# Universitat de les Illes Balears

# Facultat d'Economia i Empresa

#### **GADE**

# THE BOOK INDUSTRY AND THE INFORMATION TECHNOLOGIES

**AUTHOR: CARMEN CUARTERO SASTRE** 

**Tutor: Aleix Calveras** 

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#### **ABSTRACT**

As it is a final degree assignment, in this work I have tried to apply all the knowledge acquired in the different subjects I have been working on last years. Specifically in this work I try to study and show an overview of the book industry. First I introduce the field and explain the basic concepts. After that it is introduced the term of Information Technologies as well as there have been analysed its main consequences on the economy and on the industries, taking into account the large number of expert economists' studies of this field. Concerning the electronic book, the concepts of e-book and e-reader are widely defined. To finish, we make a review on the price of e-books and the market competitive concerns.

#### INTRODUCTION

Born many centuries ago, book industry has always supposed a huge contribution to world culture. This is why is it interesting to analyse its evolution over the years.

At first, the main concern of the market was the physical book; all industry agents, laws and mechanisms were created for and organized around this primary product. Nevertheless, with the introduction of the Information technologies and in particular the Internet and the World Wide Web, many changes came to place. On the one hand, IT changed people lives making some tasks easier and creating new needs.

On the other hand, industries have suffered many transformations thanks to IT, where automated processes of production, new ways of commercialization via social networks or changes in cost structures are some examples. In the case of the book industry, the most important recent event has been the creation of the electronic book and its later boom. Now, the book is not conceived anymore as a physical object made of paper, but it now has elnk and it can be read from many different devices, and mainly using a e-reader.

However the introduction of the e-book has brought transformations not only for consumers reading experience but also for industry agents. Many companies, traditionally engaged in selling paper books, have extended their businesses by incorporating the sale of electronic books as well as the production and sale of e-readers. Therefore, the industry faces new businesses that try to cover all needs that arise with the use of the e-book.

The e-book market is still young, and there exist some facts that may stop it to grow faster. Fix price laws, pricing models, collusion between publishers and European regulations on Value Added Tax imply higher prices for e-books, making the market less attractive for consumer, deviating sales to paper books and other cultural and leisure goods. Consequently, to improve the e-book market prospects, these barriers to growth need to be abolished creating a new environment updated to the newest trends.

#### **OBJECTIVES AND METHODOLOGY**

The first objective of this work is to analyse the relationship between the information technologies and the book industry. The second objective we try to achieve with this study is to know the reason why e-books price is very similar to the physical books price; even it was expected to be lower.

Indeed, the purpose is to first make a review on the book industry explaining all the e-book and e-reader key terms, and examine economies of information theories. Then there must be analysed industry pricing models and policies, as well as it must be questioned if there are other facts that could affect indirectly e-books prices.

To carry this out I have based my work in the previous studies and analyses of economist's from specialized articles and theories, basically for the first parts of the work, as they have been studied since long ago, so it is easy to find practical and theoretical sources. In my case, I have found many different sources from experts as Shapiro or Varian.

For the second half of the work, E-book and E-book economies, I have focused my research on press releases, industry market studies carried out by big companies like PWC or governmental institutions, also from master projects and experts market analyses. To gather information about the E-readers I have visited its supplier's web pages.

Finally, for the study of the US and European actual book industry, I looked for press releases and I have explored European Commission memories of antitrust cases as well as European laws and regulations related with the electronic book.

#### **BOOK INDUSTRY**

#### **HISTORY**

Before discussing about the E-book, its changes, improvements, advantages and disadvantages, it would be interesting to understand how did the industry work some years ago, before the IT revolution, before the producing, distributing, selling and reading methods get changed. We are going to do a review of the publishing industry, its creation and history.

If we go back to the past we notice that the idea of printing exists since 440 B.C., when the Roman culture started to use seals on clay objects to create inscriptions. But the history of the modern book did not begin until 1400, thanks to the German Johannes Gutenberg and the printing of *Forty two-Line Bible*. Before Gutenberg all book copies were handwritten, most of them done by priests or ecclesiastics and were focused on religious and legal issues. Gutenberg followed this trend but offered the world a brand new technic to develop the copies, he invented the movable type, capable of coping the Bible in half the time than it would take to one of the fastest traditional copyists. By this time, the structure of the publishing industry was very simple and based on cottage industry, where the author of any particular work would make a contract with the bookseller-printer for the printing and selling of the book. Usually there was a patron of the author who bore the expenses incurred.

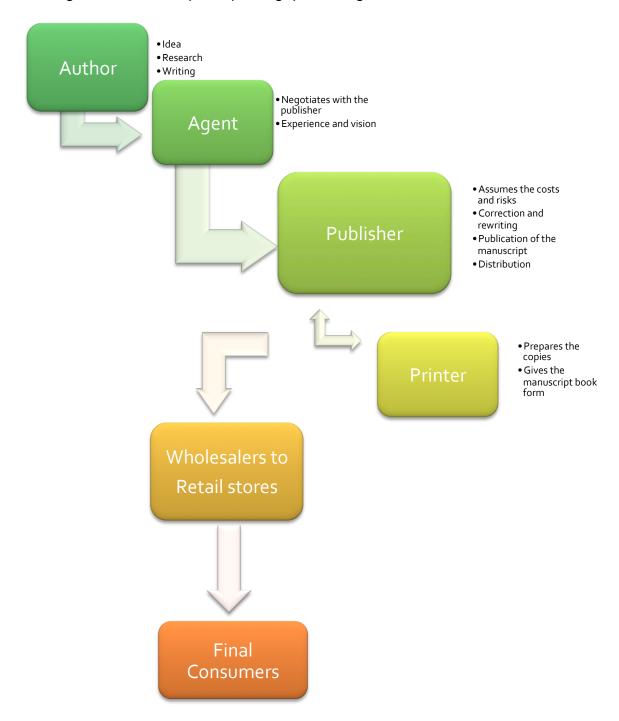
Due to the continuous growth of the book market this simple structure disappeared and was replaced by a modern one. The higher levels of literacy the population reached, together with the lower price of the books (thanks to the economies of scale reached due to the new and more efficient printing methods) led to the emergence of the early publishing houses, each one run by one publisher and his family.

However, the model that most closely resembles that of the present did not appear until latter half of the nineteenth century, when the market of books in the USA suffered a huge increase becoming a mass market.

#### CONCEPT

The book production is characterized for existence of many participants during the process, where each one has clear defined functions. The process begins with the author's idea, which needs to be developed. Some times it is useful to do some research of the key topic in order to get more information, and after that begins the writing period. Once the manuscript is finished the author contacts the agent who is in charge of negotiating with the publisher and achieving a good contract. That person does a first screening of the book and

works to find the publisher who best fits the book characteristics. If the publisher is interested, the negotiation with the agent starts and when all the terms are clear they sign the contract. The publisher assumes almost all costs and financial risks, as he is the one who is responsible of the correction and/or rewriting of the manuscript, its printing, publishing and distribution.



The printer receives the manuscript, previously modified by the publisher, and he turns it into the final book, which will go back to the publisher. The last one distributes the books to the wholesalers who, at the same time, give the copies to the Retail stores, where the final consumers would by the book.

#### PRE INTERNET SPANISH PUBLISHING INDUSTRY

If we look back to the 90's decade we notice some remarkable characteristics in the Spanish book industry, this section is based on a review of the most interesting peculiarities of the Publishing industry in Spain before the introduction of IT advances and processes.

#### **PUBLISHING AGENTS**

About the market structure it can be highlighted that a 20% of the publishing enterprises depended on public administrations while the remaining 80% were private companies. Last ones billed a 90% of the overall industry turnover and public administrations just a 10%, for this reason this section is going to be based on the private sector as it reflects a greater part of the market.

Most enterprises were small sized or, in other words, microenterprises, but the interesting part is that many Industry companies were concentrated constituting big conglomerates. A proof was that, in 1999, a 26% of the micro companies claimed to belong to a group. Therefore we could say that large enterprise groups were the main market participants. A good example to illustrate this could be conglomerate Grupo Planeta whose sales achieved a third part of the total industry turnover.

#### PRODUCTION AND COMPOSITION

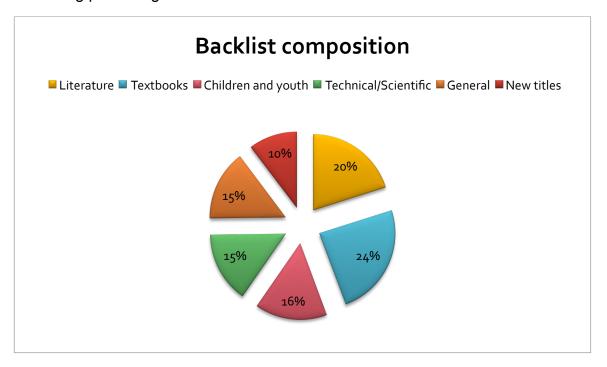
If we analyse the number of published titles during the 90's we can see that the trend was the progressive increase in production, being 39000 the number of titles published in 1990 and 57848 in 1999, namely, almost a 50% increase.

About the composition of the blacklist book of the Spanish market, by 1995 the number of new creations was around 44.000, standing the number of titles in catalogue in 172.380. From the last figure, a 20.1% were literature books, a 24.2% college and non-college textbooks, a 15,5% was composed by youth and children editions, a 15.1% were scientific and technical titles and the remaining percentage were books of general disclosure items.

It must be said that Spain had a wide backlist with many titles of many different topics, which sometimes caused distribution, inventory and logistic problems.

Interestingly enough, we should say that the titles were produced in different languages. The clear winner was Spanish language gathering a 80% of total production, being the rest 20% number of titles produced in Catalan (15%), Basque (2'6%), Galician (2%) and other languages (0'5%).

Regarding the distribution channels, a 56% of the publisher sales were sold to the retail stores (including traditional bookstores, kiosks or malls), and the remaining percentage was sold to the wholesalers.



#### INTERNATIONAL TRADE

A key point of the publishing industry in the 90s was the huge production of books for foreign trade, assuming a quarter of total industry production. This fact contributed positively to the balance of trade, which was historically in deficit.

Regarding the targets, a 46% of the foreign trade was intended to Latin America, a 45% to the EU and the remaining percentage to other parts of the world. The closer the end of the decade, the more grown European exports, as a symbol of the increasing importance of Spanish literature and Spanish language.

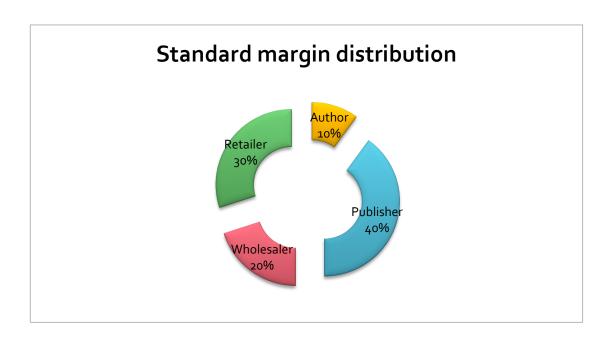
#### **REGULATIONS**

In the Spanish market there existed a vertical relationship between all industry participants. This relationship was build on the basis of XVI century estimative contract, which consisted of an agreement between publishers and retailers through which the latter kept the books in storage until its sale and return to the publisher the books which where not sold. With this model revenues where shared between industry participants, creating an inelastic model which did not respond to demand fluctuations.

As the time went on, started to show some threatens which could change the status quo. To avoid the changes, industry participants asked for a regulation that would preserve the old model. The next step was the publication of book fixed price regulation, under which publishers were forced to set a unique price for the books, and all retailers within the national market should sell the books under that price.

The consequences were the continuation of the vertical business structure and the creation of a stable margin distribution of book price among participants.

In the graphic we can see the most frequent margin distribution of the book fixed price in the 90s among industry agents. Nevertheless, this standard distribution could be altered by the bargaining power of each of the participants satisfying mainly the publishers and big retailers in detriment of the authors.



It is also important to say that the model implied that all customers should pay the same price independently of the retail store in which the bought it. Therefore, retailers had no chance to yield a part of their margin to the final customer, so they can achieve higher sales or even discriminate prices between clients to reward loyal customers. Even though, retailers preferred to continue with the fixed price to maintain the stability and preserve their margins, in other words, to avoid risks.

To conclude we can say that there was no flexibility in the model, harming competence and, thereby, affecting final consumers.

#### INFORMATION TECHNOLOGIES

#### INTRODUCTION

Information technologies have completely changed the World we live in. On the one hand, our personal lives are now easier and more sophisticated, we communicate via social networks, smartphones or email, we can watch our favourite movies from our computer, or rewind TV's series whenever we want with intelligent and 3D televisions, among many others.

On the other hand, it have also changed the way of doing business, companies use the advances to streamline production, distribution and commercialization of products and services. So great is its magnitude that many macroeconomists attributed the increase in productivity growth of the lasts decades to the investment on IT.

One of the most important components of IT, without which this would not have been possible, is the Internet. First conceived as communication tool to allow general communication among users of various computers, which later led to the creation of the World Wide Web, represented one of the most rapid revolutions seen to date. There are many reasons to explain this fact, to start, it has to be said that the Internet consists of immaterial components such as ideas, software or protocols, which completely avoids inventories and shipping costs. It was and is very easy to create new tools as everything on the Internet results to be a combination of basic tools. Furthermore, once something is uploaded it is spread all over the world in few seconds and the sources are opened thus anyone could see the components and rapidly copy and update them.

Internet has an important effect over value creation, either by modifying production costs and/or consumers willingness to pay. Thereby it affects companies' competitive strategies, more efficiency is achieved due to the lower transaction costs, search costs are also lower, creates new opportunities of product differentiation... These effects are more observable in sectors where information processing is more relevant, such as the entertaining sector or the one of telecommunications.

#### IT EFFECTS

Here will be listed and described the main effects Information technologies have caused on industries and companies, especially in technology intensive ones. The analyses will be divided into two main sections where, the first will explain changes on supply, and the second the changes on demand.

#### SUPPLY SIDE

#### TRANSACTION COSTS

Transaction costs can be divided into coordination costs and motivation costs. The first group includes price determination, resource allocation and localization of sellers and buyers during the transactions. Motivation costs involve information asymmetry costs and imperfect commitment.

Prima facie, with the Internet, increases in motivation costs are expected. As it enables more transactions between anonymous, it can lead to information asymmetries.

On the other hand, it is expected that Internet empower coordination costs reductions. In fact, Information Technologies make possible that some activities traditionally performed by companies could now be ruled by market mechanisms, giving way to disintermediation and reintermediation of activities.

As a result, electronic marketplaces appear. These are places where information is shared efficiently between companies and consumers. An example could be online job boards where both companies and job seekers can obtain information to make their own selections incurring little transaction and searching costs.

Reintermediation occurs when there are created new virtual intermediaries and disintermediation is the elimination of traditional intermediaries. Knowing that traditional intermediaries capture a huge percentage of final product's price, the benefits of its replacement are clear. Many companies today do without intermediaries, this is the case of some American airlines who decided to create a website to sell their products directly to its customers in order to save intermediaries commissions.

#### PRICE DISCRIMINATION

Information technology makes easier price discrimination among consumers and consumer groups. A first kind of price discrimination could be mass customization; it consists on the possibility of creating a distinctive product via choosing between common pieces or elements and extra features to configure a unique product. This is the case of Dell who sells personally configured computers from basic pieces.

A second kind of discrimination could be the creation of different versions of the same product. As Internet allows companies to collect consumers' information and preferences, they are able to configure products adequate to consumer characteristics, differentiating between standard and premium versions of the same product. For instance, in the app sector we can find many companies who offer the same application with different contents, charging different prices.

Therefore, you can find free versions or trials, which are cost less, full versions, for a settled price, and versions with some extras, which prices tend to be higher than the ones of the normal versions.

Another good example could be DVD's. Companies have created the collectors versions, shaped for groups of customers who do not matter to pay a little more in order to get additional contents.

#### **SCALE ECONOMIES**

Technology implies high fixed costs, which then make possible to incur in little marginal costs, this is the basis of scale economies, the more accumulated production the smaller the unitary cost. Amazon has clearly take advantage of this, the company uses scale economies to build market share by charging low prices to its customers.

#### **DEMAND SIDE**

#### **SEARCHING COSTS**

On the demand side the most relevant change is the one of searching costs. The Internet brings a lot of information to consumer's hands, in part, thanks to searching engines. Additionally, it is easier to compare information and product prices from different sellers (shopbots, or product's price comparison websites, are created for this purpose). These facts have led to a reduction in consumers search costs. It is a clear advantage for consumers, which eToys did not hesitate to use. The company introduced an online toy store on the basis of making easier to its clients the process of buying a toy. Taking into consideration that many parents (consumers) spend a lot of time looking for their kinds desired toy (going street by street looking for the toy and going store to store to compare prices), we can say that the searching costs related with the purchase of a toy are very high. For this reason, eToys offered low prices, and thanks to the online store, made the job of comparing prices easier, creating a faster purchasing process. These characteristics created value for many customers, incrementing their willingness to pay.

There's another possible consequence of lower searching costs: rivalry. As Internet facilitates transparency, it is easier to compare prices and to access to substitute products. All this means aggressive competition between firms in order to get the customer. At the same time, intense competition leads to price reduction and lower price dispersion, benefiting the final consumer.

#### **NETWORK EXTERNALITIES**

Network externalities take place when the demand of a good depends on how many other people purchase the product so that when no one adopts a network

good it has no value for the customers. This is the case of products such as Facebook, PlayStation or mobile applications. Network effects are most noticeable in high-technology industries. For instance, if you decide to learn how to use a word processor you will pick the one with higher market share as you ensure you will use it in many more cases and you are going to find more people to help or advice you about it, better technical assistance, etc.

#### VALUE APPROPRIATION

As a conclusion we agree that Internet creates additional value, the question is who is going to take the ownership. The value appropriation possibilities depend on the firms' market power, rivalry and entry barriers. In competitive environments where companies have low market power, there's a high rivalry among firms and where the entry barriers are close to zero, it is more likely that the companies could not take the ownership of the value created. In markets with structures more similar to monopolies, with lower levels of rivalry, more entry barriers and where firms have high market power, companies have more power to appropriate the value created.

As a matter of interest, the American book market could be an example of how rivalry against companies lead to customers' welfare, meaning that the consumer gets lower prices, for example. Some years ago, Barnes and Noble, a big firm from the book industry, decided to enter the online market. The reaction of Amazon, the current online leader and its main competitor, was to cut prices until Barnesandnoble.com level, in order to retain its customers. As the companies started a price battle, consumers benefited of this lower prices.

# ECONOMIES OF INFORMATION GOODS AND INTELLECTUAL PROPERTY

#### INFORMATION GOODS

The increasing relevance of free time for leisure combined with the introduction of the Internet have change entertainment guidelines. A first characteristic is that new technologies offer a wide variety of entertainment features. Consumers now have to share their free time between online and offline activities, including technological and non-technological devices. The entertainment products involving technological innovations are going to be called Information goods hereafter. Shapiro and Varian defined them as "anything that can be digitalized", including books, movies, records, telephone conversations and so on.

A first characteristic of this kind of goods is that they are experience goods. They can be defined as goods you don't know the quality prior to consumption, in other words, you have to try them to know how good they are. For this reason, a strategy many companies use is to offer free trials and samples of their products, in order to raise awareness of the product quality.

A second characteristic is that they are non-rival, which means that the consumption of one consumer does not affect others' consumptions of the same good. The same good can be consumed as often as you like and it will remain the same.

Another remarkable fact is the cost structure. Information goods present very high levels of fixed costs where commercialization, promotion and creation of the product are the biggest culprits. These costs are also sunk, which means that, once the production process has started, the costs are not going to be recovered anymore. On the other hand, marginal costs are very low because it is very cheap for companies to do digital copies of the product. As Shapiro and Varian said "Information is costly to produce but cheap to reproduce".

Therefore, the firms related with information goods have to deal with the recovery of the huge fixed costs. The key of is on differentiation, firms are allowed to set higher prices to information goods because them all are almost unique. This fact gives them market power so the market structure tends to be the one of monopolistic competition.

#### INTELLECTUAL PROPERTY

Talking about digital goods, the main problem companies have to deal with is copyright infringement. The term, colloquially speaking called piracy, can be defined as the unauthorized use of information goods, infringing the copyrights

holder's exclusive rights. It refers to the set of practices including illegal copying, distribution and selling of works in copyright. As technology allows to copy information goods for a very low cost and facilitates and streamlines distribution, many consumers now prefer to do illegal practices reproducing, distributing and consuming this goods online and for free.

In order to prevent others from consuming companies' goods for free, there exists **intellectual property**. Most countries recognize intellectual property laws that allow information goods to be protected. The legal concept refers to the "creations of the mind for which exclusive rights are recognized ". So it permits firms to profit from its inventions. By adopting this legal protections they ensure the survival of the monopoly competition commented above.

Patents, copyright, industrial design rights and trademarks are known types of intellectual property. For the concerning topic we must make clear that copyright is used to protect mostly creative, intellectual and artistic products and defines property rights of the product being sold. While patents last for more years and apply to inventions. The mechanism of protection chosen by each company will depend on its characteristics, its knowledge-specific, technology-specific and industry-specific factors. Firms can also choose when they do prefer to use each protection. For example, they can use copyright at the early stages and ensure longer protection with patents at later stages.

The reliance of property rights is now questioned due to the prevalent illegal file sharing on the Internet. This is the case of Spain, where laws such as Ley Sinde work to protect authors against alien illegal practices but without getting to be really efficient. It is true that this measures helped, for example, to lock Limewire, an extended illegal net for sharing tracks. But the truth is that it hasn't stopped piracy, to give an example, just in 2011 music sector piracy reached a 95'6% of the total market.

Meanwhile, many companies have chosen to face this adversities reinventing themselves in the online world. There are many companies adopting new business models. This is the case of iTunes store, which sells online tracks for less than one euro. Also streaming services as the one offered by Spotify or the Spanish version Yes.fm, enables consumers to listen to music online and for free. The only drawback is the continuous interruption of ads. All this models of business are legal alternatives that allow accessing to online contents for free or at a very low price, furthermore it generates revenues both for artists and record labels.

In the case of Audio-visuals, the piracy tax reached a 77% of the Spanish market in 2011. In this case, the response comes on the heels of the largest companies – Sony, Paramount, Fox, Universal and Warner – and its called Ultraviolet. The platform allows streaming access to films in certain chosen devices by paying a low price. Nevertheless, Apple already offers this kind of products at the iTunes store, and if you have an Apple TV you could also buy or rent your favourite series/movies and watch them on your television screen.

A different strategy to deal with copyright infringement is to offer differentiated versions. Related with the topic explained before of price discrimination, many companies use these techniques to compete against piracy. It includes the creation of special versions with extra contents of exclusive scenes, for instance.

Piracy does not only affect companies but it indirectly affects artists' remuneration, so now companies pay cinema stars in relation to their films' performance. Before it was different, actors and actresses used to enjoy great advances and a lower percentage of the revenues generated by a film. Now it is the case of many stars not to have advances but a reasonable percentage of film's revenues. This model implies efficiency as artists now care about the projects they choose, they spend more time reading and studying the different possibilities and finally invest their time in the best projects, the ones they think are good stories which will be well received by the audience.

Music industry shows a similar structure, advances are lower and pays are based on revenues and sales. Artists have responded by adopting more control of their businesses. The great artists have created their own record labels. Lesser known ones have been forced to became entrepreneurs of all kinds. Companies like ReverbNation have emerged to help artists to sell their music in platforms like iTunes and to promote new groups and artists there. These companies, in many cases, charge small fees and then a portion of the sales generated. Big brands have responded to the decline in sales of music trying to grab a bigger piece of a larger pie. The centrepiece of this effort is what is known as the 360 agreement in which the record label gives an advance to artists in return for a percentage of the revenues stream beyond music sales, including merchandising and touring.

Regarding the digital book, there exist some specific tools created to protect them against illegal uses. The first one is the DRM or Digital Right Management developed in order to block, protect and control access to works. It enables rights owners to set the terms and conditions under which a particular work may be used, to promote the transmission of texts in safe context, to protect the integrity of the work by not allowing its modification, to control the work distribution (agents involved in the editorial process are registered) and also permits to control who, when and under which conditions access to the work.

To sum up, digital book market can benefit from the past experiences of music and cinema industries, trying not to make the same mistakes. Some experts recommend the digitalization of books as mechanism of protection against piracy. If there is an extended catalogue of books already digitalized, the consumer won't have the need to try to get it from other illegal sources. If industry agents let this happen, it may be possible that readers get used to consume products without paying and, when the publisher decides to sell their books online, consumer is not willing to pay for they consumption.

#### MULTI-SIDED PLATFORMS

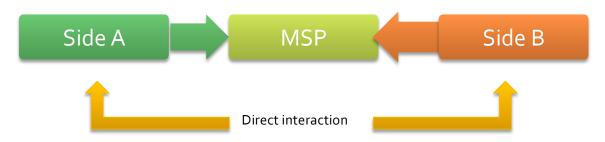
A major consequence of Information Technologies is the appearance of Multisided platforms. Andrei Haigu and Julian Wright refer to them as "an organization that creates value primarily by enabling direct interactions between two (or more) distinct types of affiliated customers". To make it understandable, an example of MSP could be Google, which gathers both customers and advertisers. Customers on each side value more the platform depending on the number of customers it has on the other side. Google offers web search to customers, the platform will be more valuable for the customers if they can find there more results (larger number of participants in the other side). And the more searchers Google has, the more companies would want to show on the search engine. For this reason we assume that any firm that offers a good that is more valuable for one side depending on the number of participants on the other side is a MSP. Therefore, eBay, Facebook, iPhone, Skype, Sony PlayStation, Vogue magazine, YouTube or American Express are examples of Multi-sided platforms.

Nevertheless, there are some requirements organizations should accomplish in order to be an MSP. The first requirement they should attain is that the first source of its value creation has to be that it enables interaction between sides. It has to be a direct interaction, excluding companies who do take control over the exchange between sides to be defined as MSP. This is the case of the resellers.

There must be conscious decision to participate in the platform from the customer's part, this is because the customer may incur in costs by participating in the platform like opportunity costs (i.e. using one platform and not another) or access fee (i.e. paid membership). To illustrate this, we can focus on the case of the E-ink. E-ink may rather be an input supplier than an MSP. It is true that the it enables direct interaction between readers and device producers but the fact is that last ones have consciously decided to use E-ink in their products while consumers have not, it is just a repercussion from consuming e-readers.

At this point it is important to make clear that MSP are not re-sellers neither input suppliers. There are different characteristics endogenous to each that make them belong to one group or another.

-MSP: a platform that relates two different sides A and B, where both A and B are affiliated with MSP, causing a direct interaction between both sides but without MSP taking control of this interaction.



-Re-seller: this element buys goods or services from the retailer, or Side A, and sells it to the consumer, or Side B, where A and B are not directly interacting.



-Input supplier: this element ensures direct interaction between side A (i.e. products sellers) and B (consumers) but it is only engaged with one side, only side A is actively and consciously affiliated with it.



Now to illustrate all theory with an example and as it is very related with the case of study of this work, we may introduce Amazon's characteristics as Multi Sided Platform. It is very interesting since it gather all three different cases explained above. Amazon has some products under its own name, which were bought to any supplier and then are sold to their customers; in this case it is acting as a re-seller. It acts as an input supplier when it is selling its Amazon Web Services. In this case the company creates and sells the products that are the technological services and applications.

It acts as an MSP when it is both serving buyers and sellers. It occurs when amazon enables sellers to use its website to sell their products to others. In other word it enables direct interaction among buyers and sellers and it does not take control but it just takes a cut of the revenues.

Its most famous device Kindle also works as an MSP. Thought the e-reader consumers can buy authors works, enabling a direct interaction between both sides. It does not interfere in the commercial relationship but it permits it.



#### E-BOOK

Once we have introduced the book industry and the Information Technologies consequences, we are going to focus in the matter of our study, the E-Book. In this section it is explained what is an e-book, how did it appear and the main devices used to read it.

#### CONCEPT

A good definition of the electronic book could be the one used by Gardiner, Eileen and Ronald G. Musto in the work *The Electronic Book* who defined it as a "book-length publication in digital form, consisting of text, images, or both, and produced on, published through, and readable on computers or other electronic devices".

#### **EVOLUTION**

In this segment it is intended to offer a brief guideline of the most relevant events the e-book has been trough until its most recent version.

The concept dates back to the decade of the 70. It was born 1971 by the hand of Michael Hart. The aim was to create electronic versions of literary works and to share it all around the world, creating the Project Gutenberg. Hart decided to digitize books from public domain in order to create a digital library reachable by anybody and without any cost.

The boom arrived with the invention of the World Wide Web. It supposed a boost for the Internet, it made easier to upload and download files without being an expert, and so it finally encouraged dissemination of digitalized texts worldwide. Online Books page created in 1993 contributed to the cause, the web page tried to facilitate the access to online books.

With the increasing importance of the Internet, some publishers saw the web as an interesting place to promote their businesses. By the year 1994 publishers started to create web pages with online versions of some textbooks.

The next big step was the launching of Amazon in 1995. It was the first online bookstore where all transactions were made through Internet. Its creator, Jeff Bezos explains that the idea began with a study he carried out in order to try to find out which was the best product to sell online. As he says, the results pointed to the book market as it accomplished all requirements. The first is that the book market has a big size, they preferred to introduce products with an already established market, and the fact that is was a large market increased the possibilities of finding customers who may try to buy online. Bezos also was looking for a low-priced product; it was going to be the online purchase of many

customers so they would be more comfortable with products that meant small amounts of money. Another important fact was the variety of choice, Bezos thought that IT possibilities to store information could be exploited needed to be exploited; as book industry involved many works from many different fields, the incorporation of technology to this industry would suppose an incredible improve for processes like cataloguing.

The web page aimed consumers to buy online and other booksellers decided to follow the trend. Barnes & Noble started selling online in 1997. In their website you could find an extended catalogue with authors and publishers' reviews and aggressive discounts. This fact was the trigger of the fierce competition between Amazon and B&N. The intense competition affected many small bookstores, some of them had to close and others decided to run their businesses online.

Newspapers had a very important role as well, in 1997 many of them started to publish electronic versions on their websites. Some examples are the daily *Times* from UK, which launched a web page, TimesOnline; *The Economist*, the German *Der Spiegel*, *Le Mond* and *Liberation* from France or the Spanish *El País*.

In 1998 libraries decided to get involved in the movement and entered the virtual world. Many of them created their own websites informing form opening hours and showing online catalogues. They also created digital libraries enabling people to reach an extended bibliography online.

In addition, national libraries carried out a project called Gabriel in order to build a common digital library. The evolution of Gabriel culminated with a second project: European digital library. The benefits were clear, better use of space, total availability of the content and improved search mechanisms. Libraries also decided to digitalize its treasures. Thereby everybody could enjoy them online everywhere. *Beowulf*, the earliest known narrative poem in English, was one of the first treasures to digitalize. Subsequently, they created a digital copy of the *Bible of Gutenberg*. These innovations supposed a big step in world's culture; it supposed easy access to free resources, information and news, everywhere and with no cost.

IT did not only induced changes in big institutions but also in small businesses changing traditional librarians' jobs. The use of e-mail or the creation of intranets for their organizations supposed a big transformation. It made easier many tasks including cataloguing, searching or controlling book orders and stock. OPAC is one example of the relevant online catalogues.

In the teaching world, teachers and students began using the net as a place to upload and/or information. Most of the subjects' material was hanged online so all pupils could have better access. Students also made their own notes online sharing them with their colleagues. It was the case of MIT OpenCourseWare, an initiative created by Massachusetts Institute of Technology to upload its course materials on the web.

Related to it, in 2001 Wikipedia was launched, introducing the most popular online encyclopaedia. Its most interesting characteristic is that it can be modified by anybody who has Internet connection.

At the beginning of the 21<sup>st</sup> century many online bookstores started to show, introducing a new model of business: companies dedicated entirely to the digital book commerce. This fact created a market where every company had its own text format and text reader, thus there were lots of different e-book formats, only available for a specific reader and from a specific store.

It was for this reason that it became necessary to create a common format for e-books. Publishing industry agents decided to launch Open eBook, based on XML format, as a solution. Nevertheless, Open eBook get a big competitor courtesy of Adobe. The company created the PDF (Portable Document Format) and Adobe Reader. This programs permitted to read digital texts via computers, PDAs and later via mobile phones and tablets.

The next step of Adobe was to partner with Amazon and Barnes & Noble so they started offering eBooks with a universal format. Afterwards, the company created Acrobat eBook Reader enabling consumers to add notes and marks to their own digital books and texts. The firm did also think about the publishers and distributors as it created a program that ensured the protection and security of copyrighted eBooks.

By 2004 many authors seemed to be engaged with the online world, many of them saw it as a possibility to promote their works, increase awareness or build communication links with readers. Writers created websites and started linking images and sounds related to their books, they were trying to capture readers' attention amplifying reading experience.

Another important event was the introduction of Google in the eBook world with the launch of Google Books. This program offered digital copies of full textbooks or excerpts thanks to the collaboration of big educational institutions like Harvard, Stanford, Oxford or Complutense de Madrid.

We can conclude the section with the launch of Kindle, first Amazon e-reader. At first, the devices used to read digitalized text went from computers to PDAs. Later mobile phones and smartphones could also be used for the purpose. Shortly after, industry companies realized the need for a device destined to improve readers' experience, the need for an e-reader with the main function of reading books. Rocket eBook, SoftBook Reader or Gemstar eBook intended to cover the need but didn't succeed. More recent devices like Sony Reader and Kindle convinced consumers. Now it is estimated that just in the US 48.6 million people used an e-reader at least once in 2012.

#### **FUTURE**

About the future of the eBook world, based on other industries companies' most recent behaviour, we could say that it will be Net focused. Many companies have yet take advantage of the business possibilities the Internet and the Social networks offer them. Most firms have a Facebook account and participate actively in the online social world.

Many experts believe that Social Reading could be book industry next step. It involves an application that allows users to share what they are reading with their contacts and let them begin a conversation, creating discussion groups. The app also permits the modification of the text by adding notes and comments highlight paragraphs and sentences, and then share it online.

Though paper books still have a significant role in publishing, in a not too distant future all books could have a digital version on the web. The Net could enrich books reading experience. For example, linking at books web pages other information related; direct link to a travel web page that organize a trips to the places that appear on the books. The basis of the project would be an application-programming interface that allows manipulating information, to add interesting sources and to create a plenty of new possibilities making the reading experience even better.

#### E-READERS AND OTHER READING DEVICES

When we talk about digital texts, the need of a device that enables reading is implicit. The digital files need technological tools to decrypt and display the texts on a screen. Today, in the digital age, there exist many devices able to carry out these tasks: e-readers, tablets, smartphones, mobile phones, computers and laptops. In this section we analyse deeply all the devices used to read e-books and its main characteristics.

#### E-READER

This is the quintessential device used for reading e-books; it was created with the ultimate purpose of reading digital books with the most optimal characteristics to improve reader's experience. It is a portable device with a size no larger than a standard paper book, as thin as a mobile phone and, therefore, very light. Among its main features it can includes screens that prevent light from reflecting and the electronic ink or elnk that makes reading from an electronic device similar to reading from a paper book. These characteristics make possible e-readers' batteries to last various weeks; power is only used while turning pages. Bellow there are explained some of the most important models.

#### **KINDLE**

Amazons' e-reader deserves a special mention, which is why we will devote a section set aside for the analysis of this device. As we mentioned when explaining e-book evolution, the launch of Kindle in 2007 meant a big revolution in the book industry world, the reason is that it was the first e-reader with an integrated online library. People were so enthusiastic about the product; the first units of the Kindle were sold in just a few hours. But it was not until 2009 that the e-reader reached international markets, such as the Spanish market.

Amazon's one is considered one of the top e-readers of the market thanks to its simplicity, comfort and its huge library catalogue with more than 800.000 titles. In addition to its own catalogue, Amazon also offers the possibility to read all free public-domain books, whose number amounts around 1.8 million copies. Another advantage for the company is that Kindle boosts potential purchases since you just need to press a button to buy an e-Book.

About the device compatibility with e-book formats, the first versions of Kindle allowed consumers to read only Amazon e-Books, being a closed system. Nowadays, the company has made possible that the e-reader supports the following formats: AZW (Amazon's format), MOBI (quite an extended format, especially in the US), TXT, PRC and PDF.

A different thing is that almost all Amazon e-books are designed under the AZM format, which works only with Kindle e-reader; other e-readers are not allowed to read this format. On the other hand, although at the beginning Kindle used to have Linux operative system, they realized they needed to create compatibilities with Android and Apple, as it was very influent in the smartphone market, so their consumers could read Amazon's e-books in their mobile phones or computers and with their tablets, and not just with Kindle. So now this second drawback was fixed.

To sum up, Amazon sells two different products that, at the same time, are complementary. They offer, what they call, eBooks Kindle that can just be read with their e-reader or with mobile phones, tablets and computer that have the proper application. The second product is the Kindle e-reader that allows consumers to read e-books purchased on Amazon or somewhere else but with MOBI, TXT or PDF format.

At present, after 3 generations of Kindle, Amazon offers, in Spain, three different models of its Kindle 4<sup>th</sup> generation:

- -Kindle (79€) → containing Wi-Fi, E-ink screen and 15cm length
- -Kindle Paperwhite (129€) → with the same characteristics as the one explained before plus a new lighter screen with better resolution and contrast
- -Kindle Paperwhite 3G (189€) → with all the features of Paperwhite model in addition of free 3G connections.

Even the price of the basic model makes it very attractive; in the Spanish market there still exist some reluctance to buy the Kindle. The first reason is that paper books continue to represent more than a 90% of the market.

Further more, although Amazon has doubled its number of available books in Spanish, it is true that the dominant language of the company's catalogue continues to be the English.

The fact that the Kindle is not able to read some formats supposes another barrier in the Spanish market, as the main format adopted by publishers is the ePub and it is not a Kindle supported format.

A last problem could be that Spanish population does not feel comfortable with Amazons policies, because the firm gathers all consumers' personal information, reading habits and preferences, thus consumers privacy may not be respected.

#### NOOK

Barnes & Noble e-reader was introduced in 2009 in the US. The idea was very similar to the one of Kindle; they had an extensive catalogue (around a million e-books, including Google public domain one's) accessible via the on-line store. Then in 2010 the company launched a new version with an integrated LED colour screen what made the difference with Kindle, with Nook it was possible to see books' colour illustrations and pictures.

Another positive point is that Nook operates with Android, Google's operative system. It is an advantage since almost all smartphones use Android too, so users can share contents between the e-reader and their mobile phones. But that is not all; IPhone, iPod and Blackberry owners could also read e-book contents downloaded from B&N if they had the proper software e-reader application.

B & N did also think about e-books' loans. Its e-reader was able to read e-books reached from libraries, we are talking about free downloadable e-books or borrowed e-books.

Moreover, now B&N offers the possibility to share e-books between different users, in addition to being shared between different devices. The loan lasts a maximum of 14 days and not all e-books are allowed to do that, it depends on the editor, but it supposes approximately half of the company's catalogue.

Now there are 2 models of Nook available:

- -Nook simple touch (79€): it is the basic model, with touchscreen, e-lnk and Wi-Fi.
- -Nook simple touch wit GlowLight (119€): the same characteristics as the first model plus internal light for bedtime reading.

Since its launch, it has not been easy to buy this e-reader from Spain; Barnes & Noble online store does not send Nook to Span. There are just few shops or e-shops where you can buy it from Spain, and surprisingly one of them is Amazon, its major competitor.

#### **SONY READER**

The first model was launched in the US in 2006, but the most remarkable aspect of Sony Reader is that it plays a very important role in the European market since its introduction. One of the reasons may be that the first versions were already compatible with many e-book formats, including ePub and Adobe PDF.

If we compare it with the e-readers introduced before, early models of Sony such as Sony Pocket Reader or Sony Touch Edition did not have wireless Internet access and it was needed a computer to download e-books. Nevertheless, its latest model Sony Reader PRS-T2 (150€) is very light, contains E-Ink, Wi-Fi and a long lasting battery, quite similar features to those of other e-readers.

#### OTHER E-READERS

# Distributed in Spain by Grammata, e.book comercializer Touch screen and wifi Papyre •One of the most expensive ones Allows entering notes Low-priced iRiver Compatible with many formats (i.e. PDF or ePub) • No wifi or touch screen Launched by publishing company Luarna Very competitive in the Spanish market Booq Avant Contains wifi and touch screen Compatible with many formats •four different models spanish company Bq Cervantes • prices between 99 and 130 euros

#### **BOOK LOANS AND RESELLS**

At first, e-readers where created to enable consumers to read their e-book, and this e-book needed to be bought on the different companies online stores. Now e-readers owners are allowed to lend their e-books and read someone else's.

Leading companies such as Barnes & Noble, Amazon or Sony permit their customers to share their e-books with other people. The process is the following, the owner of a book lend the book to any other reader, during a certain number of days the e-book is transferred to the new consumer and meanwhile the owner cannot read it. After this time, the book comes back to where it belongs, the owners' online library or to the e-reader. There are many platforms supporting this practice like Booklending.com or Ebook Fling, which allows users to share their Amazon and B&N e-books for 14 days and then they get point they can change to borrow a new book. Actually, the file is not really transferred from had to hand but two copies of the same file are created, the fact is that it must disappear from the owner's library to reproduce a physical real world loan, so he cannot use the item when it is in someone else's hands. What they want to achieve is a temporal limitation to the access, which has to do with DRM or Digital Rights Management, right holders and publishers tool used to restrict digital files usage.

But Amazon has decided to go further in the field and has patented the practice of re-selling e-books among other digital files. Since digital books cannot be broken or age-worn it makes sense that Amazon think of an online store where customers can resell the e-books they have already read to those customers who may want to pay a reduced price for the same file; and of course the company will get a percentage of this sale. But one can think, why customers may want to sell their digital files if it is not costly to keep them and there exists a "cloud" with almost unlimited storage? The answer is clear, they will get money in return getting rid of old files. The original owner of the file is transferring its rights to use the file a new buyer.

In terms of substitutive products, we may think that Amazon is creating its own competence since company's sales can deviate toward the resale market. Bill Rosenblatt, an expert in digital content of patents has some arguments about why this new business would be profitable for the firm. A first reason is that Amazon would be the one holding the power in a marketplace where there are no other participants than the company and the customers, so editors or publishers cannot interfere, they are only allowed to interfere in first sales, but once the customer has bought the product they have no voice in future transactions. Additionally, the firm would have a powerful weapon they can use to convince authors to sell the pieces to Amazon, offering them a percentage of the resells in exchange.

Nevertheless, this new kind of business is very close to the copyright infringement edge as there's a transfer of digital goods. From there emerge important issues such as asking permission to rights holders which could bring Amazon lots of legal problems. This fact makes some experts to thing whether if

it can be a strategy to prevent that others adopt the business model and not to exploit it. But the future answers to these questions still remain to be seen.

#### THE E-READER: COMPANIES' STRATEGIC TOOL

It is clear that e-reader producers obtain the major part of their profits from the sale of the devices, however there are different strategic ways retail companies, who also offer e-readers, can take into account in order to obtain even more profits from their products. The e-reader can be used as a strategic tool.

This is the case of retailer companies like Amazon, who tries to get extra revenues by pricing the access to some products, other than e-books. This means, if the owner of a Kindle wants to consume products like blogs or newspapers, that are normally free of charge on the web, through the e-reader, the company will charge an extra cost. We are talking about reduced costs, many users are willing to pay because the convenience of the Kindle. These costs are named Subscriptions and a small percentage of the total price of the subscription goes straight to the blogger or newspaper.

#### **TABLETS**

A tablet can be defined as a portable computer which a size bigger than a smartphone and composed solely by a touchscreen with which you can interact using the fingers or a stylus pen. Even it was during the last years that it has become more important; the concept exists since the 19<sup>th</sup> century, when Apple launched Newton MessagePad a portable computer with a pen accessory. After that came PDA's or personal digital assistants.

Dynamo, designed by Alan Kay, was the first tablet prototype, after that Microsoft launched the Tablet PC, but it didn't succeed. The real boom came when Apple launched the revolutionary iPad in 2010, the concept was based on the iPhone, they wanted to create a bigger version bound to have a different use. Nowadays there exist many different models of tablets; almost every electronic equipment manufacturer launched one (Sony, Samsung, Toshiba, etc.).

The main difference between a tablet and an e-reader is that tablets are designed to perform more tasks than reading. Tablets are capable of browsing websites, writing and reading e-mails, connecting to social networks, viewing photos or videos, video calling and downloading many kinds of different applications. They also include a LDC screen that makes possible to carry out all this tasks with colour image. Nevertheless, this LDC screen can suppose a disadvantage since it can be washed out in direct sunlight, it also means that the battery is not so durable, so they need to be recharged sooner than the e-readers. They do not include elnk so it is not so comfortable to read for a long

time. Tables are usually bigger than e-readers and they are much more weight so it is heavier to carry them on.

When talking about tablets as e-readers we may consider that the process needed to obtain a book is almost the same one you would follow with an e-reader. This is the case of Apple who has created the iBook, a library where you can read and keep all the purchased books, and from where you have direct access to the iBookstore. In the case of non-Apple tablets the access to the content is also via bookstores or Internet portals. As a matter of fact, companies such as Amazon and B&N have launched applications to enable tablets to read their e-books and access to their stores.

Finally, another remarkable difference is the price. The average price of an ereader is around 100€ while the cheapest iPad costs 329€ and the price of android tablets ranges between 500€ and 120€.

A possible prediction is that both devices are going to coexist in the market, as they are suitable for different kinds of consumers. The e-reader is perfect for long time reading occasions, they are targeted for people who love reading and who don't want to have any distractions while reading.

However, tablets are designed to cover different needs, they are perfect for readers who prefer to read from time to time, to read newspapers, articles, or professional works.

#### SMARTPHONES, COMPUTERS AND LAPTOPS

Another option different to reading with an e-reader or a tablet is the use of smartphones or personal computers. The creation of applications for smartphone that allow reading texts in smartphones widen, even more, the reading possibilities. First it was Adobe launching a reader program, and more recently it is has been the biggest bookstores that launched their own applications. In Japan, for example, some novels created specifically to be read with mobile phones have become best sellers.

The biggest drawback is that they don't offer a comfortable readability, because of their screens, usually too small. For this reason, Mobile phone manufacturers have rushed to create larger versions of the standard smartphones in an attempt to facilitate and make better the reading experience on their devices. Some examples of this new creations are Sensation XL from HTC or Nexus Prime and Samsung Galaxy Note from Samsung measuring approximately 5 inches. Furthermore, recently have emerged some firms designed to sell electronic books for smartphones, like Mobipocket.com.

From all electronic reading devices the personal computer is the oldest one. Used for many years the computer establishes itself as the quintessential reader. A recent study carried out by Federación de Gremios de Editores en España reveals that the computer is still the most widely used support for digital

reading with a 55.8% in comparison with other electronic reading devices. A remarkable disadvantage is that they are not portable, and in the case of laptops they are not that easy to carry as other devices.

IN the table bellow, we try to gather the most important characteristics should be present in any device to be suitable for digital reading, we show if the devices explained above accomplish them or not. Where  $\checkmark$  means suitable,  $\approx$  more or less suitable, and  $\checkmark$  not suitable.

Features	E-readers	Tablets	Smartphones	Computers
Battery	✓	✓	Х	✓
Size of the screen	✓	✓	X	✓
Weight	✓	✓	✓	X
Storage space	<b>≈</b>	X	X	✓
Readability	<b>✓</b>	✓	X	<b>≈</b>
Variety of formats	≈	≈	≈	✓
Access to extended catalogues	•	/	X	/
Easiness to purchase and	1	<b>✓</b>	≈	≈
download e- books				

### **E-BOOK ECONOMIES**

#### **INDUSTRY PLAYERS**

The main functions of the industry players have been explained at the very beginning of this work, where authors where the ones who write manuscripts, the publishers the ones in charge of the distribution, and retailers the ones supplying the book to the final consumer.

However with the IT revolution and mainly with the Internet, new tasks have emerged, now they also have to deal with the distribution and supply of digital books. In Spain, the e-book production and distribution chain will follow the same steps that its predecessor: the work comes from the author's hand, then the file is delivered to the editor, and after that to the distributor or/and retailer.

Even though, there have been some visible changes in the industry's value chain. Previous traditional tasks such as logistics and storage are greatly reduced while others like marketing and edition are intensified.

With the introduction of the e-book, some retailers have seen an opportunity to expand their businesses by offering their own e-reader devices. This is the case of Amazon and B&N who try to sell complementary products in order to increase revenues.

#### E-BOOKS' OPTIMUM PRICE

It is known that the price plays a very important role in product's commercialization, but in the case of the e-book, industry agents should address this issue with especial care because it could make them succeed or fail.

The online market is very competitive since searching costs are close to zero and it is very easy to compare prices between products. Furthermore, we have to take into consideration that in the online world there are many products that are free of charge; for this reason products' price must be interesting, otherwise they won't achieve many sales.

As explained before, it must be taken into account that offline products start to be replaced by online ones, so there a wide variety of interesting products that can become e-book substitutes. Therefore, the market itself does not only become more competitive but it also competes with others.

Moreover, when thinking about a price for an e-book, the price structure of a printed book must not be taken as a model. The characteristics are different and there are some cost components, like logistics, printing, storage or distribution, which are not given when producing an e-book.

Chris Anderson advocates for a low price, he thinks a good price could be the one reached by dividing the price of the offline version of the book and then reducing it even more. He claims that this strategy could increment sales and lower piracy.

Someone could think that, with very low prices, e-books won't be profitable enough. But there's evidence that shows the opposite. Amazon has been setting low prices since its very beginning, maybe it won't be profitable for the company to sell e-books under such low prices, but the company, by using this strategy is making sure a competitive position in the market and is gaining market power.

The Kindle is a crucial element of Amazon's strategy. The fact of setting a little price makes the company achieve higher sales of its e-reader, since it is the only e-reader that can read Amazon e-books. Consequently, the company obtains revenues indirectly from the sale its electronic device.

Anyway, there are other strategies that could enable to set higher prices for e-books. The key is to create additional value by offering extra services, when selling an e-book. The consumer needs to see a plausible difference between the printed book and the electronic book. This could be for example offering a continuous actualization of the file if you choose to buy the digital format.

Moreover, according to Cory Doctorow, the best option is to distribute the digital books for free. As he says in his work *Download for free* it could be a good technique to raise awareness. This mechanism is suitable for works available in both digital and physical format. He thinks that any author can take advantage of the cheap reproduction and distribution e-books imply to distribute them for free, because it may increase paper book revenues.

#### PRICING MODELS

Far away from the optimal price theories, in the e-book industry there exist two different pricing systems.

The first one is the wholesale model; in this model the retailer is the person in charge of setting the final price. The publisher sells the e-book to the retailer at a Recommended Retail Price; and from this price the retailer gets a percentage. From that moment in advance, the retailer is the one who decides on the e-book, he determines what will be the price for the final consumer. This model gives the retailer more flexibility to decide what will be its strategy for every product. As they have control over the price, than can decide to cut prices in order to be more competitive.

Nevertheless, not all retailers can afford setting competitive prices, or prices below cost, because they may not recover it. As we explained before, companies selling also e-readers, can use this strategy because they loose in e-books prices in order to gain from e-readers sales; but for all other retailers it could be a harmful practice, because they could not compete.

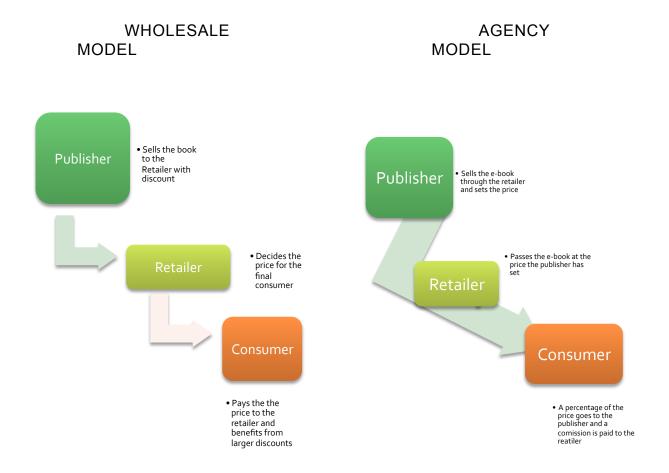
The second model is called agency model, and it differs with the first one since here the one who sets the price is the publisher. The retailer is perceived as an intermediary whose main task is to transmit the good from the publishers to the customers without interfering in the price. As a reward, retailers obtain a commission on sales. In this case discounts are only allowed if they are established formerly with the publisher and if they represent, normally, a maximum of a 5% of the price.

This model has been widely used as it can be related with the fix book price agreements we talk about in earlier sections. Many European countries and specially Spain are places where this model is deeply rooted. This agreement forces different retailers to fix the same price for one work within the national territory.

In the agency model comes to play an agreement called Most Favoured Customer, which comes to place when the publisher promises to the retailer concerned that he won't set lower prices for other retailers.

Therefore we can say that this model leads to rigid prices, weaker competition and collusion among publishers. Final consumers' surplus is damaged because he has no choice, all retailers will fix the same price, they don't need to compete, and it is very close to the monopoly where publishers can decide to set a price that is more convenient for them.

The following graph shows how the wholesale and the agency models work:



#### **US MARKET**

In the US e-book industry the predominant standard was the use of the wholesale model, retailers were allowed to decide over the prices and, therefore, to compete. This model permitted to do big discounts and to set very little prices, benefiting the final consumer. This is why Amazon was able to set very low

prices even below the cost of the product, particularly 9.99\$ which was less than what the company was paying to the publishers for the e-books. Therefore, with that system publishers felt like they were not taking all the profit they could, for them it would be better to arrange contracts under the agency model giving them more power. Another interesting fact is that, by this time, Amazon was the absolute market leader, as the company controlled approximately a 90% of the market volume. In that sense, it is reasonable to think that publishers were worried about Amazon's bargaining power.

Subsequently, with the introduction of Apple in the e-book market, a big change came to place. Due to the launch of iPad the company needed to establish relationships with those who where to be its suppliers. Of course, publishers saw an opportunity to change things in their favour. Apple started its negotiations with the six biggest publishers of the US (among them Macmillan, HarperCollins or Penguin). They reached an agreement based on the agency model was established.

After that, publishing agency Macmillan decided to offer Amazon a change of its current agreement (wholesale model) into the agency model. The publisher proposed to price all books at 14.99\$, which was above Amazon's standard price (9.99\$). As the proposal was inapplicable for the big retailer, Amazon decided to temporarily cease the sale of Macmillan books.

In 2010 and under a lot of pressure, Amazon was forced to carry out the same type of agreement with many of its suppliers and finally adopted the agency model. The prices of the e-books supplied by the biggest publishers that were sold on Amazon grew up, but the story didn't come to an end.

The following year, the American Department of Justice filed a lawsuit against Apple and the biggest five publishers of the US accusing them of collusion and illegal fixing of prices. Since then there's been an exhaustive battle trying to endanger the competition and trying to apologize by saying it was all done to ensure consumer's welfare. The fact that Amazon could end bringing a monopoly market was one of the claims while, the other side blamed Apple and the publishers for anticompetitive behaviour.

Since then all sued publishers have been settling with the government, the most recent, was Macmillan, who finally decided to conform to the new retailing and discounting rules. Nevertheless, the department continues to litigate against Apple.

Nevertheless, there are many experts who support this model. Mark Coker from the company Smashwords, reported some information of their case. The company, which worked with Apple supplying them e-books, secures that with the agency model, what they did was to lower the prices of their e-books progressively. The fact that the publisher gets a higher percentage on sales with the agency model, they say, gives them more autonomy to lower prices to make e-book more interesting to consumers. The founder of the company explains that this model would also help to avoid big companies to push smaller companies out of the market. He adds that agency model makes retailers focus

on consumers experience rather than in product price. To illustrate all this claims, he explains that with the agency model average price of Smashwords at Apple iBook store has been declining over the years.

Here the most important question to ponder is who will be the one that sets the prices in the end. Experts have different opinions about it, but we will have to wait for Department of Justice to pronounce.

#### **EUROPE**

In many European countries there exists the fix price law, which implies that one title must be sold at the same price in all retail stores from the same country, and the editors fix the price. With this law the authorities pretend to protect small retailers from big price battles from which they could not survive. However, editors have the power to change the price over the time, and this is what they have been doing with the e-book. This model is in force in countries like France and Spain, where law imposes it. This law is limiting competition between retailers, therefore prices of e-books result to be higher than expected.

A different issue is that European commission decided to go ahead with an investigation against Apple and four publishing groups. They wanted to investigate the price of the e-books they sell in order to determine whether there was a situation of abuse of dominant position and antitrust. As Joaquín Almunia, EU Competition commissioner declared, they won't allow collusions or cartels threatening competition. The fact is that, even price fixing is allowed by law, and therefore it is allowed to use the agency model, what is not legal is to let publishers to coordinate on prices.

In the end, companies involved in the investigation decided to culminate the agency contracts bound them and to exclude certain terms of their business relationships. As a punishment, during 2013 and 2014 retailers will be allowed to set prices of the e-books they sell, this is, they will be able to adopt wholesale model.

Another relevant fact that affects European markets is the existence of a Value Added Tax charging e-books at the standard rate. Since the introduction of the e-book, European governments have charged different types of VAT for e-books and printed books.

EU's Value Added Tax Laws permit countries to set their own standard VAT taxes. However, they can charge reduced rates on specific key goods. This is the case of printed books that are charged with reduced VAT rates, the specific figure depends on the country, but it is normally ranged between 0%(UK) and 10%. But in the case of e-books as they are considered digital download services, European law imposes standard VAT rates (e.g. in Spain in 2012 books were charged with a 4%, big Spanish publishers made pressure for the government to not increment the rate, and e-books, with the VAT increment of

that year, reached a 21% tax rate). Thus, it is another reason why e-books price is so high.

Due to this inconsistency, in France and Luxembourg decided to take action on the matter and reduced their VAT levies until 7% and 3% respectively. That's when Amazon saw an opportunity to take advantage; the company settled its base in Luxembourg. Since the law says that across Europe borders VAT is charged at the rate imposed by the country where the seller has the headquarters, the company was allowed to charge its e-books with a 3% VAT. This fact offered Amazon a big competitive advantage over other countries e-books' retailers, which had to charge the local rate, usually much higher than a 3%.

Immediately, European Commission decided to refer Luxembourg and France to the Court of Justice. As they explained in a press release, these countries failed to comply with the EU law, which considers that the e-books could not benefit from a reduced rate. They said that it endangers fair competition within the European internal market. Nevertheless, they also declared that they needed to review VAT charges concerning physical books and electronic books, but in the meanwhile, all European countries should obey actual law.

At the beginning of this year they released the actual VAT rates for each of the European countries. Here it is shown the huge difference of rates between books and e-books:

II. APPLICATION OF REDUCED VAT RATES BY THE MEMBER STATES TO THE CATEGORIES OF GOODS AND SERVICES CONTAINED IN ANNEX III OF VAT DIRECTIVE 2006/112/EC

	Category	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	МТ	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK
1.	Foodstuffs	6	20	15	25	7	20	13	4	5,5	0	4	5	21	21	3	18 <sup>1</sup> 27	0 <sup>2</sup>	6	10	5	6	24	8,5	20	14	12	0
		12				19			10	7	4,8 13,5	10	18	12³							8	13			10		25	20
		21								19,6	23										23	23						
2. V	Water supplies	6	20	15	25	7	20	[ex] <sup>4</sup> 13	10	5,5	[ex] <sup>5</sup>	10	5	21	21	3	27	0	6	10	8	6	24	8,5	20	24	25	0
											23																	
3.	Pharmaceutical products	6	20	15	25	19	9	6,5	4	2,1	0	10	5	12	5 <sup>6</sup>	3	57	0	6	10	8	6	9	8,5	10	10	25	0
								13		7							27											
		21						23	21	19,6	23	21				15			21			23					0	20
4.	Medical equipment for disabled persons	6	20	15	25	7	9	13	10	5,5	0	4	5	12	5 <sup>6</sup>	3	5	5	6	20	8	6	98	8,5	10	24	25	0
		21									23	21				15	27		21							[ex]	[ex]	
	Children's car seats	21	20	15	25	19	20	23	21	19,6	13,5	21	5	21	21	15	27	18	21	20	8	6	24	20	20	24	25	5
5.	Transport of passengers	6	20	15	[ex]	7	20	13	10	7	[ex]	10	5	12	21	[ex]	27	09	[ex]	10	8	6	24	8,5	0	10	6	0
	(+see nº VI)	0		0	0	19	0					[ex]	8	[ex] <sup>10</sup>		3			6						20		0	
													18						21									
6.	Books	6	20	15	25	7	9	6,5	4	5,5	0	4	5	12	911	3	5	5	6	10	5	6	9	8,5	10	10	6	0
		21							21	19,612		21									23							
	Books on other physical means of support	21	20	21	25	19	20	23	4	5,5 19,6 <sup>12</sup>	23	4 <sup>13</sup> 21	18	21	21	3	5	18	6	20	23	6	9	8,5	20	24	6 <sup>14</sup> 25	0 <sup>15</sup> 20
	Newspapers	0	20	15	0 25	7	916	6,5	4 21	2,1 19,6	9	4	5	12	21	3	5	5	6	10	8 23	6	9	8,5	20	10 <sup>17</sup> 24	6	0
		21			23				21	15,0											23					24		

GOODS and SERVICES	BE	BG	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	МТ	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK
Rate on importation (Article 103 of the Directive 2006/112/EC)	6	20	15	2544	7 <sup>45</sup> 19 [m]	20	13	10	7	13,5	1046	5 <sup>47</sup>	21	21	6	27	5	6	10	8	6 23 <sup>48</sup>	24	8,5	20	10 24	12	5
Supplies by creators and occasional sales (Article 103(2) of the Directive 2006/112/EC)	6	20	21	2544	7 <sup>45</sup> 19	20	13	10	7	13,5	1048	N/A	21	21	6	27 [-] <sup>49</sup>	5	6	10	8	6	24	8,5	20	10	12	20
E-books (supply of the digitised content of books over the internet or an electronic network)	21	20	21	25	19	20	23	21	7	23	21	18	21	21	3	27	18	21	20	23	23	24	20	20	24	25	20

**European Commission January 2013** 

As we see in the table different taxes for books and e-books still exist in all European countries, but France and Luxembourg. Even though, European Commission have planned to show new proposals on different tax treatment of e-books and printed books by the end of this year (2013) and this new laws would take effect from 2015 in advance.

Big multinationals like Amazon can sell their e-books at competitive prices, but in the case of the Spanish market, local companies have to accomplish all the fix price laws and VAT charges that make them very difficult to set such low prices.

Even though, local editors are trying to do their best, using commercial techniques to try to make their products interesting. For example, some of them set a book price at  $0.99 \in$ , in order to let people know the author and then sell other titles of the same writer under higher prices. But some editors disagree with this technique as they think that could bring consumers the impression that e-books are very cheap to produce and that they shouldn't be priced above 1 or  $2 \in$ .

Some Spanish publishers tried also to explain why e-books are not as cheap as they are expected. They state that even e-books do not involve printing costs, but other costs like digitalization, distribution or promotion should be included in the price, to this, publishers remind, they should add the VAT. As a final remark, the e-book market is still young and with the time is will evolve and prices too.

Companies participation in different substitutive markets takes an important role when companies have to set prices. Various studies demonstrated that firms which both work in the traditional and the electronic market, tend to have higher prices on online products, than companies who only sell online. The interpretation is that traditional companies do not want electronic versions to cannibalize printed versions.

To sum up, there are many reasons why the e-book is still very expensive in comparison with the paper books. The fact that book publishers settled high prices for e-books because they were afraid of a possible cannibalization of the printed books, in addition to the fix price model and the high rates of VAT, raise price of e-books. Nevertheless, it is true that some authors and editors settle very low prices for certain works and that the market is in continuous evolution and there are still many changes to be seen.

#### CONCLUSION

Information technologies have completely changed the way we conceived the book industry. The transformations are plausible in both demand and supply sides giving rise to scale economies, price discrimination, network externalities and modification of search and transaction costs. Many industry agents have yet implemented the digitalization of books, and to the improvements on production, distribution and commercialization methods Internet and technology offer them. Another consequence of all this is the emergence of Multi Sided Platforms, which creates value from the interaction of other parties.

Even though, not all changes are beneficial for the industry agents, information goods are threatened by piracy. These illegal practices have already made their mark in the music, film and the audio-visual sectors. For this reason new laws and legal protection tools have emerged. But as they are not really efficient, companies from these industries have reinvented themselves creating new business models.

Even that concept was devised many years ago, the electronic book needs to be seen as the future of the book industry. This is the reason why there have been created specific devices to read such files, called e-readers, such as Kindle or Nook. Other technology producer companies try to design products that could satisfy different needs arising from the use of e-books: tablets, large smartphones, reader applications for computers and mobile phones.

To the question: why e-books are almost as expensive as paper books? We can give many reasons. First we should say that the pricing models have been one of the major culprits of that. The introduction of the agency model supposed the adoption of a rigid structure where retailers have no ability to play with discounts or change prices. It is true that competent authorities both in the United States and in Europe are investigating these practices. Nevertheless, in some European countries there exists the fix price law, which have the same effects that the agency model.

In addition to this, in Europe must be taken into consideration that VAT rates increment considerably the final price, as rates for e-books are much higher that rates charged on physical books.

Another reason why e-books are not as cheap as they are expected is that publishers are afraid of the possibility that electronic books cannibalize printed books. Therefore, and as they can choose book's prices (fix price law and agency model), they set prices for e-books that are not that cheap that consumers do not want to buy books in other formats.

A general conclusion is that, we are talking about a young industry with a huge potential growth that still has not imposed which will be the final game rules.

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