet catalog) and the printed paper books is a “sort of fluid movement from print to digital and back to print, and from born-digital to print” (Geitgey, 2011, p. 59). This suits and satisfies different customers and different needs, including publishers, retailers, authors and readers.

² http://ondemandbooks.com/ebm_software.php

2. Research approach

This study is divided into two phases – the pilot research and the main research. The aim of the pilot research was to collect the field information from the owners of the EBM, and based on the occurring themes and categories to formulate a research question. The main research (which is the focus of this paper) was designed to answer the main research question and analyze the topic in a thorough and systematic manner.

2.1. The Pilot research

Due to the lack of academic literature and extended data on the Espresso Book Machine, the researcher immersed into the exploration of the topic by reading popular literature online, publishers' and book trade forums, media news. It served as a way to collect primal information about the EBM. However, in order to get more accurate and reliable data, a basic exploratory study was conducted by contacting the current users of the EBM³. Using the publicly provided list on the On Demand Books website⁴, all locations (with the exception of Abu Dhabi National Library, China Publishing Group and Japan Books Sanseido, because of unavailable contact information) were contacted, i.e. 52 EBM owners.⁵ Out of 52 contacted locations, 22 replies were received. Some of the respondents stated that they are not able to reply to the questions properly either due to the lack of knowledge, or time. Thus, 10 respondents from Canada, US and South Africa fully answered the questions.

2.2. The main research

The main research involves two types of respondents – the owners of the EBM and publishing industry actors. As it was mentioned in the pilot research description, the users of the EBM were firstly contacted by email and out of the replied people, a further inquiry about the interview was sent, resulting in three interviews conducted using Skype. For the further empirical data collection a purposive sampling approach was chosen. Due to the researcher's feasible visit to the Copenhagen Book Fair, an initial contact with the small group of publishers was established. This contact with relevant to the research people were used to connect to other potential respondents. Furthermore, the location restriction placed on the researcher, i.e. the availability to connect to the respondents from Denmark easier and more effectively, justifies the selection of Danish publishers. This resulted in four interviews conducted with the representatives of four different publishing houses. Finally, to ensure the validity of the collected data, to provide a deeper knowledge on the topic and to reveal new aspects of the research problem (Dubois & Gadde, 2002), an additional interview with the publishing industry strategist and leading consultant was conducted.

³ The term "users of the EBM" and "owners of the EBM" are used interchangeable throughout the thesis. It indicates not the end users of the EBM services, i.e. readers, but the owners of the EBM, such as retailers, libraries, bookstores, etc.

⁴ <http://www.ondemandbooks.com/>

⁵ Appendix

3. Literature review

3.1. The EBM related literature

Although the Espresso Book Machine has aroused many public conversations which resulted in a quite extensive amount of online articles, forum discussions and blog posts, the academic approach towards this phenomenon remains scarce. The existing academic articles analyzing the Espresso Book Machine mostly reflect the opinions of the current EBM owners, or people directly related to it.

The most recent article published in the *Library Hi-Tech Journal* by S. Perry (2014) highlights the experience in running the machine and the advantages brought to the Windsor Public Library in Canada. The most prominent identified advantage is the literary community of self-publishers which emerged after the installation of the machine in the library environment. It is a way to share their works with the community, get guidance in book production process, and is also a way to showcase successful authors.

T. Geitgey (2011) describes the use of the EBM at the Michigan university library, emphasizing the pros and cons of the functioning of the machine. Despite certain drawbacks, such as not properly developed search mechanism or technical issues, the machine “has generated much interest from many different segments”, due to its ability to produce books quickly, and change, update or customize content easily (p. 60).

A very similar account of the use of the EBM is presented by R. Anderson (2010) who affirms the excitement in relation to the machine and the opportunity of printing rare and unique titles. Furthermore, R. Anderson concludes that EBM can have certain implications to change and influence the library environment.

Finally, K. Arlitsch (2011) examines the implications of the Espresso Book Machine on library collection and its development, as well as the expanded services for the library users. The possibility to generate the new revenue streams at the library is also addressed, raising the question of the changing role of the libraries in general.

In reference to Arlitsch’s (2011) identified revenue streams, S. J. Berman (2011) looks into the Espresso Book Machine from the innovation perspective, namely, seeing it as “revenue innovation”. Despite the critical approach to the machine: “The Espresso Book Machine is an interesting application for our age because it is so unlikely. <...> a machine that allows readers to get physical versions of rare books seems hopelessly anachronistic” (p. 172), the author highlights certain features of the machine, which could be utilized maybe not within the traditional book trade, but within other segments, such as universities, business consumers and self-publishers.

In addition to the above outlined studies on the Espresso Book Machine, the device is mentioned in several books and articles related to publishing, reading and retail (Chamberlain, 2012; Clark & Phillips, 2008; Greco, Milliot, & Wharton, 2014;

McWilliams, 2009; Woodward, 2009). However, most of them mention the Espresso Book Machine as a printing and distribution novelty, but none of them is supported by the in depth analysis of its utilization and application.

3.2. The Long Tail Theory and its characteristics

The Espresso Book Machine's software, i.e. digital EspressoNet database, which catalogs books, corresponds well with the Long Tail Theory, which represents a large number of items sold in small quantities. This section, therefore, focuses on the Long Tail theory and its elements. Moreover, in order to gain an overall knowledge of the topic, the opposing approach to the Long Tail Theory will be presented. The aim of this, however, is neither to support nor to deny one of the positions, but rather to provide different perspectives. This allows the researcher to identify situations in which elements of one perspective or another could be applicable to the EBM case.

3.2.1. What is the Long Tail theory?

For a long time, businesses were ruled by the Pareto principle, which states that the market is dominated by a number of best-selling products (Brynjolfsson, Hu, & Simester, 2011). This implies, that a small number of products sell very well, while the majority of products are overlooked (McWilliams, 2009). This is noticeable in many markets; however, it can be very well exemplified by the entertainment industry, where music, movies and books are known for the blockbusters, top hits and bestsellers. This also indicates, that there is a vast amount of products that go unnoticed or do not sell well.

Publishing is one of the oldest industries with an extremely huge amount of new products entering market each year (Coser, Kadushin, & Powell, 1982; Greco et al., 2014; Hjorth-Andersen, 2000; Shatzkin, 1982). By applying the Pareto principle to the book market, it can be assumed that just a very small amount of books and authors are recognized and sold. Many publishers, therefore, have been publishing the books which are considered to be profitable, thereby concentrating on mass market, which ensures more sales and higher income. This creates difficulties for niche titles. Firstly, because publishers consider them to be too risky and unprofitable, secondly, due to the limited space, most of the bookstores cannot afford having titles, selling several copies a year.

Whether it is a niche title or a bestseller, books in general have a short and limited time of fame. They disappear from the bookshelves after several months or weeks and go to a nearly "total obscurity" which is disadvantageous to the readers, who can't find the titles, to the authors, whose books become difficult to get, and publishers, who very often lose money on many titles (McWilliams, 2009).

The advent of the Internet and Internet markets, however, have helped "to shift the balance of power from a few best selling products to niche products that are previously obscure" (Brynjolfsson et al. 2011). The possibility to find more items on the Internet enables customers to consume things that satisfy their unique interests. They are not limited to the

key products that are easily available anymore. On the other side, the suppliers are also inclined to produce more products and goods, because they know that the customers will be able to find them. According to Weeds (2012), “New formats and modes of distribution, such as e-books, movie downloads and mobile television, have expanded demand in some areas by offering consumers new ways of enjoying media products. Internet and electronic distribution have enabled retailers to serve harder-to-reach customers who struggle to access high street stores, and to supply national and global markets rather than just the local area” (p. 60). For the publishing industry it means that books nowadays can reach many more customers, i.e. customers who are not necessarily within the same city, country or even continent (Huang & Wang, 2014). By having access to the wider range of customers, who are very heterogeneous and desire a variety of products, publishers are able to offer more diversified content and increased assortment of titles (Brynjolfsson, Hu, & Smith, 2010; Brynjolfsson, Smith, & Hu, 2003; McWilliams, 2009; Shatzkin, 1982), which leads to the main idea of the Long Tail Theory: selling less to more (Anderson, 2006).

Due to the ability to reach more customers without considerable investments, the Long Tail theory indicates that “the revenues will be generated by the combination of several markets instead of mass markets” (Evens et al., 2010, p. 1009). A number of researches validate the application of Long Tail theory within entertainment business with the examples from the music, film and e-books industries. Brynjolfsson et al. (2006; 2011) analyzed a particular retail company and found that the Internet channel exhibited a less concentrated sales distribution. The researchers also looked into the online booksellers and noted that “the availability of obscure titles on the Internet has apparently led to somewhat increased sales” (Brynjolfsson et al., 2003, p. 1591), which implies that increased product variety influences sales. Elberse and Oberholzer-Gee (2007) also identified that the sales of less-popular video titles have increased in a particular period of time. Therefore, long tail demonstrates that new technologies enable customers to choose the products and items matching their more personal and private interests, and creates the phenomenon when a wider variety of products are sold to less people.

3.2.2. Three forces of the Long Tail Theory

As it was mentioned earlier, the Long Tail Theory is closely related to the cost reduction in reaching customers (Huang & Wang, 2014). There are three main forces making these costs fall, and when one or more of them come into play, the Long Tail phenomenon occurs. These forces, i.e. the democratization of the production, democratization of the distribution, and the connection of supply and demand are discussed below.

The first element of the Long Tail Theory is democratization of the tools of production, which induces a greater variety of available products. New technologies and easy access to these technologies enable anyone to produce and make things. When the amount of available goods increases and the “universe of content” is growing rapidly, the tail extends to the right, as shown in Figure 2 (Anderson, 2006). The amount of available goods,

however, does not ensure increased sales. Some authors state that a huge variety of products makes it hard for consumers to choose what they want, which might result in no purchase at all (Iyengar & Lepper, 2000). Other authors, however, claim that the variety allows customers to find what they really want and there is a higher chance to meet their expectations when the number of offered products is higher (Brynjolfsson et al., 2006; Weeds, 2012).

The second force leading to the emergence of the Long Tail is the democratization of the distribution. The above discussed issue of the democratization of the production, which causes the increase of available goods, is meaningful only “if others can enjoy it”, or in other words, only if the goods are available (Anderson, 2006, p. 3). Due to the advent of the Internet, everyone can share their content easily with the rest of the world. This includes not only the digital products, but also physical goods, which find cheaper ways to reach the consumer. This is especially relevant to publishers, who, according to Shatzkin (2009), are trying to cut their costs and increase their efficiency. Thus, a well-developed and wide reaching distribution system can help to achieve it; and the Internet and e-commerce is one of the ways to do it. Moreover, by democratizing the tools of distribution, customers get a better access, can “discover products better suited to their tastes”, and consume these products, thereby making the Tail fatter, as shown in Figure 2 (Anderson, 2006; Elberse & Oberholzer-Gee, 2007; Elberse, 2008). The last force for the Long Tail to appear is connecting supply and demand. Although the amount of products offered is huge, and the possibility to distribute them fast and easily does exist, it is important to combine these two elements. Moreover, it can be a challenge for the producers/sellers to ensure that a qualitative product reaches the necessary customer, therefore various techniques and marketing tools play an important role in ensuring that. Anderson (2006) identifies such tools as recommendations, word-of-mouth, blogs, etc. as some of the ways to ensure that the supply meets the demand, and the customers find qualitative products satisfying their needs, which drives business from hits to niches, as shown in Figure 2.

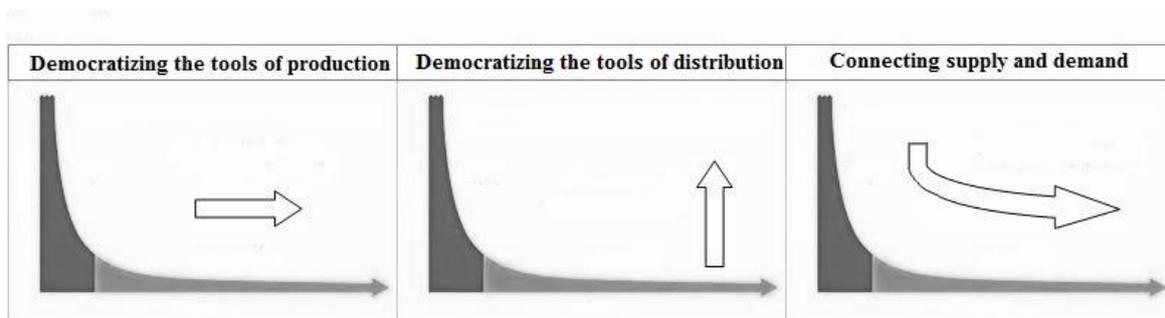


Figure 1. Three forces of the Long Tail Theory
 Source: Anderson, C. (2006). *The long tail*. New York: Hyperion

All the tools and the recommendations that help customers to find the quality in the Long Tail are filters. These filters enable consumers to move from the “hits”, that everybody

knows, to the “niches”, i.e. the function of filters is to screen out the noise and help people to find what they want and need; therefore, the earlier identified problem of the huge variety of products can be addressed with the well developed filtering system. While pre-filters take care of what gets into the market, post-filters do not predict, but find the best of what is already out there in the area of interest. Pre-filters represents the supply side which is trying to estimate what people will want, and thereby concentrating their marketing and selling efforts on certain products, which are considered to be appealing to the main audience. Post-filters, on a contrary, represent the products already existing in the market, and letting the consumers to select the things they are interested in. Neither pre-filters nor post-filters, however, can guarantee a high quality of a product, because pre-filters cannot be sure about the tastes of the customers, and it is also based on the characteristics of the pre-filter itself, and post-filters are often amateurs lacking necessary knowledge on the subject (Anderson, 2006).

3.2.3. The other side of the Long Tail Theory

Despite the fast diffusion of the Long Tail Theory and its application within entertainment industry, another school of thought presents a different perspective. According to their proposed Super Star theory, lower distribution and transaction costs will focus market on a few products, and will strengthen the “superstar” effect. In other words, the possibility to easy replicate the product and deliver it anytime anywhere reinforces consumers to consume the same items, creating the “homogeneous consumption” (Aris & Bughin, 2005; Evens et al., 2010).

According to “superstar theory” introduced by Rosen (1981), a field’s few performers become even more disconnected from the other participants of the market (as cited in Elberse, 2008). This is especially applicable for entertainment industries, where several books, movies or songs dominate the market. The homogenized patterns of consumption appear for several reasons such as “lesser talent is a poor substitute for a greater talent” (p. 2); technology allows reaching many customers at the same time anywhere in the world, i.e. costs of reproduction and distribution are low, which make profit for suppliers; people are inherently social, meaning that they like to consume the same products as their peers (Brynjolfsson, Hu & Smith, 2010; Elberse, 2008). The last feature is especially applicable for such products as books, movies and other cultural products, because it allows consumers to discuss and analyze them together, thereby demonstrating the social aspect of the consumption.

Furthermore, there are researchers indicating that although the number of products selling only several copies increases, the number of non-selling products quadruples (Elberse & Oberholzer-Gee, 2007). This implies that it is difficult to profit from the Long Tail, which contradicts the above presented Long Tail theory. Although the Long Tail and Superstar theories are often considered to be separate, in some cases they can coexist. For instance, according to Weeds (2012), reduction in fixed costs generates both, “a long tail, increasing

the number and share of niche products sold, and superstar effects, which is achieved by raising the quality of premium products” (p. 61).

Thus, it appears that both theories have different arguments for justifying the phenomenon. While it is clear, that the new technologies and new distribution tools increase not only the amount of available products, but also make it more accessible to consumers, the same elements can be interpreted as an encouragement for the consumers to purchase the same products and concentrate on the same goods rather than consume niche products.

3.3. Makers Movement and Self publishing

The purpose of the section 3.3 is to present the phenomenon of Makers Movement with the reference to the self-publishing as a branch of it. The first part of this chapter presents the concept itself and illuminates the emergence of Makers culture in the modern world. The second part will discuss the concept of self-publishers which is directly related to the Espresso Book Machine and publishing.

3.3.1. The Makers Movement

As it was mentioned earlier one of the elements of the Long Tail theory is the democratization of the tools of production, which is mainly caused by the Web and other new technologies: “Anyone with an idea for a service can turn it into a product with some software code [...]” (Anderson, 2012, p. 7). The beginning of the Makers Movement could be traced back to 2005, marked by the launch of *Make*⁶ magazine which represents the community of makers. It has its roots in the do-it-yourself (DIY) movement, started in the 19th century and known by the name American Arts and Crafts Movement, which was formed as a response to “ornate Victorian culture and marked a return to simpler or more rustic style” (Kneese, Rosenblat & Boyd, 2014). The difference between the DIY movement and the Makers Movement, which is the branch of the DIY, is that the makers are “taking the DIY movement online” (Anderson, 2012, p. 20).

The Makers Movement can be defined by three main characteristics: 1) It is about people creating designs for new products using digital desktop tools; 2) it is about sharing and collaborating with others in online communities; 3) it is about the production of the design in any numbers. Thus, the Makers Movement represents the community of people creating things themselves by using tools of modern technologies and distributing these creations (Anderson, 2012; Kneese et al., 2014; Wark, 2013). The possibility for everyone to be a creator and producer has references to the artisanal production, and the artisan way of doing things. R. Williams (1981) addressed the relation between artists and market by identifying different types of commodity production, i.e. the artisanal, post artisanal, market professional and corporate professional. While the last three involve one form or another of institutions and a certain relation to them, the artisanal production bypasses these

⁶ <http://makezine.com/>

institutions and enables the creator to remain independent. It is the situation “of the independent producer who offers his own work for direct sale” (Williams, 1981, p. 44). Applying it to the Makers Movement, the producer is able not only to create but also to offer his product to the market via modern technologies and widely accessible distribution channels. Moreover, the artisanal production centers on specialized goods, personalized production and niche products (Anderson, 2012; Kneese et al., 2014).

Based on the brief description of the Makers Movement, the phenomenon of self-publishers could also be considered as a group representing this movement, because of their independence from the middle-man (publisher), their usage of digital technologies to create their products and ability to offer it directly to the market.

3.3.2. Self -publishers

Despite the fact that according to some researches the sales of the books have been decreasing for some years, the production of books hasn't stopped. On a contrary, the number of new books has increased rapidly overtaking the demand (Carolan & Evain, 2013; Ho, Wang & Cheng, 2011). One of the reasons for this increase is the phenomenon of self-publishers, and new technologies allowing everyone to become an author. While going the traditional publishing route, the authors face many requests and rules, self-publishing allows writers to be more independent and maintain the whole responsibility for their work (Carolan & Evain, 2013).

The emergence of self-publishing can be traced back to the middle of the 20th century or even earlier with the reference to vanity press, when the author, often rejected by the traditional publishing houses, or choosing this path from the beginning, paid for his book himself (Dilevko & Dali, 2006). The same applies to the present-day self-publishing idea, when the author finances his own work. Although self-publishers have the entire ownership of their work, from creating the content to selling it, often it might cause certain difficulties.

To begin with, the amount of books being published at the moment becomes a challenge when making the work known. The authors are not only competing with other authors and their books, but rather with all other forms of media. Thus, it is important for a self-published author to engage with their potential readers and make sure that the readers find what they are looking for in the “seas of books” (Carolan & Evain, 2013). While publishing a book via a traditional publishing house, the distribution is taken care of by the publisher. Through a well established and developed distribution system, publishers are able to push the book into the bookstores, thereby increasing the visibility and accessibility of it. The problem of the amount of books becomes even more applicable, if the long tail theory is applied. The expansion of the products and the variety of goods make it difficult for the producer to find the consumer without additional efforts. On the other hand, the new technologies and new ways of distributing the products, in this case the books, is not an issue anymore. The e-commerce and the Internet enable self-publishers to share their titles

easily and reach the audience instantly, which questions the publisher's as distributor role (Haugland, 2006).

Another problem related to self-publishing is the quality and the attitude of the readers in regards to the self-published books. Books published by the traditional publishing house indicate that it has passed the "quality control", as Carolan and Evain (2013) formulate it: "the text has undergone a rigorous selection process and thorough editorial process" (p. 292). The professional editing provided by the traditional publisher not only ensures that the author conveys its message in a coherent way by an accurate and conveniently formatted text, but also carries a 'reputation' message. The quality issue brings the self-publishers into the mixed reputation area, which shows that the publisher paid for his book to be published, and thereby evoking the issue of trust and worth in the readers' eyes (Dilevko & Dali, 2006).

However, very often authors choose to bypass the traditional publisher not because they were rejected by a publishing house, but they seek to maintain the ownership of the work. Moreover, as Haugland (2006) notes, the creators of other fields – musicians, painters "are allowed and even encouraged to produce work that they can share with their family and friends, community or region and never seek to find a larger market audience" (p. 13). The investments required to publish a book has dropped significantly, due to the new technologies and developments in the publishing industry, which is considered to be a reason for the increasing amount of books and self-published authors (Carolan & Evain, 2013).

To summarize, the Makers Movement and the self-publishers as a part of this movement are the wide spread concepts nowadays, because new technologies facilitates not only the production process, but also the distribution methods. However easy it seems, certain problems related to the quantity of products and the quality of those arise, which might incite further considerations among consumers and creators themselves.

4. Findings

4.1. Limited retail space

Importance of the bookstores, variety and niche titles

As it was mentioned earlier, books differ from the traditional goods in terms of the number of new products entering the market. Until the emergence of the Internet and online commerce, bookstores were the most common point for acquiring books, and they still maintain their important (although declining) role:

“I believe that bookstores are still going to have a place and there are many readers who still want to go into a store and browse a physical book”
(U2; P4).

However, many bookstores are vanishing, because of the declining sales, which consequently lead to the reduced amount of books in the stores, meaning that many people leave the bookstores disappointed. However, the empirical data revealed that the variety of books plays an important role in attracting customers and serving their needs:

“[...] what we discovered is that you have to have a really broad universe in order for people to be able to find something they actually want to read”
(U3).

The need for variety also indicates that it is important for the readers to find the titles satisfying their own individual needs. Therefore niche titles, dealing with a specific topic or subject are very often chosen for the fulfillment of these needs. The empirical data acknowledges the importance of the niche titles:

“We have a few titles selling very much and then you have a very very long tail” (P3).

or

“We have some that are very big, you know diet books that people love, then we have niche like about overachievers and about small groups, where only a very small amount of people would find it interesting to read” (P1).

The importance of niche titles can be explained by the fact that people have diverse interests; therefore, they seek for specific titles which could satisfy these interests.

Top selling books and limited availability

Despite these factors which are important to the customers, the limited retail space leads to a limited choice. Consequently, the selection of books available in the bookstores consists of a minimum portion of titles published, and they tend to be bestsellers ensuring the sales for the bookstores:

“Most books published with publishers never make it to the bookstore. Only the top selling books get into the bookstores” (P4).

This indicates that if the book sells just several copies a year, the bookstore cannot afford to have it on the shelves, because it is not profitable, thus the bookstores offer the common interest books. While the titles in the bookstores can be described as ‘hit titles’ serving the common interests, the above outlined need for variety and niche titles justifies the need to expand the collections and offer as many different products as possible.

4.2. EspressoNet Catalog

Variety and Availability

The retail space is limited not allowing all the books to get on the shelves; therefore, apart from the traditional brick-and-mortar retail spaces, publishers need to sell their books using other channels. Online bookstores, for instance, have an advantage of having unlimited space:

“This is our big advantage compared to a bookstore like in Copenhagen. Because they have let’s say 500 different books, we have 4.5 million, and we don’t have any costs related to those [...] we don’t need a bigger warehouse to do that, we just need a bigger database” (P3).

It indicates that the books, whether they get into the bookstores or not, are available via certain or even several channels online, meaning that readers are able to find titles in the digital environment. One of the features of the Espresso Book Machine, i.e. the EspressoNet catalog, creates the opportunity for the titles to be discovered, ordered and printed at any Espresso Book Machine in the world, thereby turning the machine into the distribution channel, and making the books available worldwide.

Longevity and Niche titles

Besides the feature of making the books available at any EBM machine in the world, by using the EspressoNet catalog, the publishers are able to keep their books available in perpetuity. Although interviewed publishers indicated that the books are mostly sold through their websites, using international or local e-commerce websites (e.g. Amazon, Saxo), the additional distribution channel might be useful for the publishers, who have to remove the titles due to their low sales:

“I chose to take a title away, if they do not sell any more in order to save the cost of keeping to distribute them” (P2).

Thus, the ability to have the title for sale, even if it does not sell very well, is one of the advantages for the publishers. It is especially relevant to the publishers working with niche books and concentrating on small titles. Although niche books are often considered to have

a very small customer base, some of them do become desirable titles. This implies that if a niche book can find its way to the right customer, it can become successful:

“We have another author, every Christmas she makes like this book that has 25 knitting recipes and it sells quite a lot” (P3).

In addition to this, the emergence of POD technology, which makes the books digitally available, and the e-commerce facilitate the existence of small niche titles and their longevity. As well as before, a very small amount of niche titles nowadays have a chance to get into the bookstores, however, the difference is that the niche titles are available on different e-commerce and POD printing and distribution platforms, making them available to the readers. As one of the respondents notes:

“All the good books can be sold, but you will not find them in the bookstores. These are the niche books. If you go into the bookstore and ask for it, they can order it, because they are in their computer. [...] it is related to the central database system, so if you go into the bookstore and you know there is a title, they will look it up and they can order it for you” (P4).

This indicates that despite the fact that the amount of published books is increasing constantly, the niche titles have a chance to be discovered by the readers on various digital platforms. It is also applicable for the rare or out of print books which seldom can be found in the bookstores, though the interest in these books might still exist.

4.3. Reaching the right audience

Marketing and promotion

The fact that the books are available through one platform or another does not mean that it will reach the right customer. In terms of niche titles, which are rarely present at the bookstores, this issue becomes even more relevant.

According to Greco et al. (2014) “every book is in a tournament fighting for sales and attention against every other new and backlist book” (p. 3). Different publishing houses and self-published authors seek to get their books noticed and compete for the reader’s attention, time and money. In this situation, marketing and promoting a book becomes remarkably relevant (Clark & Phillips, 2008). Moreover, the earlier discussed longevity of the books intensifies the competition and challenges authors, publishers and even readers. The empirical data reveals that marketing a book is an activity that needs to be undertaken in order to be noticed by the readers. The respondents also identified the misconception by the authors that it is enough to make a book available and it will sell. But as one of the respondents notes:

“Some authors think that when the book is for sale, then it will sell something, which is wrong, because it doesn’t, because it isn’t promoted in any way” (P3).

The connection to the readers and author’s presence were recognized as effective tools in making the readers to purchase the book (P1, P4, P2, P3). The importance of creating a close connection to the readers might be caused by several reasons: firstly, books are a personal product, which differs from ordinary goods, because it often conveys the authors’ personal ideas, life perception and stories, therefore a closer relationship between author and reader might result in multiple purchases:

“Many of most successful authors they actually have a really really large following on let’s say Facebook or an email marketing list that they create themselves. So whenever they do something new, they sell quite a lot because they have 50.000 followers” (P3).

Hereby, the authors create the interest and encourage their fans to follow their work. Secondly, the life cycle of the books (at least most of the books) is relatively short, unpredictable and brief, especially if it is not able to generate sales quickly (Greco et al., 2014; Shatzkin, 1982). This means that when the book is launched and gets into the bookstores or online, it triggers the “buzz” for a period of time (if it is successful), until the sales plummet and the new title takes over the position. Thus, by making the gap between the author and the reader smaller, and combining it with particular marketing activities it is possible to maintain the book alive for a longer time and have a better control of this fluctuation (P1).

Furthermore, meeting the readers at the point-of-sale and building stories around the book were also identified as means to reach the right customer:

“I have one novel that sold in nearly 2000 copies, [...] because the author is going out to the bookstores and meeting the readers all the time, so they sell that book” (P2).

or

“If anybody had any complaint about the book, if the front page felt out because the spiral was wrong, I would just send them a new copy and a nice letter saying I am so sorry, here is the new book. I made the stories about the book, about the service and it just rocked” (P4).

This implies that although many books, especially niche titles do not get into the bookstores, the authors are able to meet potential customers and draw attention to their work. These examples suggest that all the techniques that bring the author and the reader closer, make both the book and the author more appealing for purchase and consumption.

Recommendation and advanced search system

The ability to find the books easily facilitates the traditional marketing efforts and becomes valuable both to the authors and to the consumers, therefore, a specific recommendation system and optimized book search was identified as one of the ways to ensure that:

“It is much of an organic search effort that we have at the long tail [...] we create a guide for all these ladies who don’t really know what they want, but they know what kind of area they want.” (P3).

In relation to the Espresso Book Machine and the search system, the cataloging was identified as an issue causing the most problems. Weak and not well developed search system does not allow the customers to find titles, although they might be available on the database. The EspressoNet catalog has millions of titles, making it a valuable offer for the collection expansion. This was also identified as one of the reasons for the machine acquisition, i.e. the collection expansion and the opportunity to provide customers/readers with the wider selection of titles (U1, U3). However, the poor cataloging and problems in finding the necessary titles was identified as number one improvement:

“Make it more effectively and easily searchable. And that means improving the catalog records which are a disaster” (U1).

This implies that although the EspressoNet catalog has millions of titles, if they are not easy to find, there is no value in it and neither publishers nor customers can benefit from it.

4.4. POD

Transportation and Remainders

Distribution, which ensures that the product, in this case the book, gets into “the customer’s hands at the right time in the right quantities” is one of the main tasks of the publishers (Clark & Phillips, 2008, p. 210). However, this is the area of publishing which is often referred as inefficient and wasteful. One of the causes being the returns and remainders, which are the books returned to the publishers by the booksellers or wholesalers after a period of time without being sold (Shatzkin, 1982). The issue of returns is one of the most costly publisher’s problems, identified by the interview respondents (P1, P4, P2, U1):

“Every year millions and millions of books are burnt. [...] suddenly another book comes out or there is a new edition or it is not such a hot book and then they cancel the book and burn the book which is crazy” (P1).

The transportation of the books also requires certain considerations:

“Let’s take Amazon as an example, in South Africa, and I want to order one book, they are going to physically transport one book around the world to me. And that makes no sense“ (U2).

These remarks imply that the distribution and transportation of books need to be optimized in order to cut costs for publishers and to minimize the negative environmental footprints. One of the ways to do that is the print-on-demand technology.

Print-on-demand

One of the recent developments within publishing industry is the print-on-demand (POD) technology, which has been identified by all the respondents as an effective solution for tackling the earlier mentioned problems:

“The idea of print on demand is so basically right, that I feel that it has to be a major part of the future of reading and publishing and book distribution” (U1).

It is worth mentioning that the POD technology satisfies the readers who choose printed books over e-books. The important role of the printed books has been identified by all the respondents stating that people still prefer physical books (U1, P1, P2, P4, P3, U2, U3). However, the position of the printed book among readers has changed and the preference for the printed books depends on a specific country and area. While the market for the e-books is huge in the US, for instance, and people chose e-readers, other countries prefer the actual book (P1).

The POD technology which became widely used in 1990s, allows small print runs, reduces the returns, keeps the book in print in perpetuity and creates the opportunity for publishers to print and distribute a single copy of a book (Clark & Phillips, 2008; Greco et al., 2014; Greco et al., 2007). Firstly, this technology is considered to be beneficial for publishers, because they do not need to make predictions about book sales and invest a lot in printing large quantities of books. Moreover, it allows publishers to take more risky projects without investing a lot of money, meaning that more specific niche books can be published. Secondly, it is valuable for retailers, who are now able to satisfy their customers by finding the digitally held title.

4.5. EBM as POD for self-publishers

Self-publishers

The Espresso Book Machine is a POD technology, but its capability to print a book at a point-of-sale differentiates it from the traditional POD solutions. As it was mentioned in the EBM description, the machine consists of hardware and software. While the software, the EspressoNet catalog is a digital database of the content available to the EBM users, the hardware, i.e. the combined printing and binding machine, is located in the retail environment.

All the users of the EBM confirmed that the machine is mostly used by the self-publishers, indicating that the independent authors benefit from this technology in one way or another:

“It is being used substantially for self publishing” (U1).

or

“Authors who have not previously been published, or have decided they would rather self publish than go through the traditional publishing routes. They will use this machine more and more (U2).

The reasons why the authors choose to self-publish were addressed in the literature review and the empirical data reaffirms that. Authors seeking to maintain their independence as producers or feeling that they are under-represented by the publishing houses often chose the self-publishing path (P4). Therefore, by keeping the control in own hands, the authors have a right to turn the development of their book in any direction. Moreover, if the self-published book proves to be successful, it can be even “picked up by a larger press” (Greco et al., 2007, p. 191; Clark & Phillips, 2008).

Efficient production and distribution

In terms of the Espresso Book Machine as a POD technology, it enables authors to produce books in small runs (ranging from a single copy to several dozens, because printing more than a certain amount of copies might be loss-making). Moreover, the possibility to print small runs means that the authors do not need to invest large sums for printing and publishing their books:

“When someone wants to come and get a book printed they don’t have to print a hundred copies“ (U3).

This especially relevant for those authors who either do not aim for big sales (e.g. family publications), or who are not sure about the success of their book, relieving the authors from the potential investment lost. Finally, the fact that EBM prints the book instantly and fast makes it attractive for the self-publishers.

The empirical data also revealed that the EBM is not only the “output device” for the self-published authors, but also a distribution channel. The authors going the traditional publishing route (i.e. published through publishing houses) do not need to worry about the distribution of the book, because the publishing house has responsibility to do that, (or at least it is expected), and this is one of the main functions of the publisher. Though self-publishing is considered to be a relatively easy and cheap process facilitated by the web services and various publishing tools, the authors often do not take into consideration the ‘next step’ and face various obstacles, distribution being one of them (Greco et al., 2007). This implies that the authors need to find their own ways to reach the readers, and although sometimes it is easier to be represented by the big publishing house in terms of distribution power, this is not always the case. It was also confirmed by the respondents, who either worked with self-publishing authors, or were self-published authors themselves (P2, P4, U3):

“I wrote a book myself and I couldn’t get it published from the big publisher like many people. And I chose print on demand solution, where I got a book

printed; they send me a box of books with 50 or 100 books, and then what? - I thought. Then I had to find out how to get the book on the shelves and all the things I had to do myself” (P2).

Through the earlier discussed EspressoNet catalog, the books published using the EBM is connected to a network of content. It allows the authors to make their books available and accessible, which ensures that by using the EBM to publish their books, authors are provided with an instant distribution channel, which is especially relevant for the self-publishers taking care of the book life-cycle themselves.

4.6. Quality

Necessary or not necessary?

The fact that fast and easy production and efficient distribution enable everyone to become an author and share their works worldwide raises the question of quality. Two opposing opinions from the empirical data emerged. On one side lies the notion that self-publishing should not be restrained or questioned by any quality issues. On the other side of the extreme lies the idea that although the book is a self-published, it should fit into certain quality frames. The former notion is justified by several respondents (U1, P4, P3) stating that the book is as any other creative product, which can be produced by everyone:

“It is like music. You can play guitar. I can play guitar. Someone happens to play great music and someone will find them. And the whole business of books has been so concerned about the quality, but it works. It works with music, it works with art. I mean if you go to any cafe or haircutter salon there will be art works on the walls. But no one will expect it to be Picasso or great works of modern art” (P4).

or

“The virtue of self publishing is that it is totally democratic. And anybody can access it and I think that is a really good thing that will allow books to be published that otherwise might not be and it could have been very important” (P5).

The opposing side (P2, U3) states that it is important to make sure that a self-published book carries a certain level of quality:

“[...] it is not just about writing this book in 2 or 3 Ds and then giving a print as a book. It is actually a business once you have written a book-this is revising it, and editing it and making sure that it is a quality item that people are going to read” (U3).

The opposing thoughts imply that the self-publishers and appreciation of them depends on the position taken upon- either to give freedom for everyone to become an author and let the readers sort it out themselves, or to control the content getting into the readers' hands.

Community

The empirical data revealed that self-publishing is also related to the community building and the establishment of special programmes within libraries or retail environment. Although self-published authors are independent and autonomous while producing their books, various platforms and communities are common among them, serving support, inspiration, knowledge sharing and creativity needs (Perry, 2014). These communities enable authors to get necessary advice and guidance not only for the technical issues such as design, paper quality, printing, etc., but also for the content and writing. Therefore, the publishing houses serving these needs benefit from the authors seeking for support:

"So I saw this opportunity to make a publishing company, where the author or writer could get his book printed and help him with all the things they have problem with - distribution, printing the book, making cover, editing, of course; and then helping them also with writing stuff for media, press releases and stuff like that" (P2).

In terms of the Espresso Book Machine, the users of it also harness the opportunity to create additional services around it by offering special programmes introducing novel writers to the nuances of publishing and writing:

"The library has a Book Arts program, where students can come and be taught how did you find printing and historical printing techniques and also how did you creative things with the book as an object and the Book Arts students have actually made some interesting use of the EBM in their projects" (U1).

Thus, the self-publishing is often centred on likeminded people sharing their experiences and knowledge in order to produce a personal product, i.e. a book, independently. At the same time, this is also the way to influence the quality of the self-published books (if the notion of quality control is applied).

5. Discussion and conclusions

5.1. Discussion

The aim of the following section is to present the meaning of the research findings and put them into a broader context. The main findings are also related to the literature and theories used in the thesis, which helps to discuss and to highlight the main points of the research. Finally, the discussion is a foundation for the implications and propositions related to the utilization of the Espresso Book Machine.

It is worth noting, that the findings touched upon different segments of users who can be influenced by the Espresso Book Machine. The discussion chapter addresses issues concerning these segments, i.e. retailers, authors and publishers, and is structured around these segments.

Retailers

To begin with, the retailers are an inseparable part of the book supply chain and it is the sales channel for the publishers and authors. In this context, the retailer indicates a physical location with an access to the books, for instance a bookstore, library, supermarket, etc. Although online retailers and booksellers “has built up a powerful presence” (Clark & Phillips, 2008, p. 244) in certain countries, the enduring existence of the bookstores demonstrates their important position, mostly because of a different browsing experience offering. However, the limited retail space hinders the variety which was identified as an important feature for the readers. It can also be related to the earlier discussed Long Tail Theory, which demonstrates the shift from hit titles to the niches (Anderson, 2006). These two contradicting notions, i.e. the need for variety and the limited space, raise a question: how can bookstores provide customers with many products within the limited space?

Millions of titles in a bookstore

With this question in mind, the Espresso Book Machine comes into play. Being a device for printed books (which are exactly what physical retailers are for), via the EspressoNet catalog, the EBM combines a wide variety of products within a limited space. In other words, the EBM offers millions of titles and do not require the storage place for them. However promising it sounds, certain issues must be taken into consideration. Firstly, the device itself is a huge investment for the bookstore. Although the exact price of the EBM was not identified (due to the unsuccessful opportunity to contact On Demand Books⁷), the online sources enabled to estimate an approximate price ranging between 85.000 and 100.000\$. The highest detected price is 185.000\$, followed by 125.000\$, 100.000\$ and 85.000\$, which indicates that the cost of the machine is falling down. However, if the

⁷ On Demand Books – the company producing and selling the Espresso Book Machines

retailer makes a decision to acquire the machine, it can take up to several years for it to make a profit. As the publishing consultant puts it, the machine “only works, if it doesn’t work” (P5):

“If lots of lots of people come to the store to buy a book on the EBM then the three-to-five-minutes that it takes to reach a book will turn into two hours because you have 25 people in front of you. The only way it works, is if you don’t have 25 people in front of you, which means that from the store’s point of view it is not a particularly useful commercial proposition”(P5).

Thus, although the possibility to offer the customers an almost infinite collection of books is promising, it requires additional investigation in relation to the investments, profitability and optimal pricing decisions.

Is it a publisher or retailer that starts using the EBM?

Another issue worth noting is the collection of the books available through the EspressoNet catalog. Despite the fact that On Demand Books has agreements with some world known publishers and content providers, there are mostly backlist titles or out of copyright books available. One of the reasons for this might be the identified quality issue, which might damage the brand of the publisher. Although the device is capable of printing quality paperback books, it does not equal the offset printing or hardcover books. Therefore, publishers are not willing to share their front titles, which leads to the closed-circle phenomenon: if the publishers do not share their titles, the retailers are not willing to acquire the machine And vice versa. The publishers do not share their titles, if the retailers do not acquire the machine.

What do these two issues imply? The EBM is a valuable proposition for retailers in terms of expanded collection and wide selection of books, but it is profitable and worthwhile only if the publishers are fully involved into the EspressoNet program.

Authors

The utilization of the Espresso Book Machine mostly by the self-publishers has certain implications and issues that must be taken into consideration. First of all, the EBM can be identified as a “democratized tool of production”, which according to Anderson (2006) enables anyone to become a creator and produce things easily. It enables to print and publish books fast, instantly, in small quantities and maintain responsibility for their work. These elements make the self-publishers attracted to the Espresso Book Machine. Moreover, the EspressoNet database, solves, or at least contributes to the solution of the distribution problem, which a lot of self-publishers face. Thus, the EBM has quite a few valuable implications for self-publishers.

The EBM and technical problems

The EBM technology was considered to be novelty at the time it was introduced. Not only was the POD solution a relatively new concept, but also the digital catalog was of interest. The rapid technology developments, however, challenge the EBM. If almost 10 years ago, when the first machine was introduced the device was promising, today it competes with a range of POD providers and content distributors. The technical problems in running the machine and the quality of a print in general were also recognized as an obstacle for a wide spread of the EBM. Self-publishers can choose any self-publishing platform in the world, providing them not only with the product, i.e. the book, but also the distribution. And although the EBM offers the possibility of getting a book instantly, it is worth questioning the amount of authors wanting to use it: is it really worth scarifying the quality of the print for the instant delivery?

How can EBM solve content quality issues?

The empirical data regarding the quality of the self-published books corresponds well to the literature discussing two different positions on that. The self-published books do not need to go through a rigorous process of editing, screening and evaluating, which was identified by Carolain and Evain (2013), indicating that the book do not necessary fulfil the requirements of quality. However, if the ‘freedom to create’ approach is applied, it means that everyone can become an author and creator and express their creative skills freely. But if the position, that the books getting into the market should be inserted into certain quality frames, the issue of quality must be addressed.

Although authors are able to run the whole book production process by themselves alone, very often they seek for advice and guidance. In terms of the Espresso Book Machine, this need for like-minded peers either experienced or just beginners can be satisfied by collaborating with the communities established around the EBM. Special programs, workshops and courses launched in relation to the installation of the EBM indicates, that through EBM communities self-publishers can facilitate their book writing and production processes and confront the “unqualified author’s” concept. The community aspect was recognized in the literature review as well, indicating that the EBM is capable of gathering like-minded people. Moreover, the self-publishers’ communities and additional services related to the EBM can become valuable for retailers in terms of attracting new customers and establishing new relationships.

What are the implications of the EBM for authors? The EBM is an attractive proposition for the self-publishers who aim to increase the quality of their work by using the communities established around EBM. The quality of the print, however, must be improved in order to compete with other POD providers or the authors, who seek for small runs, independence and instant delivery.

Publishers

In order to put the Espresso Book Machine into publishing context, it was important to understand the publishing field in general. The empirical data, therefore, was collected from the interviews with the publishers. The findings of the research demonstrated that the problem of returns and remainders is one of the biggest issues, forcing the publishers to look for more efficient production and distribution solutions, POD being one of them. But as it was mentioned in the *Authors* section, POD does not provide the same quality which is available through offset printing. This is even more applicable for the EBM, which is often referred as a copy machine with the binding possibilities, which makes the professional publishers resistant to the machine.

Since many publishers are already using POD technology, they already have established contracts and relations with certain printing and distribution companies. Signing up for the Espresso Book Machine program, would indicate that an additional contract with On Demand Books is necessary in order to utilize it, which might be another reason for reluctance towards the machine.

What are the problems related to the amount of books?

The importance of reaching the right audience was also identified as one of the main issues for publishers. Thus, besides the traditional marketing efforts, an additional distribution channel might serve as a way to reach more customers. The fact that through EspressNet catalog publishers could reach their customers in different continents instantly is promising. However, several issues related to that occur.

Firstly, the question of the amount of people willing to get a book immediately arises (as well as with the above discussed authors). As the publishing consultant noted:

“What sales are you losing? You are losing the sale of the people that have to have it today rather than tomorrow. Cause if they can wait for tomorrow they can buy it from Ingram and get it tomorrow. Not print on demand, they will get my copy from Ingram tomorrow. So how many books sales depend on getting it 24 hours faster? Not very many” (P5).

This implies that readers can order a book through one of the online booksellers, and get it delivered in one-two days, without a need to go to a physical store to pick it up. However, it is also worth mentioning, that the Espresso Book Machine was identified as a way to attract customers to the store, which implies that it can be valuable for increasing the attention.

The second issue, related to the EspressNet catalog is concerned with the Long Tail theory. Democratized production and distribution allows the variety which is highly appreciated by the readers. But at the same time, each product, in this case every book, is exposed to an enormous competition, meaning that the publishers are competing with the books being published all over the world. Thus, the Long Tail might be valuable for consumers, but for publishers and authors it can create certain problems.

Not properly developed EspressNet cataloging

Whether the Long Tail approach is beneficial or not, publishers must find a way to approach it. The recommendation and filters system addressed by Anderson (2006) becomes very relevant when connecting the supply and demand. In terms of the Espresso Book Machine, even though the publishers share their titles on the EspressNet catalog, and the printing device allows customers to get a book instantly, there is a problem of finding the titles. What does it suggest? The customers leave the catalog without ordering the title, just because the cataloging system is not developed enough and is not customer-friendly. This is one more reason for the publishers not to participate in the EBM program.

Openness to innovation and change?

The notion that publishing industry is a closed and conservative field has been prevalent both in the literature and in the empirical research. Looking back to the Gutenberg press, which enabled large scale printing, and was an innovation with unlimited opportunities for a certain period of time, it was also considered “the death knell for hand written works” (Liu & Stork, 2000, p. 94), indicating that introduction of new technologies takes time to be accepted and integrated into the social-cultural world. Other novelties, such as e-books or e-readers, can also be considered either a threat to the printed book, or an opportunity to provide readers with a more diverse reading experience. In any of these cases, disruptive change and innovation challenge traditional and “historically grown and not always ‘state-of-the-art’” (Aris & Bughin, 2005, p. 35) processes. According to Thomke (2003), people are reluctant to change, especially if the well established routines have been followed for a long time and functioning well, implying that it not only takes time for the changes to be accepted, but also the right mindset is necessary to benefit from it.

The replies from the respondents indicate that the publishers and other participants of the industry were and still are very conservative, which questions the possibility of introducing new practices or changes into the industry:

“So I think the reason that publishers are being cautious is that publishing is a very very conservative profession [...]. They don't want to try out anything that is new and crazy. They want to keep doing the things they have always had” (U1).

or

“They are so afraid. They are scared to death by the fact that now in the publishing industry we can do exactly as people have done in the music business, and film business, and art business for centuries. Because they have monopoly” (P4).

Although for a long time publishing and other media companies have been focused on the content generation, these days it is more about “the way it is delivered” (Aris & Bughin, 2005, p. 30). The content issue, and the quality of that content is also a reason for

publishers to maintain their gatekeeper's role and be reluctant to changes. However, the democratized tools of production and distribution force the participants of the publishing industry to respond to the disruptive changes and innovation. This response can take shape in new roles, innovative interaction with consumers or optimized processes among other things.

What are the implications of the EBM for the publishers? Although it is unlikely that publishers can benefit from the EBM as a POD technology for printing their books, due to the existence of more advanced technologies and already established collaborations, the EspressNet catalog can become a valuable proposition for the publishers as an efficient distribution channel. For this to happen, however, the cataloging should be improved and the publishers should look into the possible ways of dealing with the increased competition. Finally, the attitude towards innovation and change determines and affects the acceptance of the new technology, whether it is an EBM as distribution channel, or any other routine-or-processes-changing novelty.

5.2. Conclusions

The main purpose of this thesis has been to explore the current and potential implications of the Espresso Book Machine for the publishing industry. This was approached by subdividing the research question into three sub-questions:

- How is the EBM being utilized at the moment?
- What are the realities of publishing business?
- How could the participants of the publishing industry efficiently utilize the EBM?

The first sub-question of the current usage of the EBM was addressed by collecting the empirical data from the EBM users. The empirical data revealed that the characteristics of the EBM, such as small runs, instant delivery and worldwide distribution make it an attractive proposition for the self-publishers. Comparing it to the existing literature on Makers Movement, it becomes clear that the EBM serves as a device for the people who exploit new technologies for creation and sharing these individual creations with others.

The second sub-question was answered by conducting interviews with publishers in order to identify the issues publishers are facing. It appeared that the publishers operate in a competitive market, where each book competes with millions of other books available worldwide. This indicates that the publishers are exposed to the Long Tail phenomenon due to the democratized tools of production and distribution. In addition to that, publishers are altering their business models to more efficient and optimized solutions, such as POD technology in order to address the problem of costly and inefficient transportation and distribution.

The third sub-question was answered by analyzing the findings of the research and integrating EBM users' insights with the publishers' observations. The analysis was subdivided into two sections, representing two different parts of the Espresso Book Machine, i.e. the EspressNet software, and the hardware, which allowed to put the EBM into context and to discover the issues related to it. The EBM software proved to be a solution for the limited retail space, due to which, customers are not provided with the variety they want. Moreover, the EspressNet catalog serves as a tool for maintaining the longevity of the titles and creates opportunities for the niche titles. The EBM as a POD technology solves the problem of transportation and distribution; however, the quality issues make the publishers reluctant to it.

The discussion of the findings allows to make certain propositions for the different segments of the publishing industry, i.e. authors, retailers and publishers. As this thesis has only sought to explore the phenomenon of the Espresso Book Machine, each of the below presented propositions requires a separate investigation on what impact the EBM might have to each of them and it can serve as a starting point for the further research.

- The EBM is a valuable proposition for retailers in terms of expanded title collection and wide selection of books, but it is profitable and worthwhile only if the publishers are fully involved into the EspressNet program.
- The EBM is an attractive proposition for the self-publishers who aim to increase the quality of their work by using the communities established around EBM. The quality of the print, however, must be improved in order to compete with other POD providers or the authors, who seek for small runs, independence and instant delivery.
- Although it is unlikely that publishers can benefit from the EBM as a POD technology for printing their books, due to the existence of more advanced technologies and already established collaborations, the EspressNet catalog can become a valuable proposition for the publishers as an efficient distribution channel. For this to happen, however, the cataloging should be improved and the publishers should look into the possible ways of dealing with the increased competition.

The summarized results of the research are presented in Figure 5, which illustrates the main aspects of the Espresso Book Machine and their relation to the publishing industry.

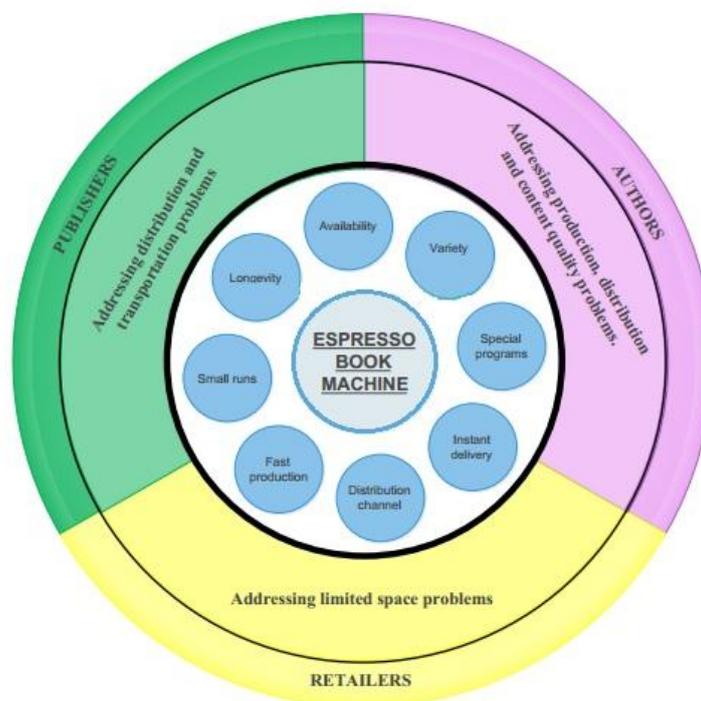


Figure 2. Summary of the findings
Source: author

Different parts of the Espresso Book Machine, i.e., the hardware and Software offer certain features which are of interest to the participants of the publishing industry. By utilizing the EBM, retailers, authors and publishers can address the problems challenging their work. Retailers can solve the problem of a limited and expensive retail space by offering titles through the EspressNet Catalog, which do not requires to store all of them in the store. Publishers can deal with the transportation and distribution issues, which are often costly and inefficient. Finally, authors can benefit from the EBM as a tool for distribution, easy production and around it created programs facilitating the publishing processes.

6. Further research

This research includes 20% of the EBM owners, making the research a small scale. Involvement of more respondents might result in different findings about the utilization of the Espresso Book Machine, which incites to conduct a wider scale research by analyzing more users of the EBM. Moreover, although the EBM functions on a same model, a particular owner might utilize the device differently, creating new functions around it and applying it in relation to a particular environment or situation; therefore each Espresso Book Machine could be analyzed separately, thereby contributing to the full picture.

The finding of the thesis shows that the Makers Movement and self-publishing in particular is closely interlinked with the Espresso Book Machine. Thus, it could be further investigated how the self-publishers could get most of this device by analyzing in depth the phenomenon of self-publishing.

Financial analysis of the EBM can also be applied. The analysis of the investment costs, return on investment and the price evaluation of the end user, i.e. the reader, would give a realistic view about the customers, their willingness to use the machine and willingness to pay, and the retailers' ability to invest in this machine.

Finally, many EBM users are the university libraries or bookstores, indicating that the EBM might have perspectives within academic publishing field, thus the analysis of the academic publishing and the applicability of the EBM could be conducted.

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Appendix 1

Contacted EBM owners

	Name	Country	Type
1	Woodneath Library	USA	Library
2	Edmonton Public Library Makerspace	Canada	Library
3	University of New Brunswick Libraries	Canada	University Bookstore
4	Towson University store	USA	University Bookstore
5	Loudoun County Public Library	USA	Library
6	University of Johannesburg	South Africa	Other
7	University of New Mexico Library	USA	University Bookstore
8	Kennesaw State University Bookstore	USA	University Bookstore
9	University of Michigan Library	USA	Library
10	University of Utah Library	USA	Library
11	Sacramento Public Library	USA	Library
12	Schuler Books	USA	Independent Bookstore
13	University of Washington Bookstore	USA	University Bookstore
14	Michigan State University Library	USA	Library
15	University of Illinois	USA	University Bookstore
16	University of Texas Co-Op Bookstore	USA	University Bookstore
17	McNally Jackson Bookstore	USA	Independent Bookstore
18	Flintridge Bookstore & Coffeehouse	USA	Independent Bookstore
19	Juan Bosch Library	Dominican Republic	Library
20	New York University Abu Dhabi Library	UAE	Library
21	University of Windsor Bookstore	Canada	University Bookstore
22	Windsor Public Library	Canada	Library
23	Books A Million	USA	Independent Bookstore
24	District of Columbia Public Library	USA	Library
25	Saltwater Media LLC	USA	Other
26	University of Alaska	USA	University Bookstore
27	The Cornell Store	USA	University Bookstore
28	McNally Robinson	Canada	Independent Bookstore
29	Powell's Books	USA	Independent Bookstore
30	NYU Bookstore	USA	University Bookstore
31	Lambton College Bookstore	Canada	University Bookstore
32	Black Crow Books	Canada	Independent Bookstore
33	Tattered Cover Books Store	USA	Independent Bookstore
34	Brighman Young University Bookstore	USA	University Bookstore
35	Harvard Book Store	USA	Independent Bookstore
36	University of Arizona Bookstore	USA	University Bookstore
37	The Mizzou Store	USA	University Bookstore
38	Third Place Books	USA	Independent Bookstore
39	Railroad Street Press	USA	Independent Bookstore
40	Politics & Prose Bookstore	USA	Bookstore
41	North Dakota State University Bookstore	USA	University Bookstore
42	North Carolina State University Bookstore	USA	University Bookstore
43	University of Pittsburgh Bookstore	USA	University Bookstore
44	McMaster University Bookstore	Canada	University Bookstore
45	University of Waterloo Bookstore	Canada	University Bookstore
46	Simon Fraser University	Canada	University Bookstore
47	University of Toronto Bookstore	Canada	University Bookstore
48	University of Prince Edward Island Library	Canada	Library
49	University of Victoria Bookstore	Canada	University Bookstore
50	Shine of Book	Ukraine	Bookstore
51	Library of Alexandria	Egypt	Library
52	Asian Development Bank Bookstore	Philippines	Independent Bookstore



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